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## Role Performance and Role Valuation Among Occupational Therapy Students in Norway

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# Role Performance and Role Valuation Among Occupational Therapy Students in Norway

## Abstract

**Background:** The Model of Human Occupation describes roles as providing the person with a framework around which to organize daily occupations. Role performance and role valuation in young adults may be related to gender, but there are few research studies to date to support this view.

**Methods:** This study is a cross-sectional design using a sample of 87 occupational therapy students in Norway. We used the Role Checklist to assess the students' performance and valuation of roles, and a variety of statistical procedures were employed in the analysis.

**Results:** Compared to the female participants, males performed roles in the community, social, and civic life area of participation more frequently. Otherwise, male and female participants were largely equal in current role performance. For most roles, we found associations between role performance and high valuation of the respective roles.

**Discussion:** Gender appears to be a factor of relevance for our understanding of role performance. This study suggests that occupational therapists should consider the societal as well as the personal aspects of roles. In addition, occupational therapy interventions could aim toward improving congruence between the roles clients perform and the value these roles have for them

## Keywords

Roles, Role Checklist, students, gender

## Credentials Display and Country

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Several professional disciplines have studied roles from different viewpoints, and the concept is, therefore, considered interdisciplinary. In sociology, the concept has been described as the socially defined attributes and expectations associated with social positions (Blair, 1998; Giddens, 1993). This view emphasizes that people generally behave according to what is perceived to be others' general expectations connected with a certain social position; for example, the position of a parent, a teacher, or an occupational therapist. The content of roles is socially constructed, implying that people take on positions with already defined characteristics. However, roles are not entirely predefined; according to Mead's classical work (1934), people take, but also make, roles. The enactment of role behavior is a dynamic process where roles are continuously interpreted and negotiated.

The occupational therapy profession has similarly used the concept of roles in its theory building. For example, the Model of Human Occupation (MOHO; Kielhofner, 2008) describes roles as an important organizing aspect of a person's occupational life. Roles direct the person toward a certain set of occupations that are valued, or even prescribed, by social expectations. The parent is expected to provide for the child's basic needs; for example, by helping the child go to sleep when tired. People enact roles, however, in their own personal manner. There are several ways a parent can help the child go to sleep. Role internalization describes the process by which the person actively identifies with the existing expectations and requirements of a role, and at the

same time shapes the content of the role according to his or her personal interpretations, meanings, and preferences (Fein, 1990; Kielhofner, 2008). Internalized roles provide the person with a sense of identity; a sense of who the person is based on the roles he or she performs and values. Illness and adverse life events, however, may restrict and deprive a person from performing the roles that make up his or her identity. Typically, research has found that persons with illnesses and disabilities, whether physical or psychosocial in nature, perform fewer roles than healthy persons (Dickerson & Oakley, 1995; Håkansson et al., 2005; McKenna, Liddle, Brown, Lee, & Gustafsson, 2009), and that health improvements may be accompanied by the performing of more roles (Eklund, 2001).

In itself, the term "occupational therapy student" signifies the performing of one role (student) and a commitment toward developing the knowledge and skills required to meet the social expectations associated with another (occupational therapist). Apart from this, there is little empirical knowledge available that addresses the roles that occupational therapy students perform in their everyday lives. A study with undergraduate university students in Jordan did not report descriptive results concerning role performance or how these roles were valued, but showed that a larger set of MOHO-related variables successfully discriminated between students with high and low subjective well-being, respectively (Yazdani, Jibril, & Kielhofner, 2008). Performing more roles was moderately associated with higher affective well-being, whereas placing a higher value on the currently performed roles was moderately

associated with higher scores on both the affective and the cognitive evaluation of well-being (Yazdani et al., 2008). A qualitatively based study of three master's level occupational therapy students in the United States showed that internalized roles changed in persons who had experienced a disrupting event; for example, some old roles were abandoned and some new roles were adopted following the students' personal experience with hurricane Ike in 2008 (Smith, Drefus, & Hersch, 2011).

Persons entering occupational therapy education programs are mainly young adults, and a large majority of practicing occupational therapists,—at least in Norway,—are women (Hagby et al., 2014). Characteristics like age and gender may contribute to determine the number of roles occupational therapy students perform and the value that are assigned to them. MOHO asserts that roles change over the life course (Kielhofner, 2008). For example, mature adults will often have started a family of their own and have caregiving responsibilities for children, whereas younger adults more often will emphasize roles associated with friendships and leisure occupations. Regarding the influence of gender, a qualitative study of young Canadian men indicated that their gender not only directed them toward certain forms of body-focused occupations, but that performing such occupations also appeared to be valued as they partly produced their roles as masculine, attractive, heterosexual men (Beagan & Saunders, 2005). Another study of six first time mothers, however, found that having their first child disrupted the women's previous

directed the women toward occupations they were required to do in order to fulfill their new role as mother (Horne, Corr, & Earle, 2005). Thus, these studies indicate the possibility of gender differences in both role performance and role valuation.

Theory and research suggest that roles change gradually and expectedly over the life course, but sometimes they change acutely due to illness or other significant life events. Essentially, becoming an occupational therapy student is an expected role change that prepares one for adopting the role of therapist in the future. However, adapting to the student role—and to the frequently accompanied change in life situation—can be difficult (Nedregård & Olsen, 2014), and women appear to be particularly vulnerable in this situation (Ghudasara, Davidson, Reich, Savoie, & Rodgers, 2011). Thus, investigating the roles of students can provide valuable insights into the lives of people adapting to and preparing for change. In turn, the knowledge developed may prove useful for occupational therapists' and occupational therapy students' perspectives on clients' roles.

### **Aim of the Study**

The purpose of the study is threefold. First, we use the Role Checklist to describe role performance in occupational therapy students across three time periods—past, present, and future (Oakley, Kielhofner, Barris, & Reichler, 1986)—and to describe how their currently performed roles correspond with the participation areas defined by the World Health Organization (WHO) in the International Classification of Functioning, Disability and Health (ICF; WHO, 2001). Second, we examine the value that students place on each of

the roles and the association between present role performance and the perceived value of roles.

Third, viewing the results from a gender perspective, we explore potential role differences between men and women.

## Methods

### Sample and Data Collection

This study has a cross-sectional design, using data collected in 2013 and 2014 by self-report questionnaires among undergraduate occupational therapy students. The sample is a self-selected convenience sample of students from two cohorts of occupational therapy students in Norway. With the 2013 cohort, only Part 1 of the Role Checklist was used in the data collection, whereas Part 1 and Part 2 were used with the 2014 cohort. This resulted in unequal sample sizes for the different analyses performed (see Results section and Table headings).

### Instrument and Translation Process

The assessment of role performance and role valuation was performed by using the Role Checklist (Oakley et al., 1986). The instrument is available in 13 languages and remains one of the most commonly used assessments in occupational therapy practice in the United States (Lee, Taylor, Kielhofner, & Fisher, 2008). The assessment is a short screening that measures role performance and the value the person places on ten internalized roles: student, worker, volunteer, home maintainer, caregiver, friend, family member, hobbyist/amateur, religious participant, and participant in organizations. Part 1 asks the respondents to indicate the roles they have performed in the past, the ones they perform at present, and the ones they plan to perform in the future. Part 2 asks for a

ranking of the same ten roles as very valuable (3), somewhat valuable (2), or not at all valuable (1). The Role Checklist has been shown to have high levels of test-retest reliability (Cronbach's  $\alpha > .90$ ), and administering the assessment as paper and pencil versus electronically yielded equivalent results (Scott, McFadden, Yates, Baker, & McSoley, 2014). The assessment has been found to be theoretically consistent with the concept of participation as outlined by the ICF (Scott, 2014).

For this study, we used Part 1 (role performance) and Part 2 (role valuation) of the Role Checklist (Oakley et al., 1986). First, we translated the instrument from English into Norwegian. Second, we developed a back-translated version, and this version was checked against the original. Only small modifications were made to the translated version after this process. The full protocol for the translation of the Role Checklist will be provided elsewhere (Scott, 2015).

### Analyses

First, descriptive analysis was applied to the data. Differences in proportions between men and women were examined with Fisher's Exact test. Gender differences concerning the total number of performed roles and the number of roles in each of the ICF participation areas were examined with the independent *t*-test. Given the ordinal type data provided with the instrument, role valuations among men and women were compared with the non-parametric Mann-Whitney U test. Associations between role performance and role valuation were similarly examined with the non-parametric Kendall's correlation coefficient  $\tau$ . The level of statistical significance was set at  $p < 0.05$ .

## Ethics

We obtained approval from the appropriate data protection agency, according to the research legislation and established procedures in Norway. All of the participants volunteered to take part in the study, and all of the participants provided informed consent to participate prior to data collection.

## Results

### Participants

Of the 87 study participants, 64 participants (73.6 %) were aged under 25 years. Nineteen participants (21.8 %) were aged 25-34 years, whereas one participant (1.1 %) and three participants (3.4 %) were in the age groups 35-44 years and 45-54 years, respectively. Seventy of the participants (80.5 %) were women, and 17 of the participants (19.5 %) were men.

### Role Performance in Men and Women

Table 1 displays how frequently the ten roles were endorsed for each of the three periods: past, present, and future. In addition, Table 1 shows

the statistical probability of differences in proportions between men and women concerning the roles they endorsed for each period. The most frequently endorsed present roles were student (100%), home maintainer (96%-100%), and friend (99% -100%). The roles volunteer (19% -24%), participant in organizations (11% - 24%), and religious participant (6% - 24%) consistently received the lowest levels of endorsement.

Compared to the female students, a higher proportion of the male students reported present performance of the hobbyist/amateur role ( $p = 0.01$ ) and the religious participant role ( $p = 0.04$ ). Further, a higher proportion of the male students planned to perform the roles of hobbyist/amateur ( $p = 0.04$ ), religious participant ( $p = 0.03$ ), and student ( $p = 0.02$ ) in the future. And, a higher proportion of the male students reported past performance in the roles of home maintainer ( $p = 0.04$ ) and religious participant ( $p = 0.04$ ). Otherwise, we did not detect statistically significant gender differences.

**Table 1**

*Role Performance in a Cohort of Norwegian Students Comparing Men ( $n = 17$ ) and Women ( $n = 70$ )*

Role	Past			Present			Future		
	Men <i>n</i> (%)	Women <i>n</i> (%)	Test <sup>1</sup> <i>p</i>	Men <i>n</i> (%)	Women <i>n</i> (%)	Test <sup>1</sup> <i>p</i>	Men <i>n</i> (%)	Women <i>n</i> (%)	Test <sup>1</sup> <i>p</i>
Student <sup>2</sup>	17 (100.0)	56 (80.0)	0.06	17 (100.0)	70 (100.0)	-	17 (100.0)	52 (74.3)	0.02*
Worker	17 (100.0)	57 (81.4)	0.06	11 (64.7)	52 (74.3)	0.55	15 (88.2)	55 (78.6)	0.51
Volunteer	8 (47.1)	16 (22.9)	0.07	4 (23.5)	13 (18.6)	0.73	6 (35.3)	14 (20.0)	0.21
Caregiver	9 (52.9)	28 (40.0)	0.42	7 (41.2)	23 (32.9)	0.58	9 (52.9)	34 (48.6)	0.79
Home maintainer	17 (100.0)	55 (78.6)	0.04*	17 (100.0)	67 (95.7)	1.00	17 (100.0)	57 (81.4)	0.06
Friend	17 (100.0)	61 (87.1)	0.20	17 (100.0)	69 (98.6)	1.00	17 (100.0)	59 (84.3)	0.11
Family member	16 (94.1)	57 (81.4)	0.29	12 (70.6)	55 (78.6)	0.53	13 (76.5)	57 (81.4)	0.73
Religious participant	7 (41.2)	11 (15.7)	0.04*	4 (23.5)	4 (5.7)	0.04*	4 (23.5)	3 (4.3)	0.03*
Hobbyist/amateur	17 (100.0)	56 (80.0)	0.06	17 (100.0)	50 (71.4)	0.01*	17 (100.0)	53 (75.7)	0.04*
Participant in organizations	4 (23.5)	9 (12.9)	0.27	4 (23.5)	8 (11.4)	0.24	5 (29.4)	9 (12.9)	0.14

*Note.* Table content is frequency and proportion of men and women endorsing the ten roles for each of the three time periods.

<sup>1</sup> The statistical probability ( $p$ ) of gender differences was examined with Fisher's Exact test.

<sup>2</sup> The lack of variation for the role of student at present was a result of the given student sample, and thus, no significance test was performed.

\* $p < 0.05$

Table 2 shows the total number of roles, as well as the number of roles grouped in the four ICF participation areas (Chapters 6-9; WHO, 2001), performed by men and women in the sample. No gender differences occurred for the total number of presently performed roles, whereas the male participants performed more roles in the chapter nine area (community and social and civic life) of the ICF compared to the female participants ( $p = 0.002$ ). These roles are hobbyist/amateur, religious participant, and participant in organizations. For the women in the sample, the level of role performance appeared to be lower in the chapter nine area compared to the other areas.

### Role Valuation

Table 3 shows the median values placed on each of the ten roles by the participants in Sample 2,

and shows the statistical probability of differences in role valuation between men and women. For the role hobbyist/amateur, the median value was three (very valuable) for both men and women. However, the distribution of scores was significantly different between the two groups, with higher scores among the male students ( $p = 0.04$ ). Otherwise, no statistically significant gender differences were found. Most of the roles received high scores among the male students, seven of the roles received a median value score of three, and six of the roles received a median value score of three among the female students. At the lower end of the scale, the roles religious participant and participant in organizations received a median value score of one, indicating that they were generally perceived as not at all valuable by the sample.

**Table 2**

*Role Performance Related to the ICF Participation Areas Comparing Men ( $n = 17$ ) and Women ( $n = 70$ )*

ICF participation area	Roles listed in the Role Checklist	Score range	Present number of roles		
			Men <i>M (SD)</i>	Women <i>M (SD)</i>	<i>p</i>
Ch. 6: Domestic life	Caregiver, Home maintainer	0-2	1.4 (0.5)	1.3 (0.5)	0.39
Ch. 7: Interpersonal interaction	Friend, Family member	0-2	1.7 (0.5)	1.8 (0.4)	0.58
Ch. 8: Major life areas	Student, Worker, Volunteer	0-3	1.9 (0.7)	1.9 (0.6)	0.80
Ch. 9: Community, social, and civic life	Hobbyist/amateur, Participant in organizations, Religious participant	0-3	1.5 (0.7)	0.9 (0.7)	< 0.01*
Total number of current roles	All 10 roles	0-10	6.5 (1.2)	5.9 (1.4)	0.12

*Note.* Table content is the mean (*M*) number of roles corresponding to each of the ICF participation areas, the total number of current roles, and corresponding standard deviations (*SD*). Differences between men and women examined with independent *t*-test.

\* $p < 0.01$

**Table 3**

*Role Valuation in One Cohort of Norwegian Students ( $N = 52$ ) and Associations Between Present Role Performance and Role Valuation*

Role	Reported value <i>Md (min-max)</i>			Role association with value Kendall's $\tau$	
	Men ( $n = 13$ )	Women ( $n = 39$ )	<i>p</i>	All ( $N = 52$ )	<i>p</i>
Student <sup>1</sup>	3 (2-3)	3 (2-3)	0.80	0.01	0.95
Worker	3 (2-3)	3 (2-3)	0.11	0.31	0.03*
Volunteer	2 (1-3)	2 (1-3)	0.37	0.22	0.13
Caregiver	3 (2-3)	3 (1-3)	0.56	0.25	0.08
Home maintainer	3 (1-3)	2 (1-3)	0.22	0.05	0.71
Friend <sup>2</sup>	3 (3)	3 (2-3)	0.41	0.70	< 0.01**
Family member <sup>3</sup>	3 (2-3)	3 (2-3)	0.41	0.35	0.01*
Religious participant	1 (1-3)	1 (1-3)	0.73	0.62	< 0.01**
Hobbyist/amateur <sup>2</sup>	3 (3)	3 (2-3)	0.04*	0.38	< 0.01**
Participant in organizations	1 (1-2)	1 (1-3)	0.24	0.51	< 0.01**

*Note.* The table shows the median value scores of men and women for the ten roles. Value coding: Not at all valuable = 1, somewhat valuable = 2, very valuable = 3. Role performance coding: Does not perform the role at present = 0, performs the role at present = 1. The statistical probability ( $p$ ) of gender differences in the distribution of value scores were examined with the Mann-Whitney tests. Associations between presently performed roles and their assigned value were examined with Kendall's correlation coefficient  $\tau$ .

<sup>1</sup>All participants had this role at present; thus, the correlation coefficient was computed for the association between future student role and its reported value. <sup>2</sup>Reported value was 3 for all of the male participants. <sup>3</sup>Among the female participants, the reported values were 3 ( $n = 38$ ) and 2 ( $n = 1$ ).

\* $p < 0.05$  \*\* $p < 0.01$

## Associations Between Role Performance and Role Valuation

Table 3 also shows measures of the associations between performance in present roles and role valuation among the participants in Sample 2. Given the largely equal role valuations among the male and the female participants, these analyses were performed for the total sample. The results showed positive and statistically significant associations related to six of the ten roles: Presently performing the roles worker, friend, family member, religious participant, hobbyist/amateur, and participant in organizations was associated with assigning a higher value score to these roles (Kendall's  $\tau$  ranging 0.31-0.70). Positive but non-significant associations with the respective value scores were also shown for the roles of volunteer and caregiver (Kendall's  $\tau = 0.22$  and  $0.25$ , respectively). We found no associations between the performance of the student role (planned for the future; see Table 3 notation) and the home maintainer role or their respective value scores.

### Discussion

This study examined role performance and role valuation, assessed with the Role Checklist, in male and female occupational therapy students in Norway. Male occupational therapy students performed more roles related to community, social, and civic life than their female counterparts. Most roles received the highest value score as the median

score for the sample, whereas religious participant and participant in organizations received the lowest value score by both men and women. In the total sample, a strong trend was associating high values to currently performed roles, positive and statistically significant associations occurred for six of the ten roles, with two additional roles showing moderate, although non-significant associations.

Few research studies of students' role performance provide relevant context for the present study. Yazdani and colleagues (2008) used a large sample of 670 university students but did not report descriptive data. Smith et al. (2011) did report descriptive Role Checklist data but used three participants only. In the Smith et al. study, the three participants performed between four and five roles each. However, the participants' number of roles had dropped during the previous year following their experience with the hurricane Ike. The traumatic experience and its consequences appear to be relevant for explaining the American students' lower level of present role performance.

Another study that provides context is Håkansson and colleagues (2005), who compared healthy women with long-term sick-listed women concerning their role performance and role valuation. The group of healthy women, who we consider constitute the most relevant comparison to our sample, performed most of the listed roles, but their median score indicated that they did not



perform the roles of student, caregiver, and participant in organizations. The friend and hobbyist/amateur roles were performed and somewhat valued, whereas the remaining roles (worker, home maintainer, and family member) were performed and received the highest value scores. In our sample, we found a larger set of roles receiving the highest value score. We would like to point to possible factors that can contribute to explain both differences and similarities between the studies that may be used to provide some general insights regarding role performance and role valuation.

First, our sample consisted of young adults with the majority of the participants under the age of 25 years, whereas Håkansson and colleagues (2005) used a mature adult sample aged 50-59 years. Kielhofner (2008) suggested that role performance and valuation changes throughout the life course. Such change, it appears, may concern the performing of fewer roles when moving into mature adulthood compared to the variety of roles performed in young adulthood. Moreover, mature adults may be more discriminating about how they value different roles compared to younger persons. Their pattern in life, including the roles they value and do not value, gradually becomes less flexible. Only three roles received the highest value score in the Håkansson et al. sample, whereas this was the case for six and seven roles in our study's female and male participants, respectively. Finally, it seems probable that life as a mature adult is more about placing value on the roles that one needs to perform and the ones others depend on the person to fulfill. Often, these are roles related to work and

family life, as also suggested by the study of first time mothers (Horne et al., 2005). Thus, the substantial age difference may contribute to explain the variations between the two studies' participants concerning role performance and their valuations. Building on the sociological understanding of roles (Blair, 1998; Giddens, 1993), we suggest that social construction not only impacts on role content, but also on the set of roles that people perform in different phases throughout their life course.

Compared to the female students, we found that the male students performed more roles related to the ICF chapter nine concerning community and social and civic life (WHO, 2001). In particular, this difference between male and female students concerned the religious participant role and the hobbyist/amateur role. Although we have not explored the specific occupational content of the students' roles in this study, it may be that some role content contributes to the maintenance and reinforcement of male gender identity, as suggested by previous research (Beagan & Saunders, 2005). For example, weight training and other types of masculine exercise appear to be part of many male persons' lives in today's Norwegian society (Bonsaksen, 2014; Ulseth, 2008), and such occupations fit with the hobbyist/amateur role, as defined by the Role Checklist (Oakley et al., 1986). All of the male participants reported the performance of this role in their past, their present, and in their foreseeable future. Thus, we suggest that gender, along with age, may have an impact on some of the roles that students perform in their daily lives.

Male students also more often performed the religious participant role, compared to the females, but only a small number of students endorsed this role (see Table 1). However, the students performing this role assigned it a high value score. This association of assigning high value scores to the presently performed roles was a consistent pattern in the sample (see Table 3). This is also in line with MOHO, suggesting that values are a central aspect of people's motivation, and that placing a high value on certain activities creates a drive toward performing them (Kielhofner, 2008). Empirically, a study of persons with mental illness demonstrated that performance in valued roles was associated with a higher quality of life (Eklund, 2001). Echoing Eklund (2001), we suggest that the pattern of performing the roles that matter to the person, as found in our sample, is an aspect of healthy living. The reversed pattern—performing roles with no or little value, or not being able to perform roles of great importance—is a situation that calls for attention and change.

### **Study Limitations and Suggestions for Future Research**

Roles can be described in a number of ways, and the ten roles and their definitions provided in the Role Checklist is one of several. Using the Role Checklist as the instrument for assessing roles in this study provides a useful and coherent, although theoretically biased, perspective on role performance. Studies using other assessments with other role descriptions and definitions may produce different results. The study used a small sample size, and the male group was particularly small. In

addition, a large number of statistical tests were performed. This increases the possibility of chance results reaching statistical significance. Thus, we have limited ability to generalize the results to the larger population, and we suggest the results be used with caution—perhaps largely as a starting point for future research efforts aimed at investigating role performance and role valuation in various groups. The study used data from one measurement only, and future studies may prefer to use longitudinal design studies to examine how people's roles and their valuations change over time. In addition, we suggest that future studies use additional relevant outcome measures to empirically assess how self-reported role performance and role valuation is related to other important aspects of human functioning, occupation, and participation.

### **Conclusion**

This study examined role performance and role valuation in Norwegian occupational therapy students, and the analyses were largely performed with a gender perspective. In terms of role performance, few differences were detected, but the male students performed more roles related to community, social, and civic life. In both male and female participants, most roles were regarded as very valuable, and the students showed a consistent pattern of performing the roles they valued more highly.

Occupational therapists may use the results of this study in several ways. First, given the scarce amount of studies concerning role performance in students, this study provides data against which the results from future studies may be compared. Second, becoming a student is a specific role change shown to be problematic for many

(Ghodasara et al., 2011; Nedregård & Olsen, 2014).

Therefore, some students' life situations may, to a certain degree, resemble that of clients seeking help in order to adapt to burdensome changes in life. As a result, occupational therapy educators may use the students' personal experiences with roles and role change as a means to promote the students' cognitive understanding of roles, as well as their empathy in relation to clients struggling with role change.

Third, we have argued that age and gender are relevant factors that may impact on the roles people perform and on how they value them. The clinical relevance of this has a dual nature: Occupational therapists should be aware of societal pressures and demands concerning which roles are considered appropriate for men and women in different age groups. At the same time, occupational therapists must appreciate that roles are not entirely determined by external forces. In the end, roles are made what they are by the people who perform them, adding meanings, values, and preferences to the roles. Last, occupational therapists need to consider the congruence, or lack thereof, between people's performed roles and the roles they value. Not all clients will share the pattern of this student sample, which largely assigned high value scores to performed roles. Incongruence, as in cases of reduced ability to perform valued roles or largely performing roles that are not valuable, may indicate a need for occupational therapy intervention targeted at role performance.

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