Defining Occupational Competence and Occupational Identity in the Context of Recovery in Schizophrenia

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Importance: The Occupational Self Assessment (OSA) measures two constructs from the Model of Human Occupation: occupational competence and occupational identity. In the field of mental health, the recovery movement has sparked discussions about what constitutes personal, clinical, and functional recovery. However, how occupation-based terminologies are related to the recovery framework is unclear.

Objective: To elucidate how domains of recovery and psychological constructs are related to the OSA's constructs of occupational competence and occupational identity in order to inform occupational therapy practice in the recovery arena.

Design: Cross-sectional study.

Setting: Outpatient mental health unit.

Participants: Sixty-six community-dwelling adults with schizophrenia recruited through convenience sampling.

Outcomes and Measures: Participants completed the OSA and clinical, functional, and personal recovery assessments. They also completed five scales that measured psychological constructs of recovery such as hope, resilience, empowerment, internalized stigma, and subjective well-being. Participants also identified up to four OSA items that were priorities for change. Tests of association and multiple regression analyses were conducted to identify predictors of occupational competence and occupational identity.

Results: Personal recovery predicted occupational competence, whereas depressive symptoms and hope predicted occupational identity. Functional and clinical recovery did not predict occupational competence. The top three OSA priorities for change were performance items: "managing my finances," "concentrating on my tasks," and "taking care of myself."

Conclusions and Relevance: Occupational therapy interventions should not be limited to functional improvement. Instead, they should account for clients' affective states and seek to instill recovery-oriented psychological states such as hope and efficacy.

What This Article Adds: Occupational competence is achieved by enhancing personal states of self-efficacy in fulfilling valued occupations rather than through functional improvement. The top three occupations prioritized for change were performance tasks that were observable by service users and immediate caregivers. Empowering clients to partake in these everyday performance tasks such as finance management, concentrating on tasks, and self-care may pave the way to enhancing occupational competence and identity.

The Occupational Self Assessment (OSA; [Baron et al., 1998](#)) is a client-centered evaluation tool that is based on the Model of Human Occupation (MOHO), which describes the heterarchical contributions of volition, habituation, performance capacity, and environment to occupational adaptation ([Kielhofner, 2008](#)). *Volition* refers to the motivation for occupation; *habituation* is the process of organizing occupations and routines; and *performance capacity* refers to the physical and mental abilities that underlie skilled engagement in occupations ([Kielhofner, 2008](#)). *Occupational adaptation* consists of two interrelated elements: occupational competence and occupational identity. *Occupational competence* involves participating in a range of occupations to meet the standards expected of one's valued roles, so as to sustain a pattern of occupational behavior that is productive and satisfying ([Taylor, 2017](#)). *Occupational identity* is

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based on the premise that participation in occupations builds one's identity (Kielhofner, 2008). Hence, the sense of who one is and who one wishes to become is developed from one's occupational history.

The OSA is designed to evaluate clients' perceptions of their own occupational competence and occupational identity, thereby establishing priorities for change (Baron et al., 1998). According to the authors of the OSA, "What a client values is a component of occupational identity" (Baron et al., 1998, p. 13). Hence, on the OSA, clients rate occupations that they value to provide a profile of their occupational identity. Studies have established the OSA's reliability and validity in measuring the unidimensional constructs of occupational competence and identity (Kielhofner et al., 2009). It has also been found to have adequate stability and sensitivity to detect change in different populations (Kielhofner et al., 2010; Taylor et al., 2011). Convergent validity with occupational performance was established with the Canadian Occupational Performance Measure (Law et al., 2005) and the Melville–Nelson Self-Identified Goals Assessment (Stuber & Nelson, 2010). In addition, the OSA has been translated into other languages, such as Persian, Malay, and Turkish (Asgari & Kramer, 2008; Murad et al., 2012; Pekçetin et al., 2018).

More than 20 yr ago, Schwammle (1996) articulated that *occupational competence* was the product of dynamic interaction among individual characteristics (e.g., needs and skills), environment (internal and external), and occupation and the resultant level of occupational competence affected occupational choices. Occupational competence, although established psychometrically as a construct within the OSA, is not well understood in relation to other clinical constructs, such as clinical symptoms, functional independence, quality of life, and so forth. Studies with stroke patients and older adults have found positive correlations between occupational competence and outcomes such as personal well-being and falls-related self-efficacy, respectively (Chae & Chang, 2016; Nakamura-Thomas & Kyoungoku, 2013). A study with people engaging in drug misuse found that occupational competence problems spanned volition, habituation, and performance components, with performance items such as self-care and financial management being top priorities for change (Davies & Cameron, 2010). Occupational identity, however, is regarded as the product of occupational engagement that entails personal and shared meaning (Taylor & Kay, 2015). Vrkljan and Polgar (2007) also postulated a critical link between one's perceived ability to engage in chosen occupations and one's occupational identity.

In the field of mental health, the recovery movement has sparked discussions about what constitutes personal, clinical, and functional recovery (Lloyd et al., 2008; Tse et al., 2014). *Clinical recovery* largely refers to remission of symptoms and general stabilization of mental state, whereas *functional recovery* delineates restoration of occupational, community, and social functioning (Noordsy et al., 2002; Robinson et al., 2004; Tse et al., 2014). *Personal recovery*, however, stems from service users' experience of healing and includes psychological experiences such as hope, empowerment, and self-direction (Shanks et al., 2013).

To elucidate the construct of personal recovery, Leamy et al. (2011) conducted a systematic review and developed a personal recovery framework that consists of five overarching recovery processes: Connectedness, Hope and optimism about the future, Identity, Meaning in life, and Empowerment (CHIME). It is not clear how occupation-based constructs such as occupational competence and occupational identity are related to the domains of recovery. To simply equate occupational competence to functional recovery may undermine the self-direction (volition) and habituation aspects of occupational competence, which appear to overlap with personal recovery processes such as hope, empowerment, and meaning in life. In addition, occupational competence can be related to clinical recovery, because OSA items such as "concentrating on my tasks" can be related to clinical symptoms. As for occupational identity, it seems to have associations with the personal recovery processes of empowerment and meaning in life, whereas its relationship with clinical recovery is not apparent (Taylor et al., 2011).

Therefore, the objective of this study was to delineate the associations between occupational competence and occupational identity and the three domains of recovery, as well as with the CHIME psychological constructs of personal

recovery. We hypothesized that (1) functional and personal recovery would be associated with occupational competence and (2) the CHIME psychological constructs of recovery would be associated with occupational identity.

Method

This was a descriptive cross-sectional study, during which clinical interviews and questionnaires were administered twice over a 2-wk period. This study was part of a wider evaluation study on the psychometric properties of recovery scales, so assessments were conducted over two visits to reduce assessment burden and to establish test–retest reliability.

Participants and Procedure

Participants were 66 community-dwelling adults receiving services at an outpatient psychiatric clinic at the Institute of Mental Health, Singapore. Inclusion criteria were a diagnosis of schizophrenia or schizoaffective disorder, according to the *Diagnostic and Statistical Manual of Mental Disorders* (4th ed., text rev.; [American Psychiatric Association, 2000](#)); ability to speak and understand English well enough to complete the measures; ability to give informed consent; and being ages 21–65 yr. Exclusion criteria were current illicit substance use, neurological disorder, and intellectual disability. Convenience sampling, recruitment, and assessment administration were conducted by research psychologists and trained psychiatric nurses, who took around 3 hr in total to complete the two assessment visits. Ethics approval for this study was provided by the National Healthcare Group's Domain Specific Review Board (Ref. No. 2016/00179).

Instruments

The OSA was used to measure occupational competence and occupational identity. Personal recovery was measured with the Questionnaire about the Process of Recovery (QPR; [Law et al., 2014](#)) because it maps closely to the CHIME framework of recovery ([Shanks et al., 2013](#)). The 15-item QPR originated from a 25-item self-report measure developed by [Neil et al. \(2009\)](#). The 25-item measure was factor analyzed and produced a two-factor structure (Interpersonal and Intrapersonal). However, a subsequent evaluation with 335 participants found that a one-factor model using 15 items provided the best fit ([Law et al., 2014](#)). Convergent validity was established with the Recovery Assessment Scale ($r = .73$), along with test–retest reliability ($r = .74$), sensitivity to change ($r = .40$), and internal consistency ($r = .89$; [Williams et al., 2015](#)). The 15-item QPR is rated on a 5-point Likert scale that ranges from 0 (*disagree strongly*) to 4 (*agree strongly*). The total score ranges from 0 to 60.

To establish additional psychological constructs related to personal recovery, the following assessments were also administered.

- Herth Hope Index (HHI; [Herth, 1992](#)): The 12-item HHI was used to measure hope. It has a three-factor solution consisting of (1) temporality and future, (2) positive readiness and expectancy, and (3) interconnectedness. Level of hope is rated on a 4-point Likert scale ranging from 1 (*strongly disagree*) to 4 (*strongly agree*). A higher score indicates a higher level of hope. The HHI has good test–retest reliability ($r = .91$) and has criterion validity with existential well-being ($r = .84$) and the Nowotny Hope Scale ($r = .81$; [Herth, 1992](#)).
- Connor–Davidson Resilience Scale (CD–RISC; [Connor & Davidson, 2003](#)): The CD–RISC is a 25-item scale that has been used to measure resilience in psychiatric populations ([Kim et al., 2013](#); [Torgalsbøen, 2012](#)). It has established convergent validity with measures on hardiness, stress vulnerability, and disability ([Connor & Davidson, 2003](#)).
- Empowerment Scale ([Rogers et al., 1997](#)): This 28-item scale measures five factors: Self-Efficacy–Self-Esteem, Power–Powerlessness, Community Activism, Righteous Anger, and Optimism–Control Over the Future. It was validated with an outpatient mental health population and has good internal consistency ($r = .85$; [Wowra &](#)

McCarter, 1999). Items are rated on a 4-point Likert scale ranging from 1 (*strongly agree*) to 4 (*strongly disagree*), with higher scores representing lower empowerment (Vauth et al., 2007).

- Brief Internalized Stigma of Mental Illness scale (ISMI; Boyd et al., 2014): The 10-item brief ISMI consists of five subscales: Alienation, Discrimination Experience, Social Withdrawal, Stereotype Endorsement, and Stigma Resistance. It has adequate internal consistency ($\alpha = .75$) and construct validity (correlations with depression, $r = .55$; self-esteem, $r = -.64$; and recovery orientation, $r = -.54$; Boyd et al., 2014).
- Subjective well-being (SWB): SWB was measured by combining ratings on the Positive and Negative Affect Schedule (PANAS; Watson et al., 1988) and the Satisfaction With Life Scale (SWLS; Diener et al., 1985). The PANAS consists of two 10-item subscales, Positive Affect (PA) and Negative Affect (NA). Participants rate the extent to which they have experienced each affect in the past week. The PA and NA subscales have high internal reliabilities of .89 and .85, respectively (Crawford & Henry, 2004). The 5-item SWLS assesses global cognitive judgment of satisfaction with life. Aside from its high reliability ($r = .89$; Henderson et al., 2014), the SWLS has good convergent validity with other scales that measure SWB, and has discriminant validity with emotional well-being measures (Pavot & Diener, 1993). Ratings for both measures were combined by dividing scores on each scale (PA, NA, SWLS) by the number of items on the scale and then summing the results (Ring et al., 2007). With these ratings put together, SWB denotes a situational form of happiness, as derived through a cognitive evaluation of one's life satisfaction and positive emotions (Gamble & Gärling, 2012).

Clinical recovery was assessed with the Positive and Negative Syndrome Scale (PANSS; Jiang et al., 2013), a 30-item clinician-rated measure consisting of Positive, Negative, Excitement, Depression, and Cognitive factors, rated on a 7-point scale ranging from 1 (*absent*) to 7 (*extreme*). It has been validated for Asian populations. To measure depressive symptoms in people with schizophrenia, the Calgary Depression Scale for Schizophrenia (CDSS; Addington et al., 1994) was used. This clinician-rated 9-item interview measure has been found to be sensitive and reliable, with a stable underlying factor structure across time (Lako et al., 2012).

Functional recovery was assessed with the Personal and Social Performance scale (PSP; Nafees et al., 2012), which assesses four domains: (1) socially useful activities, (2) personal and social relationships, (3) self-care, and (4) disturbing and aggressive behaviors. Assessment is based on the outcome of a structured interview and a global functioning rating given after the interview. This instrument has been well validated with clients with schizophrenia in inpatient and community settings (Juckel et al., 2008; Kawata & Revicki, 2008).

Data Analyses

Statistical analyses were performed with IBM SPSS Statistics (Version 23; IBM Corp., Armonk, NY). Spearman's rank correlation coefficients were used to explore associations between occupational competence and occupational identity and personal recovery, psychological constructs, clinical symptoms, and functioning. Because the OSA items are converted to interval measurements using Rasch analysis (Baron et al., 1998), we used multiple regression to determine predictors of occupational competence and occupational identity. Variables with significant correlations with occupational competence and occupational identity were entered into a three-stage hierarchical regression, with occupational competence and occupational identity as the dependent variables, respectively. Statistical significance was set at $p \leq .05$.

Results

Sixty-six community-dwelling people with schizophrenia completed the study. Their mean age was 40.3 yr, and 54.5% were women. Participants' demographic profile is provided in Table 1.

Table 1. Demographic Profile of Study Sample (*N* = 66)

Characteristic	<i>n</i> (%) or <i>M</i> ± <i>SD</i>
Gender	
Female	36 (54.5)
Male	30 (45.5)
Highest education level	
Junior college	8 (12.1)
Vocational training	20 (30.3)
Tertiary	38 (57.6)
Marital status	
Single	51 (77.3)
Married or living with someone as if married	9 (13.6)
Divorced	6 (9.1)
Race	
Chinese	61 (92.4)
Malay	2 (3.0)
Indian	2 (3.0)
Others	1 (1.5)
Primary diagnosis	
Schizophrenia	64 (97.0)
Schizoaffective disorder	2 (3.0)
Current employment	
Unemployed	26 (39.4)
Employed	40 (60.6)
Duration of illness, yr	14.82 ± 8.68
Age, yr	40.29 ± 10.55
Antipsychotic dose, ^a mg	449.24 ± 391.19

Note. Percentages may not total 100% because of rounding.

M = mean; *SD* = standard deviation.

^aTotal daily chlorpromazine mg equivalent.

Occupational Competence

A significant correlation was found between occupational competence and personal recovery as measured with the QPR ($r_s = .70, p < .001$). In addition, positive moderate correlations were found between occupational competence and the psychological constructs of hope, as measured with the HHI ($r_s = .55, p < .001$); resilience, as measured with the CD-RISC ($r_s = .57, p < .001$); and well-being, as measured with SWB ($r_s = .45, p < .001$). A negative moderate correlation was found between occupational competence and internalized stigma, as measured with the ISMI ($r_s = -.62, p < .001$). Occupational competence was also significantly correlated with empowerment ($r_s = -.39, p = .01$).

Regarding clinical recovery, significant moderate negative correlations were found between occupational competence and positive ($r_s = -.43, p < .001$) and negative ($r_s = -.32, p < .001$) symptoms, as measured by the PANSS, and depressive symptoms ($r_s = -.63, p < .001$), as measured by the CDSS. For functional recovery, a significant moderate correlation was found between occupational competence and PSP ($r_s = .42, p < .05$). No significant association was found between occupational competence and demographic variables such as age, gender, years of education, employment hours, salary, and housing arrangements.

With eight predictors, effect size estimated at 0.35, $\alpha = .05$, and power at 80%, a sample size of 52 was required; therefore,

our sample size of 66 was adequate for this analysis. A three-step hierarchical multiple regression was carried out, with occupational competence as the dependent variable and the following variables with significant correlations as independent variables:

Step 1: QPR score was entered.

Step 2: The variables of HHI, ISMI, and CD-RISC scores were entered.

Step 3: The clinical (PANSS positive and negative symptoms and CDSS scores) and functional (PSP score) variables were entered.

The results revealed that at Step 1, QPR contributed significantly to the regression model, $F(1, 64) = 86.48, p < .001$, and accounted for 56.8% of the variance in occupational competence. Introducing the psychological variables explained an additional 5.6% of variance, with a significant R^2 change, $F(3, 61) = 3.10, p = .033$. Internalized stigma was found to be a significant predictor. Adding the clinical and functional variables explained an additional 1.3%, accounting for 61.5% of the variance. However, the change in R^2 was not significant, $F(4, 57) = 1.33, p = .271$. At this step, only QPR significantly predicted occupational competence. Table 2 shows details of the regression analysis.

Occupational Identity

Weak significant correlations were found between occupational identity (as measured by OSA Occupational Values scores) and depressive symptoms ($r_s = .26, p < .05$) as well as with hope ($r_s = .29, p < .05$). When occupational identity items were grouped into their domains of volition, habituation, and performance, all of these domains had significantly negative weak

Table 2. Hierarchical Regression Model to Identify Factors Associated With Occupational Competence

Step and Variable	<i>B</i>	<i>SE B</i>	β	<i>t</i>	<i>df</i>	<i>p</i>	<i>R</i> ²	ΔR^2
Step 1					1, 64			
QPR	1.013	0.109	.758	9.299		<.001*	.568	.575
Step 2					3, 61			
QPR	0.578	0.188	.432	3.071		.003*	.607	.056
ISMI	-5.267	2.636	-.210	-1.998		.005*		
HHI	0.206	0.358	.082	0.575		.567		
CD-RISC	0.141	0.086	.187	1.653		.103		
Step 3					4, 57			
QPR	0.484	0.202	.362	2.394		.020*	.615	.031
ISMI	-2.575	2.872	-.103	-0.897		.374		
HHI	0.369	0.363	.147	1.016		.314		
CD-RISC	0.136	0.088	.180	1.539		.129		
PANSS positive symptoms	-0.056	0.254	-.021	-0.220		.827		
PANSS negative symptoms	0.204	0.332	.055	0.615		.541		
CDSS	-0.536	0.373	-.147	-1.436		.156		
PSP	0.113	0.110	.106	1.021		.312		

Note. CD-RISC = Connor-Davidson Resilience Scale; CDSS = Calgary Depression Scale for Schizophrenia; *df* = degrees of freedom; HHI = Herth Hope Index; ISMI = Internalized Stigma of Mental Illness scale; PANSS = Positive and Negative Syndrome Scale; PSP = Personal and Social Performance scale; QPR = Questionnaire about the Process of Recovery; *SE* = standard error.

**p* ≤ .05.

correlations with PANSS positive and negative factors: volition, $r_s = -.32$, $p < .05$; habituation, $r_s = -.25$, $p < .05$; and performance, $r_s = -.33$, $p < .05$. In addition, the habituation domain of occupational identity had a weak significant correlation with SWB ($r_s = .29$, $p < .05$). Occupational identity and demographic variables such as age, gender, years of education, employment hours, salary, and housing arrangements had no significant association.

Variables that had significant correlations with occupational identity were entered into a three-step hierarchical multiple regression, with occupational identity as the dependent variable: Step 1: Clinical symptoms were entered (PANSS positive and negative symptoms and CDSS scores).

Step 2: Psychological variables (HHI, ISMI, and Empowerment Scale scores) were added.

Step 3: SWB score was added.

At Step 1, PANSS negative symptoms and CDSS contributed significantly to the regression model, $F(3, 62) = 3.49$, $p = .021$, and accounted for 10.3% of the variance in occupational identity. Introducing the psychological variables explained an additional 17.4% of variance, with a significant change in R^2 , $F(3, 59) = 5.01$, $p = .004$. Depressive symptoms and hope were significant predictors. Adding SWB explained only an additional 0.6%, accounting for 24.2% of the total variance. However, the change in R^2 was not significant, $F(1, 58) = 0.49$, $p = .485$. At this step, depressive symptoms and hope still significantly predicted occupational identity. Table 3 shows the details of the regression analysis.

Occupational Priorities

Besides providing scores on level of occupational competence and occupational identity, the OSA requires clients to identify up to four OSA items that are priorities for change, to establish therapy goals and strategies. Table 4 shows the 10 occupations listed as top priorities by the participants. Of these occupations, 6 were performance items, 3 were habituation items, and 1 was a volition item. The top 3 items were all performance items: "managing my finances," "concentrating on my tasks," and "taking care of myself."

Discussion

Although we found a moderate association between functional recovery and occupational competence, the relationship was not statistically significant when personal recovery was included in the regression model. Indicators of community integration, such as employment, salary, and housing, also did not significantly correlate with occupational competence. This finding was surprising, given that both PSP and OSA measured functional areas such as self-care and productive occupations. However, the QPR contained items that measured self-efficacy, locus of control, and fulfillment, such as "I can recognize the positive things I have done," "I can take charge of my life," and "I can find the time to do the things I enjoy." Therefore, occupational competence appeared to reflect a personal state of self-efficacy in fulfilling a

Table 3. Hierarchical Regression Model to Identify Factors Associated With Occupational Identity

Step and Variable	B	SE B	β	t	df	p	R ²	ΔR^2
Step 1					3, 62			
PANSS positive symptoms	-0.225	0.461	-0.064	-0.486		.629	.103	.144
PANSS negative symptoms	-1.313	0.591	-0.271	-2.224		.030*		
CDSS	1.582	0.617	0.333	2.564		.013*		
Step 2					3, 59			
PANSS positive symptoms	-0.276	0.429	-0.078	-0.642		.523	.249	.174
PANSS negative symptoms	-0.595	0.572	-0.123	-1.040		.302		
CDSS	2.137	0.665	0.449	3.214		.002*		
ISMI	4.288	5.104	0.131	0.840		.404		
HHI	1.270	0.618	0.388	2.055		.044*		
Empowerment	-0.466	0.465	-0.170	-1.003		.320		
Step 3					1, 58			
PANSS positive symptoms	-0.333	0.439	-0.095	-0.759		.451	.242	.006
PANSS negative symptoms	-0.566	0.576	-0.117	-0.982		.330		
CDSS	2.184	0.671	0.459	3.254		.002*		
ISMI	4.932	5.207	0.151	0.947		.348		
HHI	1.226	0.624	0.374	1.964		.054*		
Empowerment	-0.443	0.468	-0.162	-0.947		.347		
SWB	0.893	1.270	0.086	0.703		.485		

Note. CDSS = Calgary Depression Scale for Schizophrenia; df = degrees of freedom; HHI = Herth Hope Index; ISMI = Internalized Stigma of Mental Illness scale; PANSS = Positive and Negative Syndrome Scale; SE = standard error; SWB = subjective well-being.

* $p \leq .05$.

range of valued occupations, rather than actual functional ability. This finding is consistent with other studies (Roe et al., 2011; Tse et al., 2014), which reported that clinical objective recovery was not synonymous with personal subjective recovery.

The concept of self-efficacy within MOHO's volition came from Bandura's (1982) self-efficacy construct, which views perceived self-efficacy as a judgment of how well one can execute a course of action required to deal with a prospective situation. Therefore, self-efficacy could be independent of actual occupational performance as rated by clinicians. However, perceived occupational competence may go beyond efficacy with respect to tasks but may also include the degree to which one can fulfill one's valued occupations within the required environment over a sustainable period. In this study, performance items such as "managing my finances" and "concentrating on my tasks" were found to be top priorities for

change in occupational competence. More research is needed to determine the constituents of occupational competence, in addition to constructs of hope, efficacy, and meaningfulness.

In the regression analysis, negative and depressive symptoms predicted occupational identity. However, when the psychological constructs were added, only depressive symptoms and hope predicted occupational identity. It was surprising that occupations were rated as more important when depressive symptoms were more severe. A possible explanation is that people who are depressed tend to magnify the importance of tasks and to amplify their lack of competence and perceptions of failure (Blake et al., 2016; Wenzlaff & Grozier, 1988). Conversely, hope also predicted occupational identity in the final regression model. Hope fuels expectations for success, thus increasing one's desire to take on more valued occupations to reinforce one's identity (Kartalova-O'Doherty & Tedstone Doherty, 2010; Kielhofner, 2008). Unlike occupational competence, personal recovery (measured by the QPR) was not associated with occupational identity, except for the psychological construct of hope.

This study was limited by its small sample size, which rendered factor analysis inappropriate. Future studies could determine mediating relationships between personal recovery and occupational competence. Further investigation of the construct of occupational identity would also be useful, because this construct has emerging sociocultural perspectives that go beyond occupational values (Phelan & Kinsella, 2009). In addition, this study's cross-sectional design could not capture how occupational competence and occupational identity evolved with changes in personal, functional, or clinical recovery. Whether assessment burden affected any of the results is also unknown. People with other, nonpsychotic conditions may also have a different recovery trajectory, so it would be valuable to include participants with other psychiatric diagnoses in future studies. Last, with the development of the OSA-Short Form (Popova et al., 2019), cross-validation of the current findings against the shortened version would be useful.

Table 4. Top 10 Occupational Priorities

No.	OSA Item	Frequency
1	Managing my finances (P)	13
2	Concentrating on my tasks (P)	6
3	Taking care of myself (P)	5
4	Identifying and solving problems (P)	5
5	Working toward my goals (V)	5
6	Relaxing and enjoying myself (H)	4
7	Taking care of the place where I live (P)	3
8	Taking care of others for whom I am responsible (P)	3
9	Having a satisfying routine (H)	3
10	Being involved as a student, worker, volunteer, and/or family member (H)	3

Note. H = habituation; OSA = Occupational Self Assessment; P = performance; V = volition.

Implications for Occupational Therapy Practice

Occupational therapists who use the MOHO strive to move clients toward improved occupational adaptation by facilitating occupational competence and occupational identity. In this study, we found that occupational competence was achieved not predominantly through functional improvement, but through enhancing personal states of self-efficacy in fulfilling valued occupations. Therefore, interventions should not only target objective functional ability (such as improving vocational and

community living skills) but also instill recovery-oriented states such as hope, empowerment, and meaningfulness.

When working with people with schizophrenia, occupational therapists should keep in mind that depression can influence people's value perception by causing them to overestimate the importance of an occupation or underrate their competence. Therefore, therapists need to grade interventions to create success and competency in addition to addressing any cognitive distortions that could widen the gap between competence and identity. By encouraging competence over a range of occupations, occupational therapists can help clients to value occupations that match their occupational identity and build on this identity over time. In addition, this study showed that hope also predicted occupational identity. As a result of negative symptoms such as avolition and anhedonia, people with schizophrenia often have difficulty motivating themselves to aspire to a positive future. Therefore, facilitating hope and empowerment may need to precede goal setting and resumption of roles.

In this study, the top three occupations prioritized for change were similar to those identified in a previous study with people with drug misuse problems (Davies & Cameron, 2010). This similarity could possibly be because these occupations are more observable by clients and their immediate caregivers. Empowering clients in the performance of everyday tasks, such as financial management, concentrating on tasks and self-management of daily living, may pave the way toward enhancing occupational competence and identity.

Conclusion

In conclusion, personal recovery predicted occupational competence as measured by the OSA, whereas depressive symptoms and hope predicted occupational identity. Occupational performance items such as finance management, concentrating on tasks, and self-care were top priorities for change among clients with schizophrenia. Occupational therapy interventions should not only target objective functional ability but also instill recovery-oriented psychological states such as hope and efficacy, in addition to awareness of clients' affective states.

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