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Individualizing Standardized Tests: Physiotherapists' and Occupational Therapists' Test Practices in a

Geriatric Setting

Kariann Krohne¹, Sandra Torres², Åshild Slettebø³, and Astrid Bergland¹

¹Oslo and Akershus University, Oslo, Norway

²Uppsala University, Uppsala, Sweden

³University of Agder, Grimstad, Norway

Corresponding Author:

Kariann Krohne, Faculty of Health Sciences, Oslo and Akershus University College of Applied Sciences,

Postboks 4 St. Olavs Plass, 0130 Oslo, Norway.

Email: kariann.krohne@hioa.no

Abstract

In assessing geriatric patients' functional status, health care professionals use a number of standardized tests. These tests have defined administration procedures that restrict communication and interaction with patients. In this article, we explore the experiences of occupational therapists and physiotherapists acting as standardized test administrators. Drawing on fieldwork, interviews with physiotherapists and occupational therapists, and observations of test situations on acute geriatric wards, we suggest that the test situation generates a tension between what standardization demands and what individualization requires. Our findings illustrate how physiotherapists and occupational therapists navigate between adherence to the test standard and meeting what they consider to be the individual patient's needs in the test situation. We problematize this navigation, and argue that the health care professional's use of relational competence is the means to reach and maintain individualization.

Keywords

evidence-based practice; geriatrics; health care professionals; interviews; older people; relationships, health care

Standardized testing has received little attention in qualitative research, although it is clear that such testing is a key part of most health assessments. In Norwegian acute geriatric care, occupational therapists (OTs) and physiotherapists (PTs) administer standardized tests daily, often as part of a comprehensive geriatric assessment wherein the standardized tests are used to screen for and monitor potential functional impairment. Despite the significant role that the test administrator has in testing patients, relatively few qualitative researchers have explored the test administrator's perspective; instead, most researchers have emphasized the purposes, experiences, and consequences of testing for the test taker (Bjorbækmo & Engelsrud, 2011; Dever & Barta, 2001; Hellström, Nolan, Nordenfelt, & Lundh, 2007; Krohne, Slettebø, & Bergland, 2011; Stobart, 2008).

Researchers that do consider the test administrator often highlight the interactional substrate of the test situation (Antaki, 1999; Antaki, Young, & Finlay, 2002; Marlaire & Maynard, 1990; Maynard & Marlaire, 1992) or discuss the possible effect that contextual factors (such as the test administrator's sex, age, and status; time and place of testing; and patients' previous test experiences) have on the test situation or test results (Sarason, 1950). Thus, the particular perspective of the PT or OT test administrator working in a geriatric hospital ward remains less clear. Our aim, therefore, is to explore the test situation of a geriatric patient encounter wherein the OT or PT test administrator, because of the procedures for administering standardized tests, faces restrictions that reduce the relational aspects of patient interaction. In doing so, we contribute to a better understanding of the OT or PT test administrator's navigation between adhering to the test standard and meeting the individual patient's needs.

Testing as a Professional Activity

Testing patients using standardized tests is not a new phenomenon; many medical and therapeutical specialties have a long history of testing patients. Some of the most reliable tests used today are more than 50 years old. In any event, both the use of standardized tests and the administrative dimension of testing seem to have gained in importance over the years. As part of a comprehensive geriatric assessment, standardized tests are thought to be important in providing health care professionals with the objective, quantifiable measures considered necessary in the planning of treatment and rehabilitation activities and, also, possibly help them avoid the errors that might occur following an individual clinical assessment (Kane, 2000). The tests' administrative dimensions becomes visible, for example, in hospital policy, which might state that all patients must be tested with a specific battery of tests, or when test scores are used to justify a patient's need for a permanent place at an institution or rehabilitation center.

On the whole, the expanded use of standardized tests might be a response to the implementation of evidence-based medicine. Today in Norway, the principles of evidence-based medicine officially guide treatment procedures. The main intention of such principles is to raise the quality of care offered to patients by using specific scientific methods and techniques based on the best available evidence, and by using treatment procedures to regulate practice (Carpenter, 2004; Sackett, Rosenberg, Gray, Haynes, & Richardson, 1996). We conclude, therefore, not only that the principles of evidence-based medicine affect the patient in treatment, but also that treatment procedures result in an increasing standardization of practice. As such, these principles affect health care professionals in their daily work; hence, the term "evidence-based practice."

The test situation is a particular example of a standardized practice found in most modern health care settings. According to the International Classification of Functioning, Disability and Health by the World Health Organization, a standardized test can measure any component of health outcome (World Health Organization, 2001) using clearly defined procedures for administration (Anastasi & Urbina, 1997). In general, standardized tests are based on a stimulus-response model that requires the patient to orally respond to questions or to perform certain tasks, depending on what is being tested. The patient's responses and performance are then marked according to the test-specific scoring system. All standardized tests come with a manual that provides a script for administering the specific test. The manual is developed to ensure discriminant validity (the ability to identify a disorder or a loss of function as distinct from typical functional ability), concurrent validity (results should be consistent with other valid, diagnostic information), interrater reliability (test results should be the same regardless of who administers the test) and, as long as the patient's context remains unchanged, test-retest reliability (test results should be consistent over repeated administrations). Adherence to the test manual in a test situation is, therefore, critical in providing a test result that actually measures what the test's authors claim the test measures (Turkstra, Coelho, & Ylvisaker, 2005).

When facing a geriatric patient in a standardized test situation, PTs and OTs acting as test administrators must, accordingly, adhere to a specified level of standardization. In fact, standardization is considered the main component of the test situation because the tests' reliability is based on standardized administration. Nevertheless, a holistic approach to patient care characterizes acute geriatric wards. Because geriatric patients generally manifest a multitude of clinical problems, as well as problems concerning home situation and social resources, this patient group needs a multidisciplinary, time-intensive, and comprehensive evaluation (Rockwood, Fillit, Brocklehurst, & Woodhouse, 2010; Urdangarin, 2000). Thus, a holistic approach requires professional attention to patients' social

and medical history and present treatment, as well as attention to their future well-being. OTs' and PTs' contributions are significant in this process. The PTs and OTs on a geriatric ward are, therefore, not only test administrators; they are also the individual patient's PT or OT responsible for providing professional care and, as such, they must establish and maintain a good relationship with the patient. It has been recognized that a well-functioning patient—provider relationship is essential in providing good patient care and positive health outcomes (Brown, Stewart, & Ryan, 2003); this seems especially important in caring for older people because such a relationship might underpin positive experiences of acute health care (Bridges, Flatley, & Meyer, 2010).

Drawing on components from professional competence theory (Argyris & Schön, 1974; Epstein & Hundert, 2002; Nygren, 2004; Spitzberg, 1993; Spitzberg & Cupach, 1983), we suggest that the therapist experiences a dilemma in the test situation because he or she is confronted with at least two possibilities (i.e., adhering to the test standard or meeting the individual's needs), neither of which is practically acceptable under the given circumstances. Meeting the patient's needs might compromise the test results, whereas strictly adhering to the test standard might jeopardize the patient—therapist relationship. Epstein and Hundert suggested that professional competence is "the habitual and judicious use of communication, knowledge, technical skills, clinical reasoning, emotions, values, and reflection in daily practice for the benefit of the individual and the community being served" (p. 226).

In analyzing real-life situations, such as the test situation, we can discern two omnipresent dimensions of professional competence: relational competence and action competence. Relational competence is about establishing a communicational and emotional relationship with the patient and maintaining it satisfactorily during the encounter (Spitzberg & Cupach, 1983), whereas action competence is commonly understood to be about the professional's instrumental skills or knowledge (Nygren, 2004). These two dimensions are knit together in the clinical encounter (Spitzberg & Cupach) because relational competence is, in most cases, needed to fulfill action competence-based aspirations. In the test situation, relational competence, which is about communication skills (spoken and unspoken), is restricted by the ideal of the stimulus-response model on which test administration is based. In this article we explore OTs' and PTs' perspectives on administering standardized tests, and provide insights into how standardized tests are handled and test practice shaped in a geriatric setting.

Methods

Data presented in this article were drawn from a descriptive project in which we sought to explore how evidence-based interventions, professional judgment, and patient preferences are in contextual and structural conflict in the hospital-based rehabilitation of geriatric patients. We focused on how OTs and PTs handled such conflicts—conflicts often understood by the clinician as practical dilemmas. We utilized fieldwork techniques to explore the dilemmas these health care professionals experienced in encounters with geriatric patients admitted to two acute geriatric wards in a Norwegian hospital. The Regional Committee for Medical Research Ethics in Norway and the privacy protection ombudsman at the study hospital approved the project.

Fieldwork

Data for the project were collected through fieldwork techniques: observation and informal and formal interviews conducted between February and September 2009. Every week the fieldworker (first author) spent one day on each ward following one of the 14 therapists around in his or her daily work with patients. This arrangement made it possible to speak informally with the therapist before and after patient interaction, observe the development of care and treatment plans in the coordinated multidisciplinary team of health professionals, and observe patient—therapist interaction in care situations, rehabilitation activities, training activities, and test situations. We spent approximately 170 hours on the two wards observing OTs and PTs working with geriatric patients, including observing and recording 26 test situations. We recorded field notes according to standard procedures, taking short notes while on the wards and expanding these shortly thereafter.

The tests used in the observed test situations were not diagnostic instruments, and both asymptomatic patients and patients clinically suspected of loss of function were tested. The tests used were the Mini-Mental State Examination (MMSE), a brief 30-point questionnaire covering various cognitive domains (Folstein, Folstein, & McHugh, 1975); the Clock Drawing Test (CDT), which requires the patient to draw numbers on a clock face and "set" the time to 11:10, and taps into cognitive and adaptive functioning (Critchley, [1953] 1966); the Trail Making Test (TMT), a two-part neuropsychological test of visual attention and task switching (Reitan, 1955, 1958); the Timed Up and Go (TUG), a mobility assessment in older adults (Podsiadlo & Richardson, 1991); the Bergs Balance Scale (BBS), which quantifies functional balance (Berg, Wood-Dauphinee, Williams, & Maki, 1992); and the Motor Assessment Scale (MAS), an assessment test of motor functions in patients with stroke (Carr, Shepherd, Nordholm, & Lynne, 1985 [AU Q: 1]). We use the noted abbreviations in presenting our findings.

Participants

In total, 14 OTs and PTs (2 men, 12 women) volunteered to participate after receiving a written invitation. They were between 22 and 54 years old and had between 3 months and 25 years of experience working with geriatric patients. Participants also consisted of the nearly 90 patients observed interacting with the OTs and PTs. All patients were age 67 or older, admitted with a severe medical condition, and needed acute medical attention. Patients' perspectives on being tested cognitively are highlighted in Krohne et al. (2011).

Interviews

Toward the end of the fieldwork, the first author conducted in-depth, semistructured interviews with the 14 participating PTs and OTs. She commenced the interviews by informing about the project's purpose and the right to withdraw according to the Helsinki Declaration. She used open-ended questions exploring experiences of dilemmas related to evidence-based interventions, professional judgment, and patient preferences. For the purpose of this article, six key questions about the experiences of OTs and PTs in testing patients physically and cognitively are relevant. Developed following observations of test situations, these questions tapped into several areas of testing: contextual factors, professional judgment, test feedback, and issues of standardization. The interviews lasted approximately 1 hour. We taped all interviews, except for one interview during which the tape recorder malfunctioned, and secretarial staff transcribed the tape recordings verbatim. The first author translated quotes from Norwegian into English. We gave participants a copy of their interview transcript and invited them to comment; none commented.

Data Analysis

In analyzing the interview transcripts we used Systematic Text Condensation (Malterud, 2001). To ensure transparency and reliability, the first, third, and fourth authors read and independently analyzed the data. We followed four steps: We read the transcripts to gain a contextualized impression of the interviews, and highlighted preconceptions. We then identified and coded units of meaning, negotiating these until achieving general agreement on the coding. We condensed the meaning in the coded groups, and generalized descriptions reflecting the clinical experiences of therapists administering the tests. The second author functioned as peer debriefer (Creswell, 1998). We had several peer debriefing sessions while working with the material, and while drafting and editing this article. We present the findings under four descriptive summaries: deciding whom to test, strategies for promoting a sense

of security in the test situation, avoiding patient stress, and contextualizing patient performance. These summaries appear in an order intended to shed light on the test situation as a process, with a beginning and an end.

Findings

Prior to the test situation, the therapists' knowledge of the individual patient's personality, history, and medical condition was based on the patient's journal and on information gathered during the "admittance talk." This talk, one that all therapists had with newly assigned patients, can best be described as an informal interview/examination in which relevant patient information was recorded for professional purposes. Therefore, when scheduling a patient for testing, the therapists had likely already established a relationship with that patient. The actual testing took place in an office or in an OT assessment kitchen if an OT administered the test, or in a training room if a PT administered it. At this specific hospital, PTs tested patients' physical functioning by using MAS, BBS, and TUG. The OTs used MMSE, CDT, and TMT to test cognitive functioning.

Deciding Whom to Test

Overall, we found that the therapists considered deciding which patients to test straightforward, because the hospital's head therapist and medical management had already determined that all patients were to be tested with these specific standardized tests. Nevertheless, patients with severe language difficulties, advanced dementia, paralysis following a stroke, and dying patients were normally exempt from testing. Because of a hospital staff shortage on one ward, the hospital did not schedule institutionalized patients for cognitive testing. Despite the managerial decision to test all patients and the obvious exceptions, therapists felt that there was room for their professional opinion on the matter of patients' "testability." A PT emphasized this: "If it is of no consequence to the patient whatsoever, then you don't do it. And if the testing is so strenuous that they don't have anything to gain from taking the test, then you don't do it." The therapists were, in many cases, able to assess their patient's testability by reading the patient's journal. If a therapist assessed a patient as having nothing to gain from being tested, this assessment was discussed among the interdisciplinary team members, and usually, they said, there was an interteam agreement to do without the testing.

Although the interprofessional team often came to an agreement on a patient's testability, we noted that there was discrepancy between the therapist's assessments and management guidelines to test all patients. An incident from fieldwork illustrates this. A therapist explained that she was hesitant to test a patient with the cognitive

test battery because the patient had been tested as part of a previous hospital stay less than 2 months earlier: "It would be stressful for her, and just so unnecessary." She added, "She is even scheduled for a follow-up test at the day hospital in a month." The therapist decided to confer directly with the attending physician rather than with the interdisciplinary team, because the patient was scheduled for testing that same day.

The attending physician was informed of the therapist's reluctance, but insisted on testing because the patient had been admitted anew. The therapist then tested the patient, who subsequently scored only 1 point less than on the prior test. This result seemed to confirm the therapist's suspicions that retesting was unnecessary. She merely said, "Well," implying that the test results did not provide any new information and that the patient experienced a stressful situation unnecessarily. In an interview, another therapist described her own feelings under similar circumstances: "I feel uncomfortable testing these frail old women who clearly have a cognitive impairment, who the physician wants to test just because it is a new stay and another small infarct." Both therapists were frustrated with the attending physician—rather than with hospital policy or management—for imposing the tests on the patients.

Strategies for Promoting a Sense of Security in the Test Situation

Therapists were concerned that individual patients might find the testing stressful or strenuous, and might even be reluctant to take the test. Because of these concerns, they had developed different strategies for introducing the test. Some standardized tests have guidelines for introducing the test, and the therapists often added their own personal twists to the standard introduction. Certain similarities between therapists' strategies were noticeable. The MMSE, for example, is a cognitive screening test that the OTs used. OTs should introduce it as follows: "I will ask you some questions; answer as best you can." We observed one OT, however, introducing the test as follows: "I will ask you some questions. You might find some of them stupid, some of them weird, and some of them even difficult. Answer as best you can." Another added the words, "This is hospital routine; all patients do it," to the guideline introduction. Toning down the test aspect by using the words "questions" or "tasks" instead of the words "test" or "screening" in introducing the tests was common. An OT explained that her strategy was "playing it down, that this is just a part of an assessment; that's something I often do. [I'll say] that this is not a finite thing. I don't use the word "screening," but rather "a mapping."

The PTs were often more specific than OTs when introducing a test to a patient. They used the words "test" or "look at," as in, "We will take a look at your balance," or "We will test your balance." This difference in communication might be because cognitive issues and cognitive impairment are more stigmatized than physical impairment is. On most occasions, and for both occupational groups, introductions were followed by a question that included the patient in the decision making; for example, "Does this seem okay to you?" The overall aim of these introduction strategies was seemingly to create a good atmosphere, and in the interviews OTs and PTs described a good atmosphere as essential in getting patients to cooperate.

Some patients were reluctant to be tested; their reluctance seemed to be because of pain, fatigue, or their failure to understand the test's relevance. In therapists' accounts regarding this matter, the latter was perceived as an understandable reluctance because sometimes a clear mismatch existed between the test's aim and the patient's medical condition. A PT elaborated on this:

What might be a problem is that some are admitted for heart failure and they might not have a problem with their balance whatsoever, and then, suddenly, they're taking a balance test! I think that can be a bit challenging, yes, but actually, we often reveal that they, too, have problems with their balance. Yes, but sometimes I find it hard to defend [testing these patients].

Another PT explained how a patient's reluctance was managed in a patient encounter:

I used this one today, when this one patient wondered why in the world's name, what significance having done [the BBS] had for her—and that is a pretty good question. I just said, didn't really know what to say, but I said it didn't really matter to her at this moment, but that it would be informative for us if she was ever admitted again, because then we could compare and see if there was any change. [I told her,] "That's why we have these standardized tests." She was happy with that, and we agreed that it was an okay answer.

Observations showed that OTs and PTs often interacted with reluctant patients by using extra time in introducing the test. This meant relating the test's purpose to professional needs, as illustrated in the above quote. Some promised the patients, contrary to test procedures, that they could take pauses or even continue another day if the test proved to be too strenuous. Some therapists seemed to find that justifying the test as "doctor's orders" was an efficient way to gain a patient's compliance:

I try to hide behind the fact that this is something the doctor wants us to do, and that everybody admitted to this ward has to do the tests. And many of them settle for that; they sort of calm down.

The therapists maintained in the interviews that they never forced anyone to take the test, but also stated that they asked unwilling patients repeatedly during subsequent days to take the test: "Like I said, you cannot force the patients. If they don't want to do it, they don't want to do it and that's that! But you will try for a while to persuade them to do it."

Therapists claimed that overall, patients argued little about taking the tests and that any reluctance was coped with. From both interviewing and observing OTs, we saw that they clearly faced a particular challenge because some patients were noticeably reluctant to take cognitive tests. An OT explained that patients often misunderstood the cognitive testing's purpose. In such cases the patient would typically say, "Are you going to check if I'm stupid now?" An OT explained her strategy in such cases as follows: "Then you just have to sweet-talk them into feeling valued again, because it's not a good feeling sitting there [feeling like that]." She and the other health care professionals interviewed stated that acting respectful was important when introducing the test and addressing potential patient reactions.

Avoiding Patient Stress

Besides the general guidelines for introducing the tests, there are also instructions for how tests should be conducted. These must be followed rigidly, and for reasons of reliability cannot be altered, but during fieldwork we observed alterations to the test structure. In the interviews, both OTs and PTs emphasized that these are demanding tests for the older patients. Thus, they acknowledged two key techniques used to avoid or reduce patient stress during testing. Both techniques entailed adjusting the test structure when patients were tired or in pain, for example. They adjusted the test structure by breaking up a test battery and administering one test on one day and the other test(s) the next day. Similarly, they might divide a particular test into what the test administrator considered manageable parts for a particular patient. In such cases, they would administer the test over the course of two days.

They would rearrange the order of tasks, questions, or tests in a battery, to accommodate the patients' needs. For example, they did such rearranging in the administration of the BBS, a test consisting of 14 progressively more difficult tasks. To spare patients who, because of restricted mobility needed to sit and rest between tasks from

having to rise from a seated position into a standing position between Tasks 8 and 9, they administered Task 8 last, after Task 14:

I usually do [the BBS] in the correct order, but I skip the one where you lean forward standing sideways by a wall. I'll usually do that one last, on the way out. Because then they'll do everything in front of the chair and then this last [task is done on the way out].

The quoted therapist argued that reducing the number of times the patient must get up from a sitting position reduced patient discomfort. An OT provided a similar argument for administering the cognitive test battery in a specific order:

I see that some do the CDT and then the MMSE, and that's a matter of personal taste. But I feel that by doing the MMSE first I get a clue about if they are on top of [space and time issues] if they should suddenly stop the test. But if we start with the CDT and they don't get a sense of coping doing that one, then next you have MMSE and [the first question is,] "What year is it?"

This quote suggests that in this therapist's experience, the order of tests in the test battery might affect patients' sense of coping, and thus their performance. She therefore administered the cognitive test battery using an order that she felt would not jeopardize patients' sense of coping. In this case, she argued that the MMSE starts with an easier question than the CDT does.

Whereas therapists frequently changed the test structure to make patients comfortable, they kept their direct oral responses to a minimum during testing. The following quote illustrates how a therapist communicated encouragements intended to reduce patient stress during testing:

I don't know if you noticed; I try to give the impression that they're doing okay during the test. I'll say "mmmm" or something so that they understand this, and that things are not left unsaid for too long. You can also give praise and encouragement by raising an eyebrow or do something with your hand or anything. Yes, there are many ways to create a good atmosphere.

We observed the same strategy when we saw an OT clearing her throat whenever patients responded incorrectly on the TMT, thereby enabling them to correct their mistakes. Nevertheless, if the therapists felt that the patient was losing focus, they used direct oral encouragements and motivation. Therapists used certain phrases to

motivate patients to complete the test: "Just one more task left now," and "I see that you are tired, but can you manage one little task more?" In many cases, we noted nonneutral expressions such as "You did well!" or "Great!"

Both the physical and the cognitive tests require the use of a stopwatch because the time to completion is registered. Therapists informed patients, "I will be taking the time while you do this task." A PT recognized the effect a visible stopwatch could have on patients: "Many ask if this is an exam, and some are triggered by the stopwatch, so there is a bit of competitive instinct left in people of eighty years, too." There were, however, differences concerning how some used the stopwatch; whereas the PT would hold it so that it was visible to the patient during the test, observers saw that the OT discretely placed the stopwatch under the table during use. This latter example, considered together with the informants' general depictions of patient stress, demonstrated that they recognized and considered medical, social, and psychological factors as initiators of stress.

Contextualizing Patient Performance

Therapists' feedback to patients concerning the tests varied depending on how the test situation played out:

It's very individual. Some just want to return to their room and be done with it. They've very little interest in what we've done, and are very much like this [indicates STOP using her hand]! Then there are the ones who ask and are curious. "Yes, what does that mean?" "Is that an A+?" . . . A lot of them associate it with a school test situation. Some do get a full account of how they scored. Maybe they have done a test a year or two earlier and "then you had that score" and "now you see that it hasn't changed," or "You have a risk of falling. You need to be careful." So, you'll do it individually based on the story they bring with them. It's not like I say, "You scored forty-two points and that's below cut-off for falling. Thank you and good bye!"

The PT quoted above clearly believed that patients had different needs concerning test feedback. An OT claimed that the patients' reactions to the test situation must be considered: "Especially if they've been a bit 'undressed' and if [the results] were worse than what they'd expected. Then it's a small form of loss [for them]." Therapists described patients' reactions and responses as varying from anger, to attempts to explain away their (poor) performance, to surprise, introspectiveness, and relief. Therefore, therapists saw a need for, and thus used, a range of feedback strategies:

If they ask, ["What do you see now?"] then I try to be honest. But I consider the person a bit. Because if they are very sad—I don't know if you observed this one guy who we walked with in the hallway—he cried and cried the

first weeks. And I tried to steer clear of all the painful questions and tried to not emphasize the negative, but instead turn [the test situation] to something positive, because it would have done him no good whatsoever [to hear the negative results].

Some therapists stated that they said the score, and some that they never said the score; they gave only a general feedback mostly focusing on the positive results. Both the OTs and the PTs claimed that the test score per se was not constructive feedback, and if a score was revealed the therapists usually walked the patient through the test, explaining the score or performance of each task or question. It seemed more common among the PTs to give feedback using the test scores with reference to a normative sample; that is, telling patients if their performance was as expected for their age group. When giving feedback, both OTs and PTs tended to contextualize the results by relating them to the patient's medical condition, home situation, or what they observed in the test:

So, you'll relate it to the patient. Yes, I'll say that "I see that you're a bit quick sitting down; it might be wise of you to use more time when setting yourself down. Feel that the chair is in the right position. Use extra time when you're getting up, especially if you get dizzy. Maybe this is what you have to do to avoid falling again?"

An OT provided another example related to patients' performance on the CDT:

If they're not able to draw this clock, then I'll ask them to look at the clock on the wall, and then I'll say, "But, you do know how to tell the time?" And that's what's important in everyday life, isn't it? I try to explain that there are things you know how to do even if you don't do a hundred percent on these [tests].

Feedback was also tailored to the patient's medical condition. This was especially the case with stroke patients who had symptoms hindering them in the test. Some therapists also used the test results to explain that patients should change to a different sort of aid; one episode observed after a BBS test highlighted this. The PT told the patient that she had a risk of falling: "Because of your poor balance and weak eyesight you are in a borderland when it comes to falling. I think you should start to use a walker and not just a crutch." Standardized tests can highlight problems that do not necessarily exist in the elderly patient's everyday life, and whether feedback on results was related to the patient's medical condition, reaction, or performance, it was evident that the health care professionals interviewed arranged for an individualized and salutogenic end to the test situation.

Discussion

A standardized test provides objective measures intended to complement the information gathered during examining and interviewing patients. Although the term "standardization" signifies that everyone should be treated similarly, a central finding in our study was that therapists implement individualized adjustments throughout the test situations described here. The patient's functional status, medical condition, reaction during the test, and general state of mind are factors made relevant in the test situation, despite an overall intention to adhere to a standardized test procedure. Instead of conducting tests uniformly, vis-à-vis standardization, health care professionals conduct them, according to the patients' needs, vis-à-vis individualization.

Breaking the Rules to Make the Rules Apply

Our findings suggest that health care professionals experience a major dilemma in the test situation. This dilemma is the omnipresent tension between standardization and individualization. When facing the geriatric patient in a test situation, they constantly navigate between the contradictory demands of this dilemma: To be reliable and valid the test must be standardized. Standardization signifies the presence of neutrality, neutrality here manifested as procedures for test administration. At the same time, a main goal in health care and for all health care professionals is to see and respect the patient as an individual (Sullivan, 2003).

Antaki et al. (2002) examined how care staff delivered a standardized questionnaire-based interview to persons with a learning disability. Their analysis described the interviewer's dilemma as a choice between literal and tailored administration. Throughout our study, we observed that the therapists navigated between adherence to the test standard (literal) and meeting the individual patient's needs (tailored). Alterations to the test structure might be a way to promote better patient performance or to avoid patient stress, but to identify what the tests are designed to identify, they must be administered strictly according to the test manual. Whereas there are rules for administration of the individual test (the test manual), there are not, as far as we know, any explicit rules regarding the order of tests in a test battery. Still, the order of tests might be important. Kane (2000) considered it best to start with the easy material and allow the testing to proceed based on adequate performance. Failure in one area of the test might affect the patient's performance in the rest of the test situation. Our findings are in line with Kane's argument: the therapists preferred a certain order in the test battery because they felt that their preferred order promoted coping and a sense of achievement.

In his study on the "dilemmatic" tendencies of informed consent to treatment practice among radiologists, Olufowote (2011) also identified tension between standardization and individualization, and he drew on concepts from relational dialectics theory to describe how radiologists negotiate this tension. Our data provided us with several insights into how OTs and PTs acting as test administrators navigate between the contradictory demands that standardization and individualization pose. An overarching insight concerns the fact that therapists implement individualized adjustments throughout the test situations described. This is not surprising, because all interactions occurring in clinical encounters are situational, no matter the standardized restrictions imposed.

A standardized test session, arranged in the manner our data showed to be customary, therefore becomes somewhat of an impossibility. The health care professional functioning as test administrator must, on some level, deviate from test procedures to make them apply to the individual patient's situational needs, because there is no such thing as a standard patient or a standard encounter between a health care professional and a patient. Test results will, therefore, be a collaborative production (Marlaire & Maynard, 1990; Maynard & Marlaire, 1992). Our findings identify some of the premises for the collaboration between therapist and patient in this specific geriatric setting. *Maintaining a Relationship While Disregarding it*

Earlier researchers focusing attention on professional competence have often taken a pedagogical or educational achievement perspective (van der Vleuten, 1996). These perspectives have rendered invisible the potential tension between relational and action competence in the relationship between patient and health care professional. Our analysis of the OTs' and PTs' actions and relational concerns in the test situation allowed this tension to surface. For instance, when a therapist alters the test structure so the patient can rest, or hints during testing about the patient's performance, it might affect both the test's reliability and the individual patient's performance. These actions disclose how therapists use their relational competence, their spoken and unspoken communication skills, to help the patient navigate through the test without letting the test's standardized procedures threaten their relationship. Worth repeating is the fact that in the geriatric setting we studied, patients and test administrators were not necessarily strangers when they entered the test situation. Because of the admittance talk, the therapists had established a relationship with the individual patient prior to the test situation; in addition, they had a professional agenda that involved more than testing, because their principal job was to address the patient's need for rehabilitation.

We argue that if health care professionals were to follow the demands of standardization, they would, in fact, be expected to disregard during testing their established relationship with the patient. At the same time, their delivery of care relies on individualization in all patient interactions and requires a continuing relationship with the patient. The stimuli-response ideal of a standardized test is, in this regard, contradictory to the problem-solving ideal of the health professional. Literally, administering a test could jeopardize the relationship between patient and therapist by being instrumental and insensitive. This possible jeopardy is why the OTs and PTs in this study administered tests in a tailored manner, a manner that might prompt better answers (Antaki et al., 2002) and possibly help maintain a good relationship with the patient.

Acknowledging the characteristic time dimension of standardized testing can further reveal the dilemma of the therapist test administrator. Administering a test demands focus on the immediate task of patient testing, a hereand-now focus (stimuli response), whereas providing professional health care requires the therapist to see the individual patient in the present task while simultaneously being future oriented and considerate of the patient's past. The latter time dimension is characteristic of a holistic approach, which is considered the best approach for geriatric patient care (Cohen, 1983; Rockwood et al., 2010). In our study, a holistic approach was revealed in the health care professionals' efforts to enhance the ecological validity of the patient's performance, to promote a sense of security and coping in the test situation, alterations to the test structure, and in their reasons for not testing a recently tested patient.

A Bias in Test Results?

There has been surprisingly little debate on the use of standardized tests in health care assessments. Therefore, insight into how health care professionals handle and shape test practice is interesting. Overall, it seems as if the concept of standardized testing is associated with high-quality care. The intention of standardized tests in health care assessments is to provide objective measures, and thus it represents the one area of a health care assessment that should not be tailored to the patient. After all, the intention is to test the patient's actual abilities and not the patient's modified abilities.

In terms of the wider implications of our findings, we have illustrated some ways in which nonstandardized actions in test practice might accumulate bias. Possible bias initiates in the process of deciding which patients to test and continues when certain alterations to the test structure are made, or when a nonneutral spoken or unspoken

response is given to a patient's performance. Individuality bias in test results is critical not only because standardized tests are important treatment decision tools and, therefore, individually adjusted tests might influence the level of care offered, but also because test results are registered in the patient's journal (chart) and used as a reference point for future hospital admissions. In this regard, it should be noted that the public services provided to test takers might be affected negatively following test administrators' prompting for better answers in the tests (Antaki, 1999; Antaki et al., 2002).

Avoiding bias is a challenge in all health care interactions, and our results press forward [AU Q: 2] not only questions regarding test reliability, but also questions concerning the clinical dilemma of the test administrator: Can OTs and PTs administer these tests any differently? Is it at all possible to administer a test in a completely standardized manner in this setting while maintaining the patient—therapist relationship and sustaining patients' dignity of identity [AU Q: 3] (Krohne et al., 2011)? These questions require systematic research. Nonetheless, our results suggest that the established patient—therapist relationship could be conducive to the tailoring of tests and to the therapists' use of relational competence. The use of test administrators without specific knowledge of or lacking a relationship with the individual patient might reduce this particular bias.

Limitations and Future Research

We accessed test situations to highlight health care professionals' perspectives on testing geriatric patients, and we identified a tension that influences implementing standardized tests in that setting. We did not interview hospital management responsible for deciding which tests to use and why, nor did we review the standardized tests or test theory in general. Management perspectives and test theory might have provided a context for the OTs' and PTs' perspectives. Although professionals with varying years of work experience and varying experience as test administrators participated in this study, we did not attain diversity regarding work experience. Given that professional competence is developmental (Benner, 1984; Epstein & Hundert, 2002), such a perspective is warranted in future research because it could result in additional knowledge.

Conclusion

There is no escaping the standardization—individualization dilemma present in modern health care settings. The therapists' accounts and actions clearly illustrate that striving for standardization and individualization simultaneously is inherently contradictory. This study shows how therapists used relational competence to address

the tension that a standardized administration of tests might cause. The therapists prioritized the individual patients' needs and resources over test administration procedures defined in the standardized test. The findings suggest that their approach to test situations must be explored in future research because it has implications for the delivery of high-quality and user-friendly geriatric care.

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References

- Anastasi, A., & Urbina, S. (1997). Psychological testing. Upper Saddle River, NJ: Prentice Hall.
- Antaki, C. (1999). Interviewing persons with a learning disability: How setting lower standards may inflate well-being scores. *Qualitative Health Research*, *9*, 437-454. doi:10.1177/104973239900900402
- Antaki, C., Young, N., & Finlay, M. (2002). Shaping clients' answers: Departures from neutrality in care-staff interviews with people with a learning disability. *Disability & Society*, 17(4), 435-455.
- Argyris, C., & Schön, D. A. (1974). *Theory in practice: Increasing professional effectiveness*. San Francisco: Jossey-Bass.
- Benner, P. (1984). From novice to expert: Excellence and power in clinical nursing practice. Menlo Park, CA:

 Addison-Wesley.
- Berg, K. O., Wood-Dauphinee, S. L., Williams, J. I., & Maki, B. (1992). Measuring balance in the elderly: Validation of an instrument. *Canadian Journal of Public Health*, 2, 7-11.
- Bjorbækmo, W., & Engelsrud, G. (2011). Experiences of being tested: A critical discussion of the knowledge involved and produced in the practice of testing in children's rehabilitation. *Medicine, Health Care, and Philosophy*, 14(2), 123-131. doi:10.1007/s11019-010-9254-3
- Bridges, J., Flatley, M., & Meyer, J. (2010). Older people's and relatives' experiences in acute care settings:

 Systematic review and synthesis of qualitative studies. *International Journal of Nursing Studies*, 47(1), 89-107. doi:10.1016/j.ijnurstu.2009.09.009
- Brown, J. B., Stewart, M., & Ryan, B. L. (2003). Outcomes of patient-provider interaction. In T. L. Thompson, A. M. Dorsey, K. I. Miller, & R. Parrott (Eds.), *Handbook of health communication* (pp. 141-161). NJ [AU Q: 6]: Erlbaum.
- Carpenter, C. (2004). The contribution of qualitative research to evidence-based practice. In K. W. Hammell & C. Carpenter (Eds.), *Qualitative research in evidence-based rehabilitation* (pp. 1-13). Edinburgh, UK: Churchill Livingstone.
- Cohen, L. (1983). Geriatrics: National conference urges holistic approach. *Canadian Medical Association Journal*, 129(11), 1227-1228.
- Creswell, J. W. (1998). Qualitative inquiry and research design: Choosing among five traditions. London: Sage.

- Critchley, N. ([1953] 1966). The parietal lobes. New York: Hafner.
- Dever, M. T., & Barta, J. J. (2001). Standardized entrance assessment in kindergarten: A qualitative analysis of the experiences of teachers, administrators, and parents. *Journal of Research in Childhood Education*, 15(2), 220-233. doi:10.1080/02568540109594962
- Epstein, R. M., & Hundert, E. M. (2002). Defining and assessing professional competence. *JAMA: The Journal of the American Medical Association*, 287(2), 226-235. doi:10.1001/jama.287.2.226
- Folstein, M. F., Folstein, S. E., & McHugh, P. R. (1975). "Mini-mental state": A practical method for grading the cognitive state of patients for the clinician. *Journal of Psychiatric Research*, 12(3), 189-198.
- Hellström, I., Nolan, M., Nordenfelt, L., & Lundh, U. (2007). Ethical and methodological issues in interviewing persons with dementia. *Nursing Ethics*, *14*(5), 608-619. doi:10.1177/0969733007080206
- Kane, R. L. (2000). Choosing and using an assessment tool. In R. L. Kane & R. A. Kane (Eds.), *Assessing older persons: Measures, meaning, and practical applications*. Oxford: Oxford University Press.
- Krohne, K., Slettebø, Å., & Bergland, A. (2011). Cognitive screening tests as experienced by older hospitalised patients: A qualitative study. *Scandinavian Journal of Caring Sciences*, 25(4), 679-687. doi:10.1111/j.1471-6712.2011.00878.x
- Malterud, K. (2001). Qualitative research: Standards, challenges, and guidelines. Lancet, 853(9280), 483-488.
- Marlaire, C. L., & Maynard, D. W. (1990). Standardized testing as an interactional phenomenon. *Sociology of Education*, 63(2), 83-101.
- Maynard, D. W., & Marlaire, C. L. (1992). Good reasons for bad testing performance: The interactional substrate of educational exams. *Qualitative Sociology*, *15*(2), 177-202. doi:10.1007/bf00989493
- Nygren, P. (2004). *Handlingskompetanse: Om profesjonelle personer [Action competence: On professional persons]*. Oslo: Gyldendal akademisk.
- Olufowote, J. O. (2011). A dialectical perspective on informed consent to treatment: An examination of radiologists' dilemmas and negotiations. *Qualitative Health Research*, 21, 839-852. doi:10.1177/1049732311402097
- Podsiadlo, D., & Richardson, S. (1991). The timed "Up & Go": A test of basic functional mobility for frail elderly persons. *Journal of the American Geriatrics Society*, 39(2), 142-148.
- Reitan, R. M. (1955). The relation of the Trail Making Test to organic brain damage. *Journal of Consulting Psychology*, 19(5), 393-394.

- Reitan, R. M. (1958). Validity of the Trail Making Test as an indicator of organic brain damage. *Perceptual and Motor Skills*, 8, 271-276.
- Rockwood, K., Fillit, H., Brocklehurst, J. C., & Woodhouse, K. (2010). *Brocklehurst's textbook of geriatric medicine and gerontology*. Philadelphia: Saunders Elsevier.
- Sackett, D. L., Rosenberg, W. M., Gray, J. A., Haynes, R. B., & Richardson, W. S. (1996). Evidence based medicine: What it is and what it isn't. *British Medical Journal*, 312(7023), 71-72.
- Sarason, S. B. (1950). The test-situation and the problem of prediction. *Journal of Clinical Psychology*, 6(4), 387-392.
- Spitzberg, B. H. (1993). The dialectics of (in)competence. *Journal of Social and Personal Relationships, 10*(1), 137-158. doi:10.1177/0265407593101009
- Spitzberg, B. H., & Cupach, W. R. (1983). *The relational competence construct: Development and research*.

 Retrieved from http://www.eric.ed.gov/ERICWebPortal/detail?accno=ED246490 [AU Q: 7]
- Stobart, G. (2008). Testing times: The uses and abuses of assessment. London: Routledge.
- Sullivan, M. (2003). The new subjective medicine: Taking the patient's point of view on health care and health.

 Social Science & Medicine, 56(7), 1595-1604. doi:10.1016/s0277-9536(02)00159-4
- Turkstra, L. S., Coelho, C., & Ylvisaker, M. (2005). The use of standardized tests for individuals with cognitive-communication disorders. *Seminars in Speech and Language*, 26(04), 215-222.
- Urdangarin, C. F. (2000). Comprehensive geriatric assessment and management. In R. L. Kane & R. A. Kane (Eds.),

 Assessing older persons: Measures, meaning, and practical applications. Oxford: Oxford University Press.
- van der Vleuten, C. P. M. (1996). The assessment of professional competence: Developments, research and practical implications. *Advances in Health Sciences Education*, 1(1), 41-67. doi:10.1007/bf00596229
- World Health Organization. (2001). *International classification of functioning, disability and health: ICF*. Geneva: Author.

Bios

Kariann Krohne, Cand.Polit., holds a doctoral research fellowship at the Faculty of Health Sciences, Oslo and Akershus University College of Applied Sciences in Oslo, Norway.

Sandra Torres, PhD, is a professor of sociology and chair of social gerontology at the Department of Sociology, Uppsala University in Uppsala, Sweden, and adjunct professor in rehabilitation and aging at the Faculty of Health Sciences, Oslo and Akershus University College of Applied Sciences in Oslo, Norway.

Åshild Slettebø, RN, PhD, is professor of health science at the Faculty of Health and Sport Sciences, University of Agder in Grimstad, Norway, and adjunct professor of nursing science at the Faculty of Health Sciences, Oslo and Akershus University College of Applied Sciences in Oslo, Norway.

Astrid Bergland, PT, PhD, is professor of physiotherapy at Faculty of Health Sciences, Oslo and Akershus University College of Applied Sciences in Oslo, Norway.