Therapeutic mode preferences and associated factors among Norwegian undergraduate

occupational therapy students: A cross-sectional exploratory study

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Abstract

Background: The Intentional Relationship Model is specifically focused on the relational aspect of therapy. The model describes six therapeutic modes; these represent different types of interaction for the therapist. However, preferences for therapeutic mode use is under-researched.

Aims: This study aims to describe preferences for therapeutic modes in undergraduate occupational therapy students, as well as to explore factors associated to each of the therapeutic modes.

Methods: A sample of 96 occupational therapy students, based at two different Norwegian universities, participated in the study. They completed the Self-Assessment of Modes Questionnaire along with sociodemographic information. Descriptive analysis, bivariate correlation, and linear regression analysis were employed.

Results: The problem-solving mode was most frequently endorsed. There were generally weak associations between the variables, but female sex, and being a student in the education program in Trondheim, were associated with higher preference for collaboration.

Conclusion: There is diversity in students' preferences for the modes, but the problem-solving mode was the most preferred. Students need to be aware of the mode they feel more comfortable with and make sure they use modes that fit with the specific client.

Significance: The occupational therapy education programs need to incorporate raising awareness about therapeutic modes.

Keywords: Intentional Relationship Model, therapeutic relationship, higher education, Norwegian Self-Assessment of Modes Questionnaire

Introduction

The therapeutic relationship has always been at the core of occupational therapy practice (1, 2). Occupational therapy, with its first roots in the USA and in the United Kingdom, started with using occupation therapeutically in hospital settings (3). Soon occupational therapists realized that productive interaction with the client was important for their ability to implement the idea of occupation as therapy (1, 4). However, the use of self as a tool in therapy at first went too far with borrowing the ideas from psychological theories, most dominantly psychodynamic. It was just recently that a paradigm shift happened in occupational therapy and the therapeutic use of self and occupation were given equal value in this field (5). The 'therapeutic use of self' recently moved more towards the unique manner that interaction between the client and therapist happens within the context of occupational therapy.

The positive interaction between the client and therapist is crucial for the provision of good care and appropriate service (6). To establish such a dynamic and flexible approach to therapy and to be able to respond to changes in the client's situation, a therapist needs to develop an advanced set of interaction skills. These skills will allow for establishing and maintaining productive relationships with clients who exhibit a variety of interaction styles (1).

There are different approaches as to how people choose their career. According to Holland (7), people's vocational interest – given a situation where people have a real choice – is an expression of their personality. Super (8) suggested that career choice and development is essentially a process of developing and implementing a person's self-concept. According to the above claims, occupational therapy students enter the university with particular characteristics that has led them to choose this profession. During their time in occupational therapy education, students exercise professional reasoning, and they learn and practice skills

that will help them to implement the profession's values, skills, and knowledge into sound practice. Establishing therapeutic relationships is an important aspect of training in occupational therapy education. Thus, the ability to work with people, to communicate with a client group, and to build relationships are some of the characteristics that occupational therapy students should appreciate. Preferably, these characteristics should be a developing part of their own self-concept when applying for this profession. However, the training process develops these characteristics further in order to establish the professional role as an occupational therapist (9). Students start establishing a professional self that is unique to them, a combination of the professional identity based on their role and their own personal self that makes them who they are as therapists (10). Therefore, it seems reasonable to suggest that the more compatible the personal characteristics are with the skills, knowledge, and values expected from an occupational therapist, the easier the educational journey may be for students.

Students should be encouraged to analyze and be critical about what they do, feel, and think as a way of monitoring their own presence in therapy and how that impacts on the therapy process (1). During their education, thus, occupational therapy students are socialized into the profession's culture, values and skills (11, 12). At the same time, they need to integrate these aspects of the profession with their personal self in order to explore who they are as occupational therapists, who they want to be, and what their stronger and weaker sides are. To support integration, students should use a conceptual framework for such monitoring of client-therapist interactions.

The Intentional Relationship Model (IRM) (1) provides a framework to facilitate this integration. As part of the IRM, Taylor introduced the 'therapeutic modes', these are different interaction styles that the therapist can adopt in therapeutic encounters. There are six identified therapeutic modes: the advocating, collaborating, empathizing, encouraging,

instructing, and problem-solving modes (1, 13-15). The *advocating* mode describes the therapist functioning as a catalyst for the provision of resources on behalf of the client. The therapist functions as a facilitator so the client can overcome occupational barriers. In the *collaborative* mode, the therapist includes the client in all aspects of the therapeutic process, strongly supporting the value of client-centered practice. In this mode, the therapist promotes client empowerment, autonomy, independence and personal choice and encourages the client to take ownership of the therapy process. The *empathizing* mode is about making every effort to understand the client's experiences, being supportive and attentive to the client's feelings. The empathizing mode includes careful listening and observing, and taking the time to accept and validate painful emotions. The *encouraging* mode requires the therapist to behave in an applauding manner to the client's performance. Strategies like making compliments, applauding and cheering in a creative manner are often used to improve the client's desire to participate in occupations. In the *instructing* mode, the therapist assumes a teacher-like role and educates the client so that he or she can address the issues considered important to occupational participation. A structured and directive communicative approach, with frequent demonstrations and instructions, are key descriptors of this mode. The *problem-solving* mode describes addressing the client's occupational problems constructively using logical reasoning and analysis. Strategic questioning, structured guidelines and other logical approaches are commonly used in this mode (1).

The empirical research concerned with IRM is sparse. Bonsaksen (16) previously described a small sample ($n = 31$) of students who showed preference for the problem-solving and collaborating modes, but these results were not put into context with other types of information about the sample. Taylor, Lee, and Kielhofner (17) examined mode preferences among 563 occupational therapists in the USA, and found that the encouraging and collaborating modes were most frequently endorsed in that sample. It was found that mode

use in general was similar between sample subgroups, but it was higher among therapists who experienced difficult emotions and/or behaviors among their clients. Thus, in spite of mode preferences being theoretically described as relatively congruent with the personality of the therapist or student (1), it is possible that their use also depend on other factors. Such associated factors may be concerned with sociodemographic characteristics (like age and sex), experience (like education and work), or the environment (like the professional culture or work challenges at a specific worksite). To date, however, no studies have reported about factors associated with mode preferences among occupational therapy students.

Aim of the study

This study aims to describe preferences for therapeutic modes of undergraduate students in two universities in Norway, as well as to explore the correlated factors to each of the therapeutic modes.

Method

Design, sample and data collection

The study had a cross-sectional design and the data were collected in the autumn of 2015. The sample of second-year occupational therapy students enrolled in the education programs in Oslo and Trondheim was recruited by convenience at the conclusion of a workshop concerned with the Intentional Relationship Model and use of the therapeutic modes. The two university programs are both 3-years undergraduate programs, relatively similar in their theoretical orientation, but the use of groups for educational and assessment reasons may be more emphasized in Trondheim, compared to Oslo. Prior to the data collection in this study, the student group in Trondheim had also completed one period of six weeks practice fieldwork, which the students in Oslo had not done. The students in both programs were briefly informed about the IRM prior to the data collection. However, as far as

we know, all the participants had no or little knowledge about the different therapeutic modes described in the model. All data were collected by self-report questionnaires, consisting of the Norwegian Self-Assessment of Modes Questionnaire (N-SAMQ), in addition to information about sociodemographic factors and education-related factors.

Measures

The *Self-Assessment of Modes Questionnaire* was designed to help therapists identify the mode(s) of relating to clients that are comfortable to them, as well as to identify the modes that are not (18). The Norwegian version of the assessment is comprised of 19 short clinical vignettes (13, 19). A set of six different therapist responses are listed to each of these vignettes, all of which representing plausible therapeutic actions. The respondent is instructed to indicate the one (and only one) of the six suggested responses that he or she feels most comfortable with in the given situation. Each response option represents one of the therapeutic modes. A percentage score for each of the modes is calculated by adding the number of responses that belong to each mode, and then dividing the resulting figure by 19 (the number of vignettes) and multiply by 100.

Additional information that was collected included age in years, sex (1 = male, 2 = female), university location (1 = Oslo, 2 = Trondheim) years of higher education prior to entry at the occupational therapy program, hours spent on self-studies during a normal week, and academic performance in the occupational therapy program (grade point average).

Data analysis

Prior to analysis, 10 % of the dataset was checked against the questionnaires for correctness. One error was detected, and this was corrected prior to the analysis. One hundred and four students gave their consent to participate in the study and completed the questionnaires. For this study, eight students (7.7 %) were excluded from the sample due to missing or inadequate responses on one or more variables.

The IBM SPSS software was used in the statistical analyses (20). In order to determine the participants' relative affiliation with the modes, the frequency of each response mode was divided by 19 (number of items) and multiplied by 100, resulting in six variables containing the percentage score for each mode. Descriptive analyses using means (*M*) and standard deviations (*SD*) were performed on these variables. Group differences were examined with independent *t*-tests and Chi-square tests. Bivariate analyses were performed using Pearson's correlation coefficient *r*. Then, hierarchical linear regression analyses were performed, using each of the six percentage mode scores as dependent variables. Independent variables were included in three blocks: 1) age and sex, 2) university (Oslo/Trondheim) and years of prior higher education, and 3) weekly hours of self-studying and grade point average. The level of statistical significance was set at $p < 0.05$, and effect sizes were reported as standardized β weights.

Ethics

The study was conducted according to ethical guidelines for research (21). The researchers informed the participants appropriately about the aims and procedures of the study, and all participants provided a written consent form. The participant information emphasized that the collected data would be used to analyze preferences for therapeutic modes on an aggregated group level. In addition, it was emphasized that participation in the study was optional. No benefits were related to individuals' participation, and conversely, no disadvantages were related to non-participation. The students completed the questionnaires at the conclusion of a workshop related to the IRM and use of the therapeutic modes. The study received approval from the Norwegian Data Protection Official for Research (project number 43954).

Results

Sample characteristics

The sample characteristics are provided in Table 1. Ninety-six students participated in the study, and the larger proportion ($n = 55$, 57.3 %) of the sample studied in Trondheim, in comparison to those who studied in Oslo ($n = 41$, 42.7 %). The participants were 21 (21.9 %) men and 75 (78.1 %) women, with a mean age of 23.4 years ($SD = 3.5$ years). Of the six therapeutic modes, the problem-solving mode was the most frequently endorsed ($M = 22.8$ %) with the encouraging mode coming second ($M = 21.8$ %).

[TABLE 1 ABOUT HERE]

Factors associated with therapeutic mode preferences

Table 2 shows the results from the bivariate correlation analysis. In general, there were very weak correlations between the variables. However, being female and studying in Trondheim (as opposed to studying in Oslo) were both associated with stronger preference for the collaborating mode.

[TABLE 2 ABOUT HERE]

Table 3 shows the independent associations between the predictor variables and the six therapeutic modes. In general, the models had little predictive power. Five of the six models explained between 3.2 % and 5.5 % of the variance in the outcome variable. For the collaborating mode, however, the model explained 14.9 % of the variance in the students' preference for responding in this mode. Female sex, and being a student in the education program in Trondheim, were significantly associated with stronger preference for collaboration, relative to the other modes.

[TABLE 3 ABOUT HERE]

Discussion

The current fashion of publication is to publish statistically significant results. An example of that in relation to this study would be the correlations between the employed independent variables and mode preferences that would support the hypotheses of existing relationships. For the most part, we were unable to demonstrate such statistically significant associations. However, given the small number of studies where the IRM has been used as the theoretical framework, we nonetheless consider there is a value in the findings of this study.

Of the six therapeutic modes, the problem-solving mode was the most frequently preferred mode. Building on Holland (7) and Super (8), this may suggest that students who choose occupational therapy as their line of study quite often communicate within this mode to express their personalities – who they are and how they see themselves. However, using the same reference points, the results also indicate that the students' personalities, as expressed by their mode preferences, are multi-faceted (see Table 1): overall, the six modes all showed percentage scores between 10.7 % (empathizing mode) and 22.8 % (problem-solving mode). This also aligns with the results from one previous study of therapeutic mode preferences in students (16), showing mode percentage scores between 11.5 % (advocating mode) and 23.1 % (problem-solving mode). Thus, the occupational therapy education program may be a line of study that has appeal to students with a variety of personality-based communication styles, but it has perhaps the strongest appeal to those with a preference for a practical approach towards solving problems.

The stronger preference for the problem-solving mode is similar to the previous finding of mode preferences in a student population in Norway (16), and supports the notion

that the problem-solving mode is a therapeutic mode that is perceived among students to be useful in many situations. The problem-solving being the more frequently preferred mode among students could be due to this mode requiring cognitive, analytical thinking. This way of thinking logically about problems appears to be one of the most basic skills taught in occupational therapy programs (22) and advocated by the professional agencies (23).

One previous study conducted with occupational therapy practitioners in the USA identified moderate endorsement for the problem-solving mode, whereas the encouraging mode was their most preferred mode (17). The encouraging mode had the second highest percentage score with the student sample in the present study, only one percentage point lower than the problem-solving mode score (see Table 1). The similar results compared to Taylor and coworkers (17), at least for the encouraging therapeutic mode, may indicate relatively similar preferences between occupational therapy students and occupational therapy practitioners. However, future studies may examine possible group differences in more detail. The time difference between the studies could have had an impact on the findings, as the world and the professional practice is rapidly changing.

According to Taylor (1), the six therapeutic modes are equally important, and they can all be used when the situation calls for it. For students, however, it may be that the problem-solving mode is less complicated than the other modes (apart perhaps from the instructing mode), and that it is quite similar to the type of client-therapist interactions that are taught during the occupational therapy education programs. Moreover, the problem-solving mode may resemble the client-therapist relationship as seen from a traditional medical model perspective (24), one which may have an appealing simplicity to students. The empathizing mode may involve more skills related to self-awareness and having a comprehensive understanding of the client and his or her lifeworld. Interacting with the client in the

empathizing mode, then, appears to be more of an expert rather than novice therapist skill (25, 26).

In general, this study was unable to explain much of the variation in mode preferences among occupational therapy students. A notable exception to this concerns the preferences for the collaborative mode, with which two factors were independently associated. The significant association between the female sex and higher preference for the collaborative mode can be considered from a wide range of perspectives. The characteristics of a collaborative mode is that it gives a high value to the client's contribution in therapy. It could have a cultural implication, in the sense that collaboration may have a particular value in female culture, related either to the community at large, or to the educational system more in particular. The collaboration preferences of female students could be because (the largely) female educators emphasize these values because the female students appreciated these values, or a combination of both. The female students' acknowledgement of the collaborative mode could also reflect women's perhaps stronger tendency to support values like collaboration and equality, a tendency that could be related to women's continued struggle to obtain equal rights in relation to men in society (27, 28). However, the study has not addressed these factors and this needs further investigation in future studies.

The other finding is the higher preference for the collaborative mode among the students in Trondheim, compared to the students in Oslo. The occupational therapy education program in Trondheim is largely based on group work, and even student assessment and exams are quite often performed using a group format that requires the students to collaborate with each other (29). The apparently stronger focus on student collaboration during the education program may partly account for the higher preference for a collaborating therapist style among the students from Trondheim, compared to the students from Oslo. The issue of educational values, occupational therapy role definition, mode preferences of the educators as

role models, the level of preparing students for each mode (explicitly or implicitly), and previous experiences of the practice placement may also be considered as contributing variables that need further exploration.

Study limitations and directions for future research

The limited scope of the study makes it hard to discuss the impact of gender on the collaborative mode. Gender-related issues may be more confidently discussed in future studies, for example in studies investigating the societal and/or educational values for establishing equal power between the therapist and client during therapy. Differences and similarities between students, practitioners, and other groups also remains to be explored in future studies. With regard to students, a possible line of further study may be to examine differences between students in different year cohorts; i.e., differences between groups of students with different levels of knowledge and experience. Moreover, it would be important to know more about the stability of the students' mode preferences – do they change over time, or are they maintained after graduation? We would also suggest future research to focus on potential associations between students' mode preferences, their values, and the types of clinical situations involved. Investigating associations between therapists and students' mode preferences on one hand, and clients' preferred ways of interacting with the therapist on the other, are similarly a way forward for research in this field. We were unable to explain much of the variance in mode preference among the students in this sample, and we found very few statistically significant associations with modes. Future studies may look at other types of variables, for example those related to personality, when exploring other factors that may be associated with mode preferences.

Conclusion

In spite of the therapeutic relationship being a significant element of occupational therapy interventions, the issue is under-researched in the field. The current study is an effort

towards filling this gap. This study aimed to identify the preferred therapeutic modes of undergraduate occupational therapy students, and factors associated with their mode preferences. The problem-solving mode was most preferred by the students. Being female, and studying in Trondheim, were associated with a stronger preference for the collaborative mode compared to the male students and those studying in Oslo. The study results are particularly valuable in relation to training students: the significance of self-awareness should be emphasized, as should clinical reasoning skills and reflection about how one best can establish and enhance a therapeutic relationship to clients.

Declaration of interest

The authors report no conflicts of interest. The authors alone are responsible for the content and writing of the paper.

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Table 1

Sample characteristics (n = 96)

Variables	All participants ($n = 96$) M (SD)	Oslo ($n = 41$) M (SD)	Trondheim ($n = 55$) M (SD)	p
Years of age	23.4 (3.5)	24.2 (4.2)	22.8 (2.9)	0.08
Prior higher education (years)	0.8 (1.1)	0.9 (1.1)	0.8 (1.1)	0.58
Weekly hours of self-study	9.1 (5.6)	8.8 (5.4)	9.3 (5.8)	0.69
Grade point average (range 1-6)	4.4 (0.8)	4.4 (0.8)	4.3 (0.8)	0.63
Sex	n (%)	n (%)	n (%)	
Male	21 (21.9)	7 (17.1)	14 (25.5)	0.33
Female	75 (78.1)	34 (82.9)	41 (74.5)	
Therapeutic modes (percentage)	M (SD)	M (SD)	M (SD)	
Advocating	15.9 (9.4)	16.9 (10.0)	15.1 (9.0)	0.35
Collaborating	14.3 (8.6)	12.2 (8.1)	15.9 (8.7)	0.04
Empathizing	10.7 (10.6)	11.4 (12.7)	10.1 (8.3)	0.56

Encouraging	21.8 (11.1)	22.8 (11.3)	21.0 (10.9)	0.41
Instructing	14.5 (8.0)	13.1 (7.4)	15.6 (8.3)	0.13
Problem-solving	22.8 (11.1)	23.5 (11.4)	22.3 (11.0)	0.61

Note. Higher grade point average score is higher grade. Group differences examined with independent *t*-tests and χ^2-tests.

Table 2

Bivariate associations with therapeutic modes in the sample (n = 96)

Variables	Advocating	Collaborating	Empathizing	Encouraging	Instructing	Problem-solving
Age	0.02	0.02	0.19	-0.12	-0.12	-0.01
Sex	-0.09	0.28*	-0.02	-0.03	-0.02	-0.08
University	-0.10	0.21*	-0.06	-0.09	0.16	-0.05
Years prior higher education	-0.02	-0.03	0.02	-0.10	-0.00	0.12
Weekly hours self-study	-0.06	-0.00	-0.03	-0.02	0.04	0.06
Grade point average	-0.15	0.09	0.06	-0.06	0.11	-0.02

Note. Table content is Pearson's correlation coefficient *r*, showing the independent variables' bivariate association with the therapeutic modes.

Sex is coded male = 1, female = 2. The university in Oslo = 1, the university in Trondheim = 2. Higher grade point average is better grades.

*p< 0.05

Table 3

Multivariate associations with therapeutic modes in the sample (n = 96)

Variables	Advocating	Collaborating	Empathizing	Encouraging	Instructing	Problem-solving
Age	0.04	0.09	0.20	-0.09	-0.16	-0.09
Sex	-0.06	0.29 *	-0.01	-0.05	-0.04	-0.08
Explained variance	**0.9 %**	**7.5 % ***	**3.4 %**	**1.2 %**	**1.4 %**	**0.8 %**
University	-0.11	0.27 *	-0.03	-0.12	0.12	-0.05
Years prior higher education	0.02	-0.06	-0.07	-0.09	0.04	0.15
R^2 change	**1.3 %**	**7.0 % ***	**0.4 %**	**1.9 %**	**2.0 %**	**2.0 %**
Explained variance	**2.2 %**	**14.5 % ***	**3.9 %**	**3.2 %**	**3.4 %**	**2.8 %**
Weekly hours self-study	-0.01	-0.05	-0.03	-0.01	0.00	0.08
Grade point average	-0.16	0.05	0.02	0.01	0.16	-0.06
R^2 change	**2.1 %**	**0.4 %**	**0.1 %**	**0.0 %**	**2.1 %**	**0.7 %**
Explained variance	**4.2 %**	**14.9 % ***	**4.0 %**	**3.2 %**	**5.5 %**	**3.5 %**

Note. Table content is standardized *β* weights, showing the independent variables' association with the dependent variables while controlling for all variables in the model. Sex is coded male = 1, female = 2. The university in Oslo = 1, the university in Trondheim = 2. Higher grade point average is better grades.*$p < 0.05$