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## Reliability and structural validity of an assessment of occupational value

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Running Head: Structural Validity of the Am. Eng. OVal-pd

Reliability and Structural Validity of an Assessment of Occupational Value

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### **Abstract**

This study evaluated the psychometric properties of the American English (Am. Eng.) version of the Occupational Value Assessment with predefined items (OVal-pd). The OVal-pd is a 26-item likert-like questionnaire designed to assess the construct of occupational value as framed within the Value and Meaning in Occupations model (ValMO). Following a translation from the Swedish OVal-pd, 277 randomly selected graduate and undergraduate students from a public university in the northwestern United States completed the Am. Eng. OVal-pd. Test-retest and internal consistency reliability coefficients were very good utilizing an improved 22-item version of the OVal-pd. The structural validity of the 22-item Am. Eng. OVal-pd was partly confirmed through exploratory factor analysis. The scale was found to assess a one-dimensional value construct supporting the ValMO model, consisting of components clearly reflective of self-reward and concrete value. Exploratory factor analysis results were equivocal with regard to the symbolic dimension of the ValMO model as assessed by the OVal-pd. Discussion suggests the refinement of both the OVal-pd and ValMO model in light of present and related empirical findings.

**Keywords:** Instrument development, meaningful occupation, human activity, occupational therapy

## Reliability and Structural Validity of an Assessment of Occupational Value

### Introduction

Occupational therapy practice models champion the application of personally meaningful occupations as a modality central to fostering full life participation for all persons. These models offer consistent perspectives which address the role of the clinician in shaping therapeutic occupations and assessing outcomes in terms of meaningful life engagement (e.g., 1, 2-3). A common aspect of the models involve interacting constituents including the person, the occupation and the environment such that an individual's experiences derived from engaging in occupation help to define the quality of a person's occupational performance. It is this aspect, the value and meaning derived from participation in occupation, which has been receiving increasing attention within the occupational therapy literature (3-9). This focus is essential to the critique and advancement of models guiding clinical decision-making and to establish valid measures of therapeutic processes and outcomes central to practice (10-12).

### A Model of Occupational Value and Meaning

The Value and Meaning in Occupations (ValMO) model (3) has guided the development of the assessment of occupational value employed in the present study. This model defines occupation as peoples' everyday doings and was conceived, in part, to address the relative absence of theoretical structures sensitive to aspects of value and meaning in existing models of occupation. The ValMO model was informed by contemporary models of occupation and propositions related to meaning in the occupational therapy and occupational science literature (e.g., 8, 13, 14-16). However, these models did not seem to offer a means by which to adequately categorize the concept of meaning (3).

The ValMO model adopts a person-task-environment triad, where occupation is seen as the result of the transactions within the triad, which is mainly consistent with other models of occupational performance (1-2). However, the ValMO model departs from these models by offering a tentative structure for the description of experience, value and meaning derived through participation. The ValMO model asserts a bi-partite distinction in terms of occupational value and meaning. The latter aspect of meaning was informed by theorists, such as Bruner (17) and Antonovsky (18), and recognizes the role of narrative in structuring an individual's experiences embedded in daily occupation which in turn contribute to an ongoing personal story (19). Occupational value refers to the more immediate or proximate experiences derived from occupation (e.g., sense of competence or enjoyment). Drawing from ideas of Frankl (20) and Csikszentmihalyi (21) occupational value is considered to be essential to occupational meaning and the creation of a life narrative (3).

Further, by providing for the categorization of life meaning and occupational value, the ValMO offers a structure for addressing how one level of experience might influence another. This conceptual distinction, that of higher versus lower levels of meaning, can be found in other models which have direct relevance for occupational therapy (11, 22-24). For example, King (11) has proffered the existence of universal modes for acquiring meaning that operate at three interacting levels: 1) the micro level of experience and perception, 2) the middle level at which persons experience everyday occupations (the phenomenological level), and 3) the macro level of meaning in life. Park and Folkman (24) and Park's (22) model of meaning-based coping integrates two levels of meaning: situational and global. Situational meaning refers to the manner with which a person experiences day to day occupations. Global meaning refers to an individual's life goals, beliefs, values and sense of meaning and purpose in life. Occupational

value as proposed within the ValMO model may be most easily linked with Park and Folkman's idea of situational meaning. The concept of life meaning within the ValMO model may then be equated with the higher-order aspects of either the Park and Folkman or King models.

This idea of levels of meaning is extended even further in the ValMO model as occupational value and life meaning are linked to three nested levels of occupation: macro, meso, and micro levels (3). First, the macro level comprises occupations spanning the life course of the individual and may be considered a part of the individual's life story intimately linked with his or her identity. Occupations at this level are conceptualized as generating a sense of life meaning. Second, the meso level can be considered as single or groups of occupations, performed occasionally or on a regular basis which may form a basis for routine or daily patterned action. At this level experiences or perceptions of occupational value take place. Lastly, the micro level is used to describe the single discrete actions that compose an occupation (3).

This approach to categorizing occupation is unique to the ValMO model in two ways. First, the ValMO model assimilates aspects of other categorizations of occupation into a three level model of occupation. This is relatively consistent with Christiansen and Baum (1) or Polatajko, et al. (25) which tend to see higher orders of occupation as being more complex than lower orders (26). However, the ValMO model's use of macro, meso, and micro levels offers a relative simplification of this ordering as a heuristic less bound to the pitfalls associated with taxonomic classifications of occupation (27). Second, the model is explicit in its linking aspects of occupational value and life meaning to each of the three levels such that any one level cannot be fully understood without reference to another. As an example, gripping a cup and taking a drink of coffee may have little value or meaning to an individual without an appreciation for its

relationship to the value derived from the occupation of having breakfast and the capacity of that experienced occupation to be related to or integrated within the individual's life story (3).

Within the ValMO model the concept of occupational value comprises three dimensions: concrete, symbolic, and self-reward value (3). These are understood as offering three congruent yet distinct paths towards assigning value to occupation. This conceptualization is important as it may offer a route from which to sidestep concerns evident in viewing occupation solely from the perspectives of meaning and purpose (4, 7-8).

Hammell (6) has posited that occupational therapy theory has centered too much on purposeful doing as constituting and defining meaningful occupation. This has in turn stalled theoretical development, which needs to address the value of experience in occupation, "...for the sake of experience, for how someone feels when undertaking an occupation, rather than for its outcome or its purpose" (pg. 301). It is from this perspective that the development of concrete, symbolic and self-reward value within the ValMO model may contribute to the ongoing dialogue on the meaning of occupation.

Concrete value refers to the more tangible aspects of occupational performance such as completing shopping or cleaning tasks which have been autonomously chosen (3). Imbedded within the concept of concrete value is the notion of competence and satisfaction within the performance of an occupation which holds personal significance to the individual. The ideas of competence and autonomy as aspects of occupational meaning are replete within the occupational therapy and occupational science literature (e.g., 4, 28-32) and are pertinent to other areas of social and developmental psychology (e.g., 33, 34-35).

According to the ValMO model, occupations appreciated for their symbolic value comprise three interacting levels of significance including a personal, a culturally specific and a



universal level of significance. The ValMO model suggests that occupations serve as a means of communicating within and across these three levels and may reflect gendered identity as well as establishing bonds within one's social group (3, 36). Therefore symbolic value is inexorably linked to the social context within which one finds him/ herself. Related considerations, especially with regard to social significance and meaning in occupation, have been expressed within the occupational therapy and occupational science literature (e.g., 6, 30, 37-38).

Finally, the self-reward dimension of occupational value refers to the more immediate experiences inherent in certain occupations (3). A familiar example includes the experience of flow as characterized by Csikszentmihalyi (21) which has been adopted within a plethora of propositions related to occupational meaning (e.g., 9, 31, 39). Beyond this, the self-reward dimension comprises experiences of pleasure and enjoyment in occupation as highlighted by Hammell and others (6, 40-42).

In sum, the three dimensions of value (concrete, symbolic, and self-reward) proposed within the ValMO model represent related yet distinct paths to understanding occupation value and meaning (3). These three dimensions are relatively consistent with other propositions of meaning found in the occupational therapy and occupational science literature. However, when these three dimensions of value are considered as being subsumed within the concept of occupational value, the ValMO model offers a unique though tentative perspective on occupational value and meaning. Besides, the ValMO model asserts a complex structure linking value and life meaning to multiple levels of occupation (i.e., macro, meso, and micro).

### **Assessing the Concept of Occupational Value as Proposed by the ValMO Model**

The Occupational Value Assessment with predefined items (OVal-pd) is a 26-item likert-like survey constructed to assess the concept of occupational value presented in the ValMO

model (36, 43). The ValMo model proposes that perceptions of occupational value at the meso level are necessary for a sense of life meaning to take form, and assessing people's occupational value at this level may render an important indicator of the degree to which someone is leading an engaged and meaningful life. Thus, occupational value is seen as linked with certain occupations across relatively short aspects of time, while a sense of life meaning arises as those perceptions of occupational value intertwine with previous experiences. The OVal-pd was therefore designed to assess the overarching construct of occupational value by directly assessing the three related dimensions of concrete, symbolic and self-reward value (36, 43).

Eklund, Erlandsson and Persson (43) first tested the OVal-pd within a sample of Swedish persons with and without severe mental illness. The OVal-pd and its underlying dimensions (i.e., concrete, symbolic, and self-reward) were all moderately to strongly associated with self-rated and interviewer-rated health variables offering convergent validity evidence in support of the scale. Furthermore, Eklund and associates (36) evaluated the OVal-pd using the Rasch measurement model (44-46) in a Swedish sample of persons who were healthy or experiencing a long-term mental illness. The authors found eight OVal-pd items that were either a poor fit to the Rasch model or displayed differential item functioning across dichotomized categories of gender and health status. The remaining 18 OVal-pd items demonstrated a good fit to the Rasch model suggesting these items comprised a unidimensional occupational value construct. The index of person separation for the 18-item OVal-pd, analogous to Cronbach's alpha was good at 0.91. Still, the authors concluded that occupational value is a dynamic construct, probably influenced by significant cultural and societal variation and more research on the instrument was needed.

In order to further assess the validity of the OVal-pd, it will be important to evaluate the factorial or structural validity of the scale (47). Exploratory factor analysis (EFA) is a tool

commonly employed to establish a scale's structural validity (48). A primary function of EFA is to identify the presence of latent variable(s) underlying a set of items which in turn offer substantive meaning to those items. These latent variables can also be thought of as causing or influencing how individuals respond to the items within an instrument. Further, Thompson (49) has suggested that EFA offers a parsimonious set of factor scores that may serve as data to develop and explore theory regarding the nature of constructs.

To date no study has investigated the factor structure of the OVal-pd using exploratory factor analysis. Moreover, critical properties of the OVal-pd remain to be addressed, such as test-retest reliability and whether the proposed dimensions of concrete, symbolic and self-reward value may be identified in the scale. This issue is important, in part, because only the Swedish language version of the OVal-pd has been studied to date. Beyond this, it is critical that results from multiple analytic avenues are obtained to best evaluate the utility of the OVal-pd. In order to further explore the psychometric properties of the OVal-pd and to offer an opportunity to use it in non-Swedish contexts, an American English version--the Am. Eng. OVal-pd--was recently developed.

The principal aims of the present study were to evaluate the reliability and factor structure of the Am. Eng. OVal-pd. More specifically, the following research questions were addressed: 1) what are the test-retest and internal consistency reliabilities of the scale?, 2) how well are scale items performing when evaluated with item analysis?, 3) what is the factor structure of the scale?, and 4) how well does the factor structure of the scale reflect the conceptualizations of concrete, symbolic and self-reward value proposed by Persson et al. (3)?

## Method

### Participant Recruitment, Data Collection and Sample Characteristics

A sample of 277 students from a northwestern university in the United States completed the Am. Eng. OVal-pd as part of a battery of instruments in an ongoing study. To be included in that study persons must have been 18 years or older and a student at the university; there were no exclusion criteria. Data were collected in January and February of 2010 through Survey Monkey, an internet-based survey company, following approval of the university's human subjects committee. Personalized email invitations were sent to randomly selected students, followed by two reminder emails sent within a one-week timeframe; a response rate of 19.0% was established. Persons were provided a \$15 e-certificate from Amazon.com for completing the survey. People in the sample were on average 27.8 years of age ( $SD = 9.2$  years,  $Mdn = 25$  years), 55.2% were Female, 87.5% were Caucasian, 71% were undergraduate and 29% graduate students. Approximately two weeks following completion of the survey, a subset of participants again completed one of two versions of the Am. Eng. OVal-pd (standard or random item order) to establish test-retest reliability ( $N = 116$ ).

### Instrument Development

The Am. Eng. OVal-pd is the result of an iterative translation process of the Swedish OVal-pd (43). The OVal-pd was initially translated from Swedish into English by faculty at the second author's institution for whom English was a second language. This English translation of the test instructions, scale items, and response options was then reviewed by the first author who spoke American English as his first language. Recommendations and questions concerning revisions to the language were noted and exchanged between the authors to establish a shared understanding of instrument wording. These exchanges strove to maintain the underlying

intention or meaning of the scale's wording while best approximating culturally distinct definitions of key terms. For example, an initial translation of item 19 from Swedish to English read as "...that gave me a sense of belonging," for which the Swedish word for 'belonging' refers to a feeling of being allied with or akin to. The final wording of, "...that made me feel very close to others" was adopted as this best preserved the underlying Swedish meaning of the item in American English. Following this process, the Am. Eng. Oval-pd was pilot tested on a convenience sample of students, staff and faculty ( $N = 12$ ) at the first author's institution and comments were sought to identify any remaining problems with instrument wording. Final recommendations for revisions were shared amongst researchers resulting in the version of the OVal-pd employed in the present study.

The Am. Eng. OVal-pd instructions provide a brief overview of the instrument and prompt the respondent to consider their experiences from the past month, "During the past month I have been doing things..." Examples of OVal-pd items include, "...in order to complete something", "...where I felt I could be myself", and "...that were fun or playful". The respondent is asked to indicate the extent to which she/ he experienced occupational value within each item using a four-point scale including: 1 (Not at all), 2 (Seldom), 3 (Usually), and 4 (Very often). The response values from each item may be summed to derive a total score (43). Although a prior study had found eight OVal-pd items with a poor fit to the Rasch measurement model (36), the present study proceeded with these items in place because the cultural comparability of the scale has not been empirically established.

## Data Analysis

### Reliability

Test-retest reliability was assessed using a one-way random effects model intraclass correlation coefficient. Internal consistency reliability of the scale was tested using Cronbach's coefficient alpha ( $\alpha$ ). Item analysis involved the use of corrected item-scale correlations. The corrected item-scale correlation coefficients subsequently informed an iterative item removal process with the intention of maximizing the Am. Eng. OVal-pd's internal consistency reliability. This process proceeded first with identifying the item with the lowest corrected item-scale coefficient below .20. This item was removed from the scale followed by a re-estimation of corrected item-scale correlation coefficients and Cronbach's alpha. The process was repeated until items remaining in the scale demonstrated corrected item-scale correlation coefficients  $\geq$  .20.

### Factor Structure

The Am. Eng. OVal-pd items remaining from the iterative item removal process were then subjected to principal components analysis (PCA). An eigenvalue of 1.0 was used as a cutoff for component identification. An oblique (Promax) rotation was applied to the solution because concepts underlying the scale's design were considered to be related. Component pattern structure coefficients  $\geq$  .40 were used to assess simple structure. All analyses were conducted using SPSS<sup>®</sup> version 15.0 (50).

## Results

### Reliability

Initial Cronbach's alpha for the Am. Eng. OVal-pd ( $\alpha = .90$ ) indicated good internal consistency reliability for the scale. The iterative item removal process proceeded first with item

6 which had a corrected item-scale correlation (CISC) of just .00. The item removal process proceeded, eventually identifying and removing three additional items (item 7, CISC = .04; item 5, CISC = .17; and item 15, CISC = .17). The resulting 22-item Am. Eng. OVal-pd demonstrated an improved Cronbach's alpha ( $\alpha = .92$ ) with a mean CISC of .56 ( $SD = .11$ , range .28 - .75). The items in both the original and the 22-item Am. Eng. OVal-pd were summed within their respective scales. The original scale had a mean of 72.40 ( $SD = 10.49$ , range 44 - 100) whereas the 22-item Am. Eng. OVal-pd had a mean of 61.88 ( $SD = 10.09$ , range 38 - 88).

Test-retest reliability ( $N = 116$ ) was established for both scales using a one-way random effects intraclass correlation coefficient. The 26-item Am. Eng. OVal-pd demonstrated good reliability,  $r(116) = .77$  (95%  $CI$  .67 - .84) whereas test-retest reliability was slightly improved within the 22-item scale,  $r(116) = .81$  (95%  $CI$  .73 - .87).

### **Factor Structure**

The PCA resulted in a four component structure explaining 59.5% of the variance in the revised 22-item Am. Eng. OVal-pd (see **Table I**). Each item in the scale typically loaded on just one component, although four exceptions were found. Component I explained 38.5% (eigenvalue = 8.47) of the scale's variance and contained nine items with pattern structure coefficients  $\geq .40$ . These items were consistent with the dimension of self-reward value from the ValMO model. Component II explained an additional 10.3% (eigenvalue = 2.26) of the scale's variance comprising six items generally consistent with the dimension of concrete value from the ValMO model. Approximately 6.0% (eigenvalue = 1.31) of the Am. Eng. OVal-pd variance was represented by Component III, consisting of five items. Component IV explained the remaining 4.7% (eigenvalue = 1.04) of the variance identified through PCA. Item 19 was not associated with any component based upon the .40 threshold, although this item achieved a .39 loading on

Component IV. The next component identified through PCA had an eigenvalue of just .91, lending empirical support for the four factor solution.

Zero-order correlations between the four components were low to moderate and ranged from .29 to .51 (all  $p$ 's < .001) (see **Table II**). The component regression coefficients generated for each participant based upon the initial oblique four-component solution were entered into a subsequent PCA. A single higher-order component was identified explaining 55.9% of the variance found within the four components (i.e., I, II, III, and IV). Component structure coefficients were moderate to high, ranging from .63 to .80. This finding suggests that the four Am. Eng. OVal-pd components are influenced by a higher-order occupational value component, and reflect a unidimensional assessment in the present sample.

To evaluate an item-level influence, zero-order correlations between this higher-order value component and each Am. Eng. OVal-pd item were estimated. Correlation coefficients for the 22-item Am. Eng. OVal-pd were on average moderately high ( $Mean\ r = .61$ ,  $SD = .09$ , range .38 to .77; all  $p$ 's < .001) (see **Table I**). This finding again supports the idea that the Am. Eng. OVal-pd items comprise a unidimensional scale. Correlation coefficients were also estimated between the higher-order value component and the four Am. Eng. OVal-pd items eliminated during the iterative item removal process. These correlations ranged from  $r = -.08$ ;  $p = .22$  to  $r = .17$ ;  $p < .01$  indicating a relative absence of meaningful relationships between these items and the higher-order Am. Eng. OVal-pd value component; this finding also lent additional empirical support for the initial removal of the four items from the scale.

## Discussion

This is the first study to employ the Am. Eng. OVal-pd and explore the scale's reliability and factor structure. Further, these psychometric characteristics had not been investigated in the



Swedish version of the OVal-pd. Therefore the findings from the present study have important implications for the OVal-pd as an indicator of occupational value, but these results also have significant theoretical ramifications for the ValMO model.

Overall the reliability coefficients of the Am. Eng. OVal-pd were quite good, supporting its utility for population-based research (51). Eliminating items with low item-scale correlations resulted in a slightly shorter 22-item Am. Eng. OVal-pd, which benefited from improved internal consistency and test-retest reliability compared to the original 26-item version. The internal consistency of the 22-item assessment was nearly identical to the index of separation obtained from the 18-item OVal-pd analyzed with the Rasch measurement model (36). Interestingly, the four items (5, 6, 7 and 15) removed because of low item-scale correlations in this study were among those items in the Swedish OVal-pd deleted because of misfit. These items represent necessities (item 7), traditions (item 5), or doing things because everybody else or family/friends did them (items 6 and 15), which may be seen as “externally imposed” values and, as such, may not fit well within the general construct of occupational value. These items have been problematic when tested in several populations under differing measurement assumptions (i.e., classical test theory and item response theory). Therefore, it is recommended that the four items not be used within future versions of the OVal-pd.

The factor (component) structure identified by means of PCA corresponded quite well to the ValMO model with regard to self-reward and concrete value. Importantly, the self-reward component accounted for the large majority of variance within the OVal-pd discerned by the PCA. This aspect of the occupational value construct focuses on a variety of positive experiences associated with occupational engagement, including enjoyment and the flow state characterized by the work of Csikszentmihalyi (52). The items in the self-reward component addressed ideas

related to having fun and being playful, relaxing and engaging in pleasurable occupations. This finding is in agreement with other perspectives on meaning in occupation (9, 31, 39) and offers evidence to further explore the important contributions of finding pleasure in occupation (53).

Component II was represented by items which were consistent with the concrete value dimension within the occupational value construct. Concrete value reflects the idea of being engaged in occupations which are autonomously chosen, support competence and the production of valued tangible outcomes. Some items comprising the concrete value component included learning new things, completing important tasks, and dealing with manageable challenges. This discovery offers substantial confirmation for the concept of concrete value and its role of supporting occupational value within the ValMO model. Furthermore, as was the case with self-reward value, concrete value appears to be a measurable dimension with ties to theories and propositions of meaning found in related occupational therapy and occupational science literature (6, 31, 41).

Components III and IV contained a preponderance of items intended to reflect the dimension of symbolic value, although this finding was problematic with regard to the construct of occupational value. According to the ValMO model (3), occupations appreciated for their symbolic value comprise the three interacting levels of personal, cultural and universal significance. The model suggests occupations serve as a means of communicating within and across these three levels constituting the concept of symbolic value. However, results of the PCA did not lend full support to the model in this regard, as items intended to represent symbolic value were distributed across two components. Component III comprised items originally intended to reflect each of the three dimensions of occupational value, whereas Component IV

comprised items pertaining mainly to socially situated occupations and experiences, such as doing something with or for others, and getting in touch with or feeling very close to others.

Importantly, this study utilized an oblique rotation in the PCA to obtain simple structure for the four-component solution. The decision to employ an oblique rotation is based on the belief that the components identified through the PCA will be correlated to some degree (48-49). Prior exploratory factor analytic results from a related scale, the Engagement in Meaningful Activities Survey (54), found correlated components thereby offering evidence to suggest that items underlying the OVal-pd might also be correlated. The present study supported this understanding because the four OVal-pd components demonstrated low to moderate intercorrelations. Furthermore, a higher-order value component was identified when the four components were entered into a subsequent PCA.

Together, these findings have significant implications for the construct of occupational value as proposed within the ValMO model. The fact that a higher-order value component was discerned in the present study indicates that the OVal-pd assesses a unidimensional construct. This finding is consistent with the tenets of the ValMO model which subsumes the multiple dimensions of value under a general construct of occupational value (3). Moreover, the intercorrelations between the components and the existence of a higher-order component, confirm that occupational value is likely a complex construct.

However, it may be useful to provide a brief example to illustrate how one aspect of this complexity might be understood. Based upon the findings from the present study, the essence of occupational value seems to be reflected by items constituting the self-reward component. As mentioned above, this component explained the majority of the variance found through PCA, thereby offering strong empirical support for the self-reward dimension within the ValMO

model. Further, the dimension of concrete value was also well supported by the results of the PCA. Because these two components were correlated they may have a modest level of shared influence on how people respond to individual items. Item 10 (being satisfied with a result) is a clear example of this because the component coefficients for the item were nearly equivalent across the two components. That is, the experience of occupational value in this instance may be due to the shared influence of both self-reward and concrete value.

The symbolic value dimension of the OVal-pd received only marginal support in the present study, thereby bringing this aspect of the occupational value construct into question. However, the most obvious portion of symbolic value derived from PCA in this study reflected a social aspect of occupational value. In a related work, a personal competence component and a social meaning component were derived through a PCA of the Engagement in Meaningful Activities Survey (EMAS; 54). As in the present study, those authors found the two aspects of meaning within the EMAS to be correlated. These findings were not available at the time the ValMO model was developed, and given findings from the present study, revisions to the ValMO model may need to be undertaken with regard to the symbolic dimension and socially embedded meaning.

Viewing occupational value as an indirect assessment of occupational meaning, the findings of correlated occupational value components and the existence of a higher-order value component may have important implications for culturally relevant models of occupation and meaning. In the present study, the construct of occupational value, derived in Sweden, was operationalized as the Am. Eng. OVal-pd and tested within the western United States. Both areas are likely influenced by a western culture or ethos which may serve to frame perceptions of experience in occupation in a relatively similar manner (55). The empirical findings from the

present study which to a significant degree substantiated the construct of occupational value support this idea of relative cultural congruence. However, certain questions remain regarding the appropriateness of the occupational value construct with regard to other cultural groups (3). As Iwama (37) has indicated, there may be significant differences between ascriptions of meaning stemming from culturally distinct definitions of occupation. Further, Hammell (56) has cautioned theorists to be skeptical with regard to culturally laden interpretations of occupation. With this perspective in mind, it may be quite informative to evaluate the construct of occupational value and its underlying dimensions within alternative cultural conceptions of occupation and meaning.

Generalization of the study findings may be limited because of the low response rate (19.0%); a problem common to web-based survey designs. Internet-based survey administration, as employed in this study, is becoming increasingly popular due to lower costs, quick response cycles, increased flexibility and minimal data errors compared to paper-pencil surveys (57-58). This study employed methods shown to maximize response rates, including provision of a gift, enrolment in a lottery, in addition to two reminder emails (59). Nonetheless, web-based and email survey methods have seen a consistent decline in response rates over the past few decades (60-61).

The present findings have in great part supported the structural validity of the OVal-pd and in turn offer evidence in support of the occupational value construct. Nonetheless there remains a need to further develop the construct and its underlying value dimensions through additional empirical studies. Also, research that has investigated occupational value has primarily focused on the assumed link between perceived value and meaning on one hand, and between perceived meaning and health on the other. So far, work in this vein has begun to verify

the existence of these relationships (43, 62-63) which is also in line with other research on meaning, health and well-being (5, 64-65). Continued work in this area of study might address the similarities and differences that exist between measures of value and meaning in occupation. Further, studying the Am. Eng. OVal-pd with Rasch analysis may offer evidence to support the utility of the OVal-pd as a measure of occupational value. Future studies with these aims in mind should offer important tools with which to substantiate and extend the important role of occupational therapy in fostering personal well-being.

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Legend of tables & figures

Table 1.  
Structure Coefficients and Zero-Order Correlations with Higher Order Component ( $N = 277$ )

Table 2.  
Zero-Order Correlations between Component Regression Coefficients ( $N = 277$ )

**Table I**Structure Coefficients and Zero-Order Correlations with Higher Order Component ( $N = 277$ )

Item Number	Item Label Summary	Pattern Structure Coefficients				Correlations with Higher Order Value Component*
		I	II	III	IV	
1	I felt I could be myself	.76				.59
2	I could be free and let loose	.87				.59
3	Fun or playful	.89				.59
13	Emotions or tensions had an outlet	.44			.41	.65
16	I could let off steam	.56				.61
18	True pleasure to do those things	.70				.72
21	They were a lot of fun	.74				.69
26	Helped me to relax	.72				.55
10	Satisfied with result	.43	.41			.72
4	Something important was accomplished		.62			.68
8	I learned something new		.52			.55
11	In order to complete something		.82			.38
17	Dealt with challenges I could handle		.69			.45
24	I developed as a person		.40	.62		.70
22	I thought I made a contribution			.66		.66
23	Strengthened identity as a man/woman			.71		.64
25	I forgot about time and place			.53		.47
20	Had spiritual importance for me			.45	.48	.56
9	I was in touch with other people				.75	.58
12	Led to other people getting in touch				.63	.61
14	I taught something to someone				.64	.60
19	Made me feel very close to others				(.39)	.77

Note. \* all  $p$ 's < .001 (two-tailed).

**Table II**  
 Zero-Order Correlations between Component Regression  
 Coefficients ( $N = 277$ )\*

Component	I	II	III
II	.29	-	-
III	.51	.37	-
IV	.47	.34	.48

Note. \* all  $p$ 's < .001 (two-tailed).