

**Development and content validity of the Norwegian  
Self-Assessment of Modes Questionnaire (N-SAMQ)**

Running headline: Development of the N-SAMQ

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### Abstract

**Background:** The Intentional Relationship Model (IRM) introduced six therapeutic modes as ways of relating to clients. By increasing occupational therapists' awareness of modes, and by increasing their skills in using them, therapists may improve their interactions with clients.

The Self-Assessment of Modes Questionnaire may assist in increasing awareness of modes.

**Aim:** To describe the process of developing a Norwegian version of the Self-Assessment of Modes Questionnaire (N-SAMQ) and to evaluate its content validity.

**Materials and methods:** A ten-step translation and adaptation procedure was followed.

Occupational therapists working in diverse practice areas completed the preliminary N-SAMQ version. Individual cognitive interviews were performed with these therapists in order to examine the comprehensibility and cultural appropriateness of the N-SAMQ.

**Results:** Initially, one item was omitted. Following the pilot study ( $n = 7$ ), two of the remaining items were modified with a view to increasing their cultural relevancy. Otherwise, modifications were made mostly in terms of words and phrasing.

**Conclusion:** The N-SAMQ appears to have good face- and content validity.

**Significance:** With the N-SAMQ, Norwegian occupational therapists can assess their preferred therapeutic modes.

*Keywords:* Intentional Relationship Model, therapeutic modes, therapeutic relationship, therapist self-awareness, use of self

## Introduction

By tradition, the relationship between the client and the therapist has been viewed as important in the occupational therapy profession. Contemporary writings in this area have emphasized that the relationship should be an egalitarian, collaborative, and empowering one (1-3), and that it should be characterized by caring, empathy, connection, and effective communication on the part of the therapist (4-7). Occupational therapists' different ways of shaping their relationship with clients have been described from both therapists' (5) and clients' viewpoints (8). However, so far the only research in this area that has been driven by a consistent theoretical framework is that of Taylor (9-11), and thus, the contributions have only to a modest extent cumulatively added to a common knowledge base.

The Intentional Relationship Model (IRM) (9) is the first conceptual model that systematically addresses the relational aspects of the occupational therapy process. Core to the model is the typology developed for different therapist responses in a variety of clinical situations and contexts. Six distinct ways of responding were previously identified from interviews with and observations of expert therapists. These different response types are referred to as the therapeutic modes, and they are all extensively described in previous publications (9-12). Briefly summarized, the *advocating* mode refers to the therapist ensuring that the client gains access to needed resources. The *collaborating* mode is a response type where the therapist relies upon the client's leadership during the clinical interaction, works to solicit the client's agenda, and acts as a follower and supporter of the client's goals and agenda for therapy. Using the *empathizing* mode, the therapist makes every effort to fully understand the client's experience, and to let the client know that this is the intention. Using the *encouraging* mode, the therapist explicitly encourages the client's performance, in order to instill the client with the hope and courage needed to stay engaged in the current occupation. Relating in the *instructing* mode, the therapist often assumes a teacher-like role informing the

client – for example, about how he or she can proceed with the desired occupation, even in the face of new constraints. Finally, the *problem-solving* mode implies that the therapist relies on logical reasoning in the relational approach.

Research is often facilitated by the use of instruments that measure the concept(s) of interest. Instrument development involves a series of steps to ensure that the instrument will function appropriately and as intended (13, 14). Initial steps in this process involves ensuring that the instrument's content well represents the concept being measured (content validity), and that the instrument gives the overall impression that it measures what it purports to measure (face validity) (15). Within the IRM, the *Self-Assessment of Modes Questionnaire* (SAMQ) was designed to assist occupational therapists to identify the mode(s) that they feel are natural or comfortable to them, as well as to identify the types of responses they are more uncomfortable with, when relating to clients (16). The SAMQ comprises 20 brief clinical case descriptions. To each of these, six different therapist responses are listed as plausible therapeutic actions. The SAMQ instructs the responding occupational therapist to select (only) one of the listed responses, indicating the response he or she feels most inclined to give in the described situation. Each of the responses represents one of the therapeutic modes, as exemplified in Table 1. By gaining knowledge about his or her preference (and non-preference) for therapeutic modes, the occupational therapist increases his or her self-awareness as a therapist. Moreover, he or she is enabled to reflect about the strengths and cautions related to these ways of relating, potentially resulting in an increased willingness to explore unfamiliar ways of relating to clients. To date, however, the SAMQ appears not to have undergone any kind of validity testing.

[Insert Table 1 about here]

The first empirical study investigating the use of therapeutic modes employed a sample of 563 practicing occupational therapists in the USA (11). The encouraging mode was found to be the one mode most frequently used, whereas the empathizing mode was least used. In a study of undergraduate occupational therapy students, Bonsaksen (17) in contrast found the problem-solving and the collaborative therapeutic modes to be most frequently endorsed, and the advocating mode to be the least endorsed. Still, there is relatively little empirical research related to the IRM and its applications in various contexts. One important reason for this is that assessments associated with the model's concepts are still in development, and that translations and adaptations into new languages and cultures are at a beginning stage (18). To date, there are no published articles regarding the translation and validity of the SAMQ in any of the Scandinavian languages.

### **Aim of the study**

The present study describes the process of translating and adapting the SAMQ to Norwegian, and evaluates the content validity of the translated version.

## **Materials and Methods**

The process of translating and adapting the SAMQ to Norwegian language and context followed the ten-steps process proposed by Wild et al (19). These are 1) Preparation, 2) Forward translation, 3) Reconciliation, 4) Back translation, 5) Back translation review, 6) Harmonization, 7) Cognitive debriefing, 8) Review of cognitive debriefing results and finalization, 9) Proof reading, and 10) Final report. This article represents the tenth and final step of the process.

### **Preparation**

First, the research group contacted the author of the original questionnaire, and the group was granted permission to translate and adapt it into Norwegian. We also inquired

about other translations into the Scandinavian languages, and found that no such translations of the SAMQ existed.

### **Forward translation**

Authors #2 and #3 translated the SAMQ independently of each other. Many of the key terms used in these translations were equivalent, and most of the differences were concerned with phrasing and sentence structure. The aim was to find expressions that retained the meaning of the original and at the same time kept the Norwegian phrasing as close to everyday language as possible. Based on the two draft translations, these two authors developed a joint version of the N-SAMQ.

### **Reconciliation**

The joint version was discussed and modified during four subsequent meetings between the first four authors. Again, most of the differences that needed to be resolved concerned the preference for different words and phrasing, and not actual meaning differences.

One major change was suggested at this point. In the original SAMQ, item 14 is about a patient needing more therapy than originally planned. A problem arises when the insurance company is unwilling to pay for more therapy sessions, and the therapist is faced with different options regarding how he or she would naturally respond to the client in this situation. We considered this item to be specifically linked with the healthcare system in the USA. Given the longstanding political agreement in Norway, the state is responsible for financing any advised treatment in public hospitals. Because of this, the situation described in item 14 was considered culturally incompatible and difficult to relate to for most Norwegian occupational therapists. Resultantly, we decided to omit this item from the Norwegian translation.

### **Back translation**

The fifth author performed the back translation. She uses English as her first language, along with Punjabi, and she studied occupational therapy in the USA.

### **Back translation review**

The back translation was sent to Renée R. Taylor, the author of the original SAMQ, for review. After a comparison of the original and the back translation, Dr. Taylor agreed to remove the problematic item from the N-SAMQ, and generally found that the back-translated version was identical with the original in terms of meaning content. She highlighted two issues that should be examined in more detail, based on her reading of the back translation. The first issue concerned the meaning content of the clinical vignette in item 1, where the authors were asked to clarify the described situation. The second issue, concerned with the collaborating response type in item 15, the authors were asked to place more emphasis on the therapist following up on the client's initiatives.

### **Harmonization**

In light of the back translation review, the research group followed up on the two identified issues to be resolved in the N-SAMQ in order to ensure equivalence in content. Both issues were resolved, and a new Norwegian language version was agreed upon between the research group members.

### **Cognitive debriefing**

At this stage in the process, we were ready to have the preliminary N-SAMQ tried out by a group of occupational therapists. The purpose of the pilot study was to examine the N-SAMQ in terms of any aspect that could lead to confusion or misunderstanding among persons in the target group. In cases of confusion, we also wanted to obtain alternatives in terms of phrasing (19).

### *Ethical considerations*

The study was conducted according to standard ethical guidelines for research (20). Participation in the study was voluntary and anonymous; participant data was only concerned with age and sex. All participants gave their written informed consent to participate. Given the nature of the study and the data collected, we did not require formal approval from a research ethics committee.

### *Participants and procedure*

Seven Norwegian occupational therapists were invited to participate in the study, and all seven volunteered to take part. Strategically, we wanted the therapists to cover a range of practice areas, including somatic, psychiatric, and community health services. The participants were three men and four women, all aged between 26 and 44 years. Four participants reported that their work was related primarily to mental health, whereas three worked primarily with somatic health. Their length of experience as occupational therapists varied between 2 and 19 years (on average 7.7 years of experience).

The researchers informed the participants appropriately about the aims and procedures of the study. The information emphasized that the collected data would be anonymous and used only for developing a Norwegian version of the SAMQ. Participation in the study was optional. No benefits were related to individuals' participation, and conversely, no disadvantages were related to non-participation. The participants completed the assessment at a place and a time of their own convenience, and were interviewed by one of the researchers shortly afterwards. The interview guide is displayed in Table 2. The responses were not transcribed verbatim, but the interviewer, who also provided follow-up questions and probes to ensure that he or she had understood the intended meaning of the participant's response, immediately wrote down the content of all responses. The interview material was structured according to the five topics (see Table 2), and was then carefully scrutinized with a view to how it could further improve the N-SAMQ in development.



[Insert Table 2 about here]

## **Results**

### **Review of cognitive debriefing**

During the cognitive debriefing, all participants stated that the title of the assessment worked well. One participant was new to the concept “therapist style” as used in the translation, but was able to adjust to the idea quickly when starting the self-assessment. Similarly, the assessment instructions were viewed as sufficiently comprehensive and easy to understand. One sentence in the instructions was considered awkward, and was rephrased.

The participants reported that the content of the clinical vignettes was easy to understand. However, they questioned some of the vignettes in terms of their cultural relevance, their length and level of complexity, and their phrasing. Typically, cultural relevance was discussed in relation to vignettes where funding (for healthcare or otherwise) was an important aspect. Cultural differences between the insurance-based healthcare funding in the USA and the Scandinavian welfare-state model was found to be a problem in two of the remaining vignettes (items #2 and #8). We did not remove these vignettes from the assessment, but modified their content and phrasing so that they accurately reflected the Norwegian context. The corresponding therapeutic mode alternatives for items #2 and #8 were carefully adapted to ensure the cultural relevance of the listed therapeutic responses, while remaining true to the therapeutic modes these alternatives represented. In addition, given that the Norwegian population is considerably less ethnically diverse than the US population, we changed client names provided in the clinical case descriptions so that they with only few exceptions are traditional Norwegian names.

The participants expressed that the case vignettes in general were quite lengthy and crammed with information, and stated they would prefer somewhat shorter and less complex vignettes. We have aimed to modify the case vignettes according to comments about length by removing unnecessary words and by rephrasing sentences when possible. However, we did not allow these changes to interfere with meaning content or result in the description of a less complex clinical situation. We consider the complexity of the clinical situations to be important for the validity of the assessment. Less complex clinical situations would likely result in less variation in terms of how occupational therapists would like to respond to them at the interpersonal level.

In terms of phrasing, the participants generally commented that the language was appropriate, but that it was still easy to recognize it as a translation from English. When revising the assessment translation, we emphasized keeping the text as simple and as close to Norwegian everyday language as possible. In view of the comments about cultural relevancy in the clinical vignettes, we similarly evaluated the therapist response alternatives in terms of their fit with the Norwegian context and, in some cases, with the slightly modified clinical case descriptions.

Other issues stemming from the interviews were in relation to time use and requests for more specialized versions. Only one participant reported using more than the estimated 30 minutes to complete the N-SAMQ. Some of the participants suggested that it might be a good idea to develop specialized versions of the N-SAMQ, for example a mental health version consisting of a variety of mental health-related practice situations, that could be used with occupational therapists in that particular field of practice.

### **Proof reading and final report**

At the conclusion of the process, an academically working occupational therapist who was not part of the research group conducted the proof reading of the N-SAMQ. Few and only

minor changes were made following this step. In the final assessment layout, we made a few modifications (13). First, we increased the font size. Although this resulted in adding to its pages, we believe that more space contributes to easier reading. We also ensured that the N-SAMQ had appropriate page breaks. Some of the participants experienced a risk of overlooking response alternatives in cases where five alternatives were listed on one page and the sixth alternative came on the next page. Thus, in the final version, we addressed this problem in the layout process. This article is the final report of the research group's work with translating and adapting the SAMQ into Norwegian.

### **Discussion**

The aim of this study was to describe the process of translating and adapting the SAMQ to Norwegian, and to evaluate its content validity. Translational issues were concerned with phrasing and sentence structure, and we aimed to maintain the natural flow of language without losing essential clinical information in the vignettes. The main changes in the N-SAMQ, compared to the original, is concerned with the cultural adaptation of the assessment – we omitted one item at an early stage, whereas we modified two other items following the pilot study.

We will comment on a few additional aspects of the process of developing the N-SAMQ. As noted, it is a rather lengthy assessment, and the study participants appreciated advance information about approximately how long it would take to read and complete it. We suggested about 30 minutes, and only one of the participants used more time than that. The ability to provide instruction about the time needed for completing the self-assessment may increase its feasibility and implementation potential (15).

The SAMQ assesses the therapist style profile of occupational therapists, for which it employs clinical case descriptions from a wide range of practice fields (16), including all age

groups, and including both physical and mental health. Some of the pilot study participants suggested that further development of the assessment could include developing specialized versions, for example, different versions for mental health workers, or for those working with children. If using clinical case descriptions more consistently linked with one specified area of practice, it was suggested the responses could be better grounded in the occupational therapist's personal experience, and could therefore be more valid.

Instrument translation essentially means a change of language, and translation constitutes a risk for a concurrent change in how the instrument is able to measure the aspects it purports to measure. Thus, further research should examine the psychometric properties of the N-SAMQ and, when possible, compare its properties with those of the original. In order to argue that the new version is psychometrically valid and can be put into use among occupational therapists, it will be important to ensure that the measurement properties of the translation mirrors the original (14, 19). More specifically, the construct validity of the six modes will be important to establish. The ability of the instrument to distinguish between respondents based on their mode use also seems appropriate, as does an approach where response alternatives are examined in terms of their relative difficulty. In addition, differences in mode use between different groups of participants, for example between occupational therapists with different levels of expertise, and between therapists working in different areas of practice, may be examined. In all of the above described scenarios, a Rasch-analytic approach appears viable to use (21). Descriptive and correlational research is needed in order to gain knowledge about the use of therapeutic modes among practicing occupational therapists, and about the factors associated with their use. In a longer perspective, longitudinal research may provide answers regarding how occupational therapists develop over time with regard to their therapist style and use of therapeutic modes in relationship to their clients.

### **Study strengths and limitations**

The results from the pilot study indicate that the content of the N-SAMQ reflect the content of the original SAMQ, but also that cultural differences had to be accounted for in the translation process. We employed a rigid procedure for the translation and adaptation process. The process steps, as outlined by Wild et al (19), were followed consistently, and this represents a strength of the study. The content of each process step is thoroughly described. In the pilot study, we used a sufficient number of participants, according to Wild et al (19). All participants had adequate clinical experience, i.e. at least two years, as practicing occupational therapists. The pilot study sample was well balanced with regard to gender, but as the participants were all less than 45 years of age, the results may be less valid for occupational therapists of higher age. Another aspect of the study is that we did not consult experts outside the research group during our translation process. This may lead to a certain bias with regard to how we proceeded throughout our process, but it may also have made the translation in line with the everyday language used among Norwegian occupational therapists.

### **Conclusion**

We have described the process of translating and adapting the SAMQ, an assessment concerned with one's typical therapeutic style, to the Norwegian language and cultural context. The process adhered to the steps suggested by Wild et al (19), and included forward- and back translation, translation review and harmonization, consensus meetings, and a pilot study using practicing occupational therapists to provide feedback to the Norwegian version. The main differences between the original and the translated SAMQ are concerned with the modification of content in items #2 and #8, and with the omitting of item 14 (in the original SAMQ). More studies are needed to establish the instrument as psychometrically valid, and we suggest a Rasch approach can be useful in that respect. The Norwegian version of the assessment, the N-SAMQ, appears to have good face- and content validity.

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### **Conflicts**

There are no conflicts of interest related to this manuscript.

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Table 1

*Example item from the Self-Assessment of Modes Questionnaire (item 1) and corresponding therapeutic modes*

Daniel, a client with chronic mental illness, just began a supportive employment program. He tells you that the stress of working has caused his voices (hallucinations) to return. Daniel is worried that his supervisor will notice that something is wrong and that he could lose his job. He is following his psychiatrist's recommendation to increase his medication, but so far the symptoms have not subsided. In the past, he has been able to work and his symptoms have been controlled once his medication reaches its full effect. What response would you be most comfortable with in this situation?	
Therapist alternatives	Therapeutic modes
Remind Daniel of a time in his recent past when he had a similar increase in symptoms, that it was temporary, and that he was still able to get through that time successfully.	Encouraging
Ask Daniel what he thinks he will need to do to keep his job, and if he can come up with a goal that will support staying in his job.	Collaborating
Ask Daniel if he believes that the medication will control the voices, and whether he can think of any other reasons why he will not be able to keep his job. Ask him other questions that allow him to think about his job situation more rationally.	Problem-solving
Point out to Daniel that he has certain rights to accommodation in the workplace and remind him that he can negotiate with his boss for what he needs if necessary.	Advocating
Acknowledge how difficult it is to experience an increase in symptoms when he has just begun a new job and ask him to tell you more about his experience.	Empathizing
Remind Daniel that the psychiatrist said that it may take time for his medication to take full effect, and review strategies he might use to manage his hallucinations on the job.	Instructing

Table 2

*Interview guide*

TOPIC	GUIDING QUESTIONS
Title	How was it for you to understand the title? If difficult, what aspect was difficult to understand? How would you have phrased the title?
Instruction	How was it for you to understand the instructions? If difficult, what aspect was difficult to understand? How would you have phrased the instructions?
Practice situations	How was it for you to familiarize with and understand the different practice situations described in the self-assessment? Any comments concerning the described practice situations?
Response alternatives	How, do you think, were the different response alternatives similar with or different from the others? If relevant, where did you find any overlap between them? Were the response alternatives unambiguous and easy to understand? If not, where did you find they were ambiguous or difficult to understand? Did you feel familiar with at least one response option for each described practice situation? Did you miss any response alternatives, and which one(s) would you have added? How would you have phrased the response alternatives?
Other issues	When completing the N-SAMQ, did you notice anything else that you would like to report? What was fine, and what was not?