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APPLICATION

Adapted Physical Activity Professionals in Rehabilitation: An Explorative Study in the Norwegian Context

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Adapted physical activity (APA) is characterized by a strong orientation to professional practice. Currently, there exists limited empirical research about the professional status of APA in the context of rehabilitation. Therefore, the purpose of this study was to describe and understand the professional status, role, and work tasks of APA specialists in Norway. For the purpose of the study, the authors conducted group interviews with APA specialists and individual interviews with unit leaders at six rehabilitation institutions in the national specialist health care services. The results highlight the content of the work tasks, the roles in the cross-professional teams, the status in the institutions, and what the participants perceive to be the knowledge base for their profession. Although these results may be specific to the Norwegian context, the authors also discuss possible implications of their findings for APA in an international perspective.

Keywords: cross-disciplinary, professional status, qualitative research, sports pedagogues

Adapted physical activity (APA) is a slippery term. It has had various definitions throughout the years (Reid, 2003; Sherrill & DePauw, 1997), and currently (as of November 2017), the European Federation of APA states that its definition is an object of discussion and may therefore evolve over time (http://www.eufapa.eu/index.php/apa.html). Adding to this, some researchers have recently questioned the use of the term *adapted*, instead suggesting *adaptive* as an alternative term (Goodwin & Howe, 2016; Standal & Rugseth, 2016). Others

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have in response defended the continued use of the term *adapted* (Hutzler & Hellerstein, 2016). Despite the lack of conceptual clarity in the literature surrounding APA, a common denominator of contemporary definitions and understandings is the field's strong orientation to professional practice.

As stated by the European Federation, APA "includes, but is not limited to, physical education, sport, recreation, and rehabilitation" (http://www.eufapa.eu/index.php/apa.html). In Europe, several researchers from different countries cooperated in developing professional standards for APA in the three contexts: sports, schools, and rehabilitation (Kudláček, Morgulec-Adamowicz, & Verellen, 2010). Verellen, Molik, and Vanlandewijck (2010) noted that the scope and content of rehabilitation vary between the European countries and so does the actual use of APA in rehabilitation. Furthermore, they pointed out that APA programs are rarely considered "as a separate entity within the multidisciplinary character of rehabilitation" (p. 28). They went on to state that APA in rehabilitation normally is considered as a part of physiotherapy and as such coordinated by physiotherapists without a specialization in APA. However, there is limited empirical evidence supporting this statement, and as noted by Kudláček and Barrett (2011, p. 12), "knowledge of the state of the APA profession in Europe is still very limited." Therefore, in order to shed light on the APA in rehabilitation, the purpose of this study was to describe and understand the professional status, role, and work tasks of APA specialists (i.e., so-called sports pedagogues) working in rehabilitation in Norway.

The Norwegian Context

Sports pedagogue is a job title that is commonly used by rehabilitation institutions in Norway. It denotes a group of professionals who mainly have their educational backgrounds from physical education or sport sciences and who work together with other professions, such as physiotherapists, nurses, doctors, or occupational therapists.

The introduction of sports pedagogues in rehabilitation in Norway is closely linked to the establishment of Beitostølen Healthsports Centre (BHC), a rehabilitation institution using APA as its primary tool of intervention. The historian Andersen (2010) describes that during the first years of BHC, this new profession was founded to work alongside the more traditional rehabilitation professionals, such as physiotherapists. The two groups were seen as complementary to each other and by cooperating in planning and implementation of physical activity programs, BHC sought "to use insights from different specialties in order to transcend established ideas about what were appropriate activities for people with disabilities" (p. 248). The sports pedagogues were envisaged to have a background in sports, pedagogy, and/or physical education. It was not the idea that sports pedagogues should be doing therapeutic interventions. Instead, the contributions of the sports pedagogues were concerned with teaching and learning of physical activities *in spite of* rather than *because of* impairments (Andersen, 2010).

Andersen (2010) further demonstrates that the education of sports pedagogues was a crucial task in the early years of BHC. Since 1975, a 1-year undergraduate program delivered by Norwegian School of Sport Sciences has been in place and has led to development and dissemination of the competence of sports pedagogues.

In parallel, other rehabilitation institutions than BHC have made sports pedagogues an integral part of their organization. This has led to the outcome that over the last 45 years, more and more people have become employed as sports pedagogues in rehabilitation in Norway.

The development of sports pedagogues as a professional group in Norway can be related to international trends occurring at the same time. Hutzler (2007) refers to Lorenzen's German textbook on disability sports (*Versehrtensport*) from 1961, where Lorenzen made the distinction between disability sports and physical therapy. Disability sport, according to Lorenzen, was based in a pedagogical perspective on participation in physical activities. Physical therapy, on the other hand, was considered as originating from a medical perspective, founded on prescribed treatment of impairments. Disability sport, in contrast, was concerned with self-determined participation in physical activities, focusing on the whole person rather than her impairments (Lorenzen 1961, as cited in Hutzler, 2007, p. 48). Hutzler (2008, p. 3) further notes that Lorenzen "choose the term Versehrtensport (sport of the disabled) instead of other terms, including those reestablished during the 1990s: Gesundheitssport (health sport), and Sporttherapie (sport therapy)." Interestingly, the history described by Andersen (2010) seems to have been parallel with that of other European countries, such as Germany, albeit with the difference in choice of terminology (health sport in Norway) was different.

Conceptual Framework

The conceptual framework for the study is a sociological perspective on professions. Profession is a contested concept, and there is no agreed-upon definition of what constitutes a profession (Molander & Terum, 2008; Reid & Stanish, 2003). Loosely stated, however, one could say that a profession is an occupation that performs specialized functions for others on the basis of advanced competence with an attended fiduciary responsibility (Molander & Terum, 2008).

In their study of the professional and disciplinary status of APA, Reid and Stanish (2003) used a list of six criteria to evaluate APA as a profession: "(a) an essentially intellectual operation, (b) based on knowledge which flows from research, (c) practicality, (d) self-organization, (e) capable of communication, and (f) service to the public" (p. 214). In much the same way, Molander and Terum (2008) make a distinction between the *organizational* and *performative* aspects of professions. Whereas the latter aspect refers to the quality of the professionals' way of acting and performing their tasks, the former refers to the specific way of organizing the work tasks of the profession.

The organizational aspect is connected to the control that the members of the profession have over their work tasks. According to Molander and Terum (2008), this can be divided into external and internal control. Internal control means that the profession has a degree of autonomy in deciding the standards for how the work tasks should be performed. Members of a professional group must subsequently act in accordance with such standards. This means that a characteristic of professions is that members do not operate with their own personal standards for good practice, but rather follow an institutionalized imperative. Stated differently, professionalization means that there is not only a group of individuals performing more or less

the same tasks but that this group also is a collective actor. The external control is connected to the admission to perform the tasks, that is, a degree of monopoly of the tasks. This also means that the profession must have a "collective self-understanding as a profession" (p. 19) and strive to be recognized as worthy of performing certain tasks. An example of this could be whether an educational background in APA is necessary for providing APA services in, say, rehabilitation.

The performative aspect of professions is connected to the way the group performs its tasks. One characteristic of the performative aspect of professions is that they provide services for clients. Client is generic for a person receiving services, and who, as a consequence, is in a dependant position. In other words, the client lacks something that the professional can help her in getting. As such, professions seek to solve practical "how" problems and are geared toward change for the client, for instance, change from sick to well or uneducated to educated. To solve these problems, professions apply systematic and general knowledge to individual cases. The problem situations that professions are set to solve are often difficult to standardize. Thus, professionals must exercise discretionary judgment. To balance the individual, discretionary judgment, and collective standards for good practice, professions are normatively regulated (Molander & Terum, 2008). There are, according to Moland and Terum, three forms of normative requirements. *Epistemic* requirements for the practice mean that the knowledge applied by the professional must be relevant and valid for the given case at hand. *Moral* requirements imply that the treatment of clients must be ethically sound and fair. Given the power inherent in work with people who are dependent on the profession's services, ethical reflections are important. Finally, *pragmatic* requirements entail that the clients are entitled to purposeful treatment.

Methods

For the purpose of this study, we have conducted an explorative study at six rehabilitation institutions in Norway. The study was reported, as required, to the Norwegian Centre for Research Data and given the necessary ethical approval before institutions and participants were contacted.

Institutions and Participants

Six institutions were recruited based on the criteria that they were (a) delivering rehabilitation services in the national specialist health care services[1] and (b) had three or more sports pedagogues employed. We also sought a geographical variation, meaning we have included institutions from northern, western, eastern, and southern Norway. At each institution, we conducted group interviews with sports pedagogues and individual interviews with their unit leader. In the case of the unit leader, we sought to get an interview with the person who had the formal leadership responsibility for the sports pedagogues' work.

A total of 26 sports pedagogues participated in the group interviews (see Table 1). Of the participants, 13 were educated physical education teachers, seven had a master's degree, and 10 had taken the 1-year APA program at Norwegian School of Sport Sciences. Among the participants in our study, there is wide

Table 1 Overview of Sports Pedagogues Participating in Group Interviews and Their Educational Background

Institution	Number of participants	Female	Male	APA degree	PE teacher education	Master's degree
#1	5	3	2	0	2	2
#2	5	3	2	3	2	0
#3	6	4	2	2	3	4
#4	3	2	1	1	2	0
#5	5	3	2	4	4	0
#6	2	1	1	0	0	1
Total	26	16	10	10	13	7

Note. APA = adapted physical activity; PE = physical education.

variation in terms of their experience: Some participants had worked more than 25 years as sports pedagogues in rehabilitation, whereas others had recently graduated. Although we wanted to have at least three participants in the group interviews, we only had two at one of the institutions due to illness on the day of the interview.

Of the unit leaders we interviewed, two had a background as sports pedagogues, whereas the others had different occupations, such as nursing and physiotherapy. This reflects the cross-disciplinary nature of the rehabilitation institutions we have investigated. To secure the anonymity of the institutions as well as the individual participants, we will refer to the institutions by numbers (I#1, I#2, etc.) and the individual participants as either SP (sports pedagogue) or L (leader).

Data Generation and Analysis

We conducted semistructured interviews individually with the unit leaders and in groups with the sports pedagogues. The group interview setting is considered beneficial to elicit discussions and bring forth points of agreement and disagreement among the participants (Kvale & Brinkmann, 2009). In both the individual and group interviews, an interview guide had been developed on the basis of our conceptual framework. This means that we wanted to cover themes related to the performative and organizational aspects of the sports pedagogues' profession. Before our visits to the institutions, the interview guide was adapted to the specific institutions. The adaptations were based on what we could learn about the institution from their Web pages, such as which patient groups the institution served, what the mission statement and values of the institutions were, and whatever else we could learn about the work of sports pedagogues.

The interviews were conducted by three different researchers who all have extensive knowledge about APA and the sports pedagogue profession. Written informed consent was given by all participants prior to the interviews. The length of the individual interviews varied between 35 and 90 min. The group interviews were somewhat longer in duration. The interviews were transcribed verbatim by a professional company. During the data generation process, the research team

regularly discussed experiences from our visits to the institutions and the overall progress of the project.

The interview transcripts were subjected to a thematic analysis, following the guidelines of Braun and Clarke (2006). Two of the authors participated in the analysis. In the process, we have shifted between working independently and meeting to discuss our independent tentative analyses. More specifically, we first read the full transcripts individually to establish initial codes. According to Braun and Clarke (2006), a code is the most basic segment of the raw data, which is of relevance to the research question. Based on the codes that were developed, we individually created suggestions for analytical themes. A theme is a combination of different codes that have an overarching commonality. Based on our initial coding and creation of themes, we met to discuss the codes we had generated and to agree upon themes for further analysis. In this discussion, we also refined themes by creating subthemes.

In the next step, we independently reviewed whether and how these themes worked in relation to the data material, both with regard to coded extracts and to the entire data material. We then met again to discuss the specifics of each theme, naming the themes, and also to decide on the quotes that are used in the final report to express each theme. The third author, who had been involved in the planning and data generation of the study, was consulted in the final round of analysis. Although this way of portraying the analytical process is true to its linear nature, it is important to also acknowledge the cyclical dimensions of thematic analysis. This implies that throughout we were cognizant of looking for disconfirming evidence (Brantlinger, Jimenez, Klinger, Pugach, & Richardson, 2005) and paying attention to codes and themes that did not necessarily fit the overall picture.

Trustworthiness

To enhance the trustworthiness of our study, several measures have been taken (Brantlinger et al., 2005). As a research team, we have conducted *triangulations* at two levels: We have generated different sets of data from different sources and by several investigators. This kind of *collaborative work* helps secure us against idiosyncratic or biased interpretations. In particular, we would emphasize our different positions as researchers. One of us is an established academic, one has extensive experience from the professional field, and the third is an emerging researcher. Our discussions in the research team have also functioned as a form of *peer debriefing*, particularly in the prolonged phase of data generation. We did not conduct *members checking* in a strict sense. The lack of members checking is by some (e.g., Brantlinger et al., 2005) regarded as a threat to trustworthiness. However, we did discuss our initial analysis with both practitioners and other researchers at two conferences.

Results

Through the analysis, we established four themes that will be presented. More specifically, the findings are thematized as (a) how and with whom the sports

pedagogues cooperated in their daily work, (b) the status sports pedagogues had in their respective institutions, (c) the content of the sports pedagogues work tasks, and (d) what they perceived as the knowledge base for their profession. Although the first two themes are related to the organizational aspect of the conceptual framework, the latter is related to the performative aspect.

The Organizational Aspect

The organizational aspect of professions concerns, as explained by Molander and Terum (2008), the control that a professional group has over its work tasks. This involves among other issues autonomy in relation to setting standards for good practice and control over admission to perform the work tasks. The following results throw light on how sports pedagogues work closely together with other professional groups in a relatively autonomous way, but also that they experience certain threats to their professional status.

Cooperation and Teamwork. The sports pedagogues worked in so-called "core teams" with physiotherapists and often also with nurses and doctors. How these teams were set up varied between the institutions based on the needs and functions of the clients. In all institutions, however, the sports pedagogues cooperated most closely with physiotherapists. To some extent, it could even be difficult to separate clearly between these two groups: "we are almost one profession" (SP, I#4). Echoing this statement, one sports pedagogue said: "the physiotherapists and sports pedagogues work in a quite similar manner here" (SP, I#6). She then went on to say that "what separates us is basically that the physiotherapists can do examinations. Apart from that, most of what happens will be more dependent on the persons [than the profession]." This, however, is a viewpoint that was contested by other sports pedagogues because they saw the similarity as more apparent than real:

> It is very close [cooperation] between the sports pedagogue and the physiotherapist. I believe that we work towards a common goal, the clients' goal, so it is not always a clear separation between [us]. . . . *We* know that the sports pedagogue is more involved in the group activities and the physiotherapist is more concerned with exercising that right hand, say. (SP, I#4)

In other words, although their work tasks may look similar from the outside, there was a clear difference in their professional orientation toward those tasks. As the sports pedagogue hinted at here with the reference to "that right hand," there was an idea that sports pedagogues had a different approach due to a different educational background: "when it comes to education, physiotherapists are more—well, therapeutic—than sport pedagogues" (SP, I#4).

Furthermore, the sports pedagogues also shared with us their reflections about what they could not do: "If there is a concrete challenge with pain that needs to be examined and given specific exercises, then I believe that is more of a physio-focus, the pathology focus" (SP, I#5). Similarly, it was said that they needed to take a "hands-off approach" until the medical staff had examined the client and determined potential contraindications for physical activity. Given the blurred line between the two groups, sports pedagogues also experienced to do work that

they did not feel qualified for: "sometimes, I tend to work almost like a physiotherapist. It is almost like there is a blurred line between what they do and [what I can do]. So, there are times when I feel uncomfortable, doing physio-tasks" (SP, I#1).

Another noteworthy issue was the development over time in the relationship between physiotherapists and sports pedagogues. This was particularly evident in I#1, where there had been a marked increase in the number of sports pedagogues in the last few years: "I remember that they didn't really know how the sports pedagogue should be used. So, we were like the physiotherapists' disciples. . . . But, I feel that it is not like that anymore" (SP, I#1). This was backed up by his colleague who said that "the physios have actually become more similar to us than they were earlier. Before, it was much more [separated], while now—it seems they like doing what we do" (SP, I#5).

Status in the Organization. In Norway, many of the professional groups who work in rehabilitation have an authorization. This means that there is a governing body issuing a paper documenting that a person is qualified to work as, say, a nurse or a physiotherapist. For sports pedagogues, this was not the case. There were (and still are) no uniform requirements for their qualification, and their title was not protected judicially in the same way as those who had an authorization. Instead, sports pedagogue was a title used by institutions for a certain area of work. As it was not a protected title, one consequence was that whereas a physiotherapist could be employed as a sports pedagogue, the opposite was not possible.

The issue of authorization and thus a protected title were discussed in all interviews. Participants from almost all institutions stated that they felt valued by their institution, and that there was little need to fight to protect their position. The sports pedagogues felt that they were recognized as an important professional group, at least internally at the institution. As one unit leader said, the sports pedagogues have a unique contribution to the institution, although it might be difficult to separate from physiotherapists:

> It is a challenge to distinguish between the role of the physiotherapist and the sports pedagogue. I think it is more difficult for the physiotherapists. They come with their background and then they see someone [i.e., sports pedagogues] who do what they could have done. . . . I usually tell them [i.e., physiotherapists] that the sports pedagogue has an education in activities, have learnt a lot about activities and adaptations of activities and know that pedagogy of leading groups, while the physiotherapist know more about diagnoses and specific problems for the individual. (L, I#2)

Some, however, argued that they felt that their status and contribution were not properly recognized in the field of rehabilitation more broadly: "The title sports pedagogue, or what we are doing, is not properly known and recognized in the health care sector in Norway, but rehabilitation institutions that maybe started with one or two [sport pedagogues] see the usefulness" (SP, I#1). However, at one of the institutions (#3), it was different:

> Interviewer: Do you feel that you have to protect some of the work tasks that sports pedagogues do?

> Informant: Yes, we can agree on that! In my opinion, the other professional groups do not have the same understanding of the importance of exercise. So, to defend our competence and the time we feel it is necessary [for clients] to spend on that is something we have to do.

The other participants in this interview agreed with this specific informant, but they also pointed out that this was not necessarily a matter of misrecognition from the institution per se. It appears from our analysis that misrecognition of the sports pedagogues came from other professional groups or individual members of those groups. In particular, such misrecognition could arise in discussions about priorities in their daily work. This issue ties into the questions about whether a professional group has a monopoly over certain tasks:

> We often discuss our cooperation with the physios, and that is perhaps where the struggle between professions has been largest. But, in my experience it does not exist in our daily work nowadays. Of course, there can be some jokes about us only doing activities and stuff like that. But, I feel that we have recognition for each others' tasks. (SP, I#5)

This interpretation is supported by the unit leader at that institution: "A physiotherapist has for some reason learned a different approach than the sports pedagogues. I believe it [i.e., the sports pedagogues' approach] is a very important supplement to the activity parts of our program."

One issue that we wanted to know more about was the relationship between being a member of a cross-disciplinary team on the one hand, and developing the specific competencies and practices of sports pedagogues. In all institutions except one, the sports pedagogues did not share an office space but sat together with the cross-disciplinary team. As one of the sports pedagogues said: "I miss a meeting place where it can be something different from the cross-disciplinary . . . maybe more discussions of teaching methods or an article you have read, more for the sports pedagogues" (SP, I#4). Although some institutions held meetings only for sports pedagogues, these meetings were often more about practical issues that did not develop the competencies of the sports pedagogues. In the institution where the sports pedagogues said that they had regular meetings for competence development, one of the interviewees said, "we meet every second week in our group. That is an arena for developing our competencies. . . . We are looking out for what goes on outside" (SP, I#1). Other people in that interview also mentioned taking courses through the sports federation about inclusive kayaking and archery.

Summary of the Organizational Aspect. From our analyses, it appears that the sports pedagogues have some degree of control over their work tasks. According to Molander and Terum (2008), having external and internal control over the work tasks is an essential requirement for professions. Apart from the concern of some of the participants, the general picture was that the sports pedagogues experienced autonomy in their job, and that they were recognized as valuable members of the cross-professional rehabilitation teams in their institutions. One potential threat to this autonomy was the lack of an authorization and formal recognition of the title sports pedagogue. Some work tasks, such as examinations, were specifically reserved for physiotherapists. In principle, there were no work tasks that were

formally reserved for the sports pedagogues. However, in actual practice, there were some work tasks that were considered as belonging to the sports pedagogues, such as leading group activities and adapting and teaching.

Because of their educational background with a broad knowledge about how to teach movement activities, the sports pedagogues were seen as providing a specialized contribution. This contribution, however, included tasks that they to some extent needed to defend. For one thing, several participants felt that they had to defend the priority given to their area of work. Second, there was a need to defend the work tasks because other more medically oriented professions also wanted to perform these tasks. Our results show, however, that unit leaders in the institutions were recognizing the specialization that lies in having an education focused on activities (having studied physical education or sport sciences) as opposed to merely having a personal experience with an activity. In this sense, we conclude that the sports pedagogues seem to have internal control (Molander & Terum, 2008) over their work tasks. The sports pedagogues also had a collective self-understanding about what their specific contributions to rehabilitation were. In the next section, this will be addressed by reporting on findings concerning how the participants saw their core work tasks as adapting and teaching activities with increased participation for the clients as the main goal. Indeed, it is interesting to note that "focus on the potential," a slogan developed in the 1970s (Andersen, 2010) still was considered a hallmark for the profession.

The Performative Aspect

While the previous part addressed the organizational aspects of the sports pedagogues work, this part deals with the service delivery. This involves what their actual work tasks were. Also, in accordance with the conceptual framework, professional judgments must be evaluated in terms of three requirements: epistemic, pragmatic, and moral (Molander & Terum, 2008).

Content of the Work Tasks. For both within and between institutions, the content of what the sports pedagogues did in their daily work (i.e., their work tasks) varied. Within the institutions, there were variations because the sports pedagogues worked in specialized, cross-disciplinary teams serving specific diagnostic groups, functional challenges, or age groups. Differences between the institutions can also be accounted for by the different target groups that the institutions serve. However, there were also specific institutional traditions that made the work tasks different, such as the emphasis put on fitness training or skill acquisition, respectively.

Regardless of differences and variations, certain features of the sport pedagogues' work tasks were common across institutions. When asked about what was the typical work tasks, an answer that was representative of all institutions was: "to adapted activities and exercises. Simply put!" (SP, I#5). More specifically, we found a great focus on adaptations of activities as the content of their work:

> What I see as our great strength is that we are good at adapting and presenting activities, that we can show different ways of making it possible to participate in activities independent of [the clients'] functional level. Finding ways of doing things that suit the individual. That is our greatest strength and our

> subject matter. We use adapted physical activity as a main tool in the rehabilitation process. (SP, I#5)

With "activities," the participants meant sports and recreational pursuits, such as biking, skiing, kayaking, and swimming. In addition to these activities, sports pedagogues also did fundamental motor skill training and fitness exercises, such as balance, coordination, or circuit training. They also pointed out that the activities they led for the most part took place in groups: "The main focus is group activities, but of course, sometimes you work one-on-one. But mostly it is based in groups with individual adaptations" (SP, I#3).

One issue that differed between institutions was the emphasis put on exercise and fitness training compared with skill acquisition. In most of the institutions, it was emphasized that the sports pedagogues' job was to teach skills: "typically, the sports pedagogues teach activities, that is, our main job is the pedagogical approach to teach activities to patients. But we also do fitness training" (SP, I#2). In these institutions, it was clear that other professional groups had a larger responsibility for the fitness training, even to the extent that "for us to employ a sports pedagogue who is only interested in working in the gym, that would be wrong because that [i.e., fitness exercises] is not important" (L, I#6). At other institutions, it was opposite: less emphasis on skill learning and more on fitness exercises. This was particularly evident at I#3 and I#5, as expressed here:

> We do interval training. Then [our task is] to adapt it to the patient so that he can create enough activity to get an effect out of it. It can be strength training, circuit training where we make it simple enough, so that the patient can do it at home later. (SP, I#5)

However, this distinction was more a difference in degree than in kind. Sports pedagogues in all institutions did both, but the emphasis on skill acquisition and fitness training, respectively, varied between institutions.

Knowledge Base for the Sports Pedagogues. One of the questions we asked during the interviews was what the participants considered to be the knowledge base of the sports pedagogues. Surprisingly, it was often difficult for the interviewees to respond to that question. The question was met with silence, and some participants even explicitly admitted that the question was hard to answer. Although it was challenging to get a direct and clear response to that question, the participants did talk about their knowledge base in ways that we would describe as more indirect and implicit. In particular, we found an understanding of the importance of focusing on the resources instead of the functional limitations of their clients: "Focus on the capacity, on the opportunities rather than the limitations" (SP, I#4) and "our strongest point is the focus on ability, that we shouldn't focus on the diagnosis and what is wrong [with the client]" (SP, I#6).

Another expression of the knowledge base was the sports pedagogues' orientation toward the clients who they work with. One of the sports pedagogues invoked a situation from the pool where a patient stops and complains about pain:

> Then my colleague, the physiotherapist, would say "where is your pain," while I often would say "that's OK, then you take a break and after that you do

> whatever you can manage." . . . We are not concerned with the details, but more the holistic experience and what they [the patients] actually can do in spite of the pain in that one muscle. (SP, I#5)

One can question whether these ways of talking about a "resource orientation" can be considered as expressions of a knowledge base. It might more appropriately be seen as an attitude or a value orientation. However, two issues came up in this regard during the interviews. First, one of the sports pedagogues stated that the knowledge base cannot be divorced from their values:

> I: What is the knowledge base that the sports pedagogues base their work on?
>
> SP: I believe it is connected to values . . . it is a way of working were we really believe in increasing participation.

In other words, when the value was to increase the clients' participation, then the knowledge base was connected to the competencies necessary to increase participation by focusing on the resources of the participants rather their limitations.

Second, at a couple of the institutions, Aron Antonovski's concept of salutogenesis was mentioned as a theoretical foundation for their work: "the theory of salutogenesis—what it is that makes us well and master our lives" (SP, I#6). This perspective was supported by a unit leader at a different institution: "the sport pedagogues' role in the cross-disciplinary team is to focus on the salutogene, that is, the resources for mastery" (L, I#3). Therefore, at least for some participants, there was a theoretical link between their value orientation and a specific theory of health.

Focusing on the potential and abilities rather than the impairment was also mirrored in the way activities were conceived of by the participants: "to see what the individual is capable of in spite of rather than because of, and to see with the *resource focus*" (SP, I#6). We understand this as a form of knowledge cultivated through experience: "I have been here for so long that it has become a perspective to look for ability rather than disability" (SP, I#4). Indeed, the resource orientation emphasized here was considered a—if not *the*—hallmark of the sports pedagogues' competence. It was a specific perspective or pedagogical gaze they felt was learned through their education and later refined through their experience from working in the field: "You learn to see with that gaze. How to do it [i.e., to adapt], whether it be with kids, adults, wheelchair users or whoever" (SP, I#5).

One explicit aspect of the knowledge base that was highlighted in all the interviews was the knowledge and competence to organize and adapt physical activities in practice. As one of the unit leaders told us:

> When we employ a sport pedagogue, the first thing we look for is the background in activities, that you are good at adapting the activities. Then in addition, the pedagogical approach where you use different methods to adapt the activities . . . and your competence in communication, that is dialogue and communication with people. (L, I#4)

The knowledge base expressed here can be connected to pedagogy as well as adaptation theory. In the opinion of the sports pedagogues, being competent about activities and how to adapt them require some familiarity with the activities, that is,

personal skills, but it was also clear that being experienced with an activity was not enough:

> You might have been a kayaker for many years yourself, but that doesn't mean that you can work with a patient with challenges and provide positive experiences [for him] . . . you have to know how the activity works, how to adapt it. Like the simple things of going in and out of the kayak or bringing a long some extra equipment, just in case. . . ." (SP, I#5)

The knowledge base for adaptations therefore lay not so much in the professionals' interest or skill in specific activities, but in the competence of being able to analyze the activity, knowing what issues and needs for modifications and adaptations that could arise when working with specific clients. This, according to the sports pedagogues, was not something that one can learn only from experience by doing an activity for oneself.

Another pedagogical issue that was highlighted by both sports pedagogues and their unit leaders were the ability of building relations to the clients. Clearly, this is not a competence unique to sports pedagogues, as all professionals working directly with clients need to establish some form of relationship. However, the sports pedagogues pointed out that there are some ways that their competence for building relations were specific: "I believe that the sports pedagogue often has a specific pedagogical-methodical background that enables us to lead groups in a good way, to organize and be creative in meeting the clients—either one on one or in groups" (SP, I#4). In our interpretation, this suggests that although it was difficult to answer directly what the knowledge base was, there were certain theoretical perspectives more or less implicitly embedded in their thinking about their professional practice. In particular, the knowledge base of the sports pedagogues in our study consisted of a professional orientation toward focusing on the resources of the clients, to be competent in adapting activities to the needs and purposes of the individual and to present this is a pedagogical sound and efficient way.

This theme so far has been concerned with epistemic and the pragmatic requirements of the performative aspects of professions. In the interviews, we were also interested in the third requirement, namely the moral sides of professional practice. Similar to questions about the epistemic aspect, it was at times difficult to get clear answers about ethical challenges:

> I: Do you have any example of ethical challenges or problems you encounter in your work?
>
> [silence]
>
> SP, I#2: Ethical?
>
> SP, I#2: What are you thinking about then?

Although the answers we got about ethical issues were not very elaborate or detailed, some issues of relevance came up. Ethical problems were for instance thought about as questions concerning protection of personal privacy, such as what to tell other professionals about clients. Also, questions about clients' participation

in decision making and of paying attention to children's voices were thought about as ethical questions:

> That the kids should express their wishes, to voice their opinions. That can be different from their parents'. One thing if it is really young children, but with youth, it can be conflicts. So handling that in the best possible way (is a challenge). (SP, I#5)

Furthermore, some participants experienced ethical challenges with situations where their clients did not do their best: "we often meet people who have insurance issues. They can lose a lot by becoming better—what do you do, then?" (SP, I#4). At one of the institutions (I#1), they had established an ethical board, where professionals could come and discuss challenging situations they found themselves in. This was—as far as we were told—not the case in the other institutions.

Summary of the Performative Aspect. Molander and Terum (2008) express that in addition to the organizational aspect of professions, there is also a performative aspect, concerning service delivery. This means that a profession works with clients to solve practical how problems. It is clear from our results that the sports pedagogues knew what kind of problems they were expected to work with, for example, expressed in terms, such as increasing participation for their clients, learning to take part in movement activities in spite of a disability, and training of fundamental motor skill and fitness. Yet, it might be seen as worrying that they had a limited capacity to express what their knowledge base was. Both Reid and Stanish (2003) as well as Molander and Terum (2008) hold that in addition to solving practical how-problems, a profession must also be able to communicate about the knowledge they base their practice on. We should, however, acknowledge that it might have been difficult for our participants to discuss this issue in the artificial setting of an interview. In addition, through a closer analysis of how they talk about what they do, we were able to discern certain theoretical perspectives that could constitute the knowledge base. Yet, seen in light of the threat of a being a profession without a formal authorization, this situation is somewhat alarming.

To throw further light on this problem, we can recall that Molander and Terum (2008) specified three criteria for regulation of the performative aspect of a profession. These were *epistemic*, *moral*, and *pragmatic*. The sports pedagogues are highlighting the pragmatic aspects of their practice. In particular, this is evident in their references to a "professional gaze," a perspective with which they seek to see the resources of the clients. Although the sports pedagogues were able to talk about the pragmatic aspects of their profession, they were less competent at discussing the epistemic side of their profession. In addition, we also asked about ethical and moral issues concerning their professional practice. We did find that sports pedagogues explicitly relate values and ethical issues to the knowledge base of her work. But, similar to the epistemic aspects, the ethical issues were not a prominent feature in the interviews, in the sense that the participants did not provide any substantial answers to these questions. Thus, we believe that there is a need to develop sports pedagogues' capacities for discussing their practice in terms of the moral and epistemic aspects. The former ties in with recent developments in the APA literature calling for increased reflexivity about ethical issues (Goodwin & Howe, 2016; Silva & Howe, 2012).

Epistemic aspects of the sports pedagogues' professional practice can be linked to discussions about evidence-based research and practice in APA (Bouffard & Reid, 2012; Hutzler, 2011; Standal, 2008). But, it also ties in to theoretical developments of how adaptations of physical activities are understood epistemically. Some years ago, Sherrill (1997) suggested the need for adaptation theory. More recently, Hutzler (2007) has developed a systematic model for adaptations based on the ICF system (i.e., the World Health Organization's International Classification of Functioning, Disability and Health). In addition, some authors (Goodwin & Howe, 2016; Standal & Rugseth, 2016) have begun using the term adaptive, rather than adapted, to call attention to the dynamic and on-going process of adapting rather than seeing it as a predefined program of adapt*ed* activities. These are all important lines of development that could potentially develop the knowledge base of sports pedagogues.

Discussion

The emergence of sports pedagogues in rehabilitation may be a result of specific historical development unique to the Norwegian context (Andersen, 2010). The question is then, do our results have any implications for the international APA knowledge base? We would propose that they indeed may. First, we want to note that APA strictly speaking is not a profession. Just like adapted physical education is not a profession (but being an adapted physical education teacher or consultant is), it is more precise to say that APA is a knowledge base that rehabilitation professionals may apply. Having a knowledge base that is applied to particular cases of clients is one of the primary characteristics of a profession (Molander & Terum, 2008; Reid & Stanish, 2003). As implied by Verellen et al. (2010), different professions, also ones we consider medical, such as physiotherapists, may be using APA knowledge in their professional work. Thus, we suggest that there is a distinction between APA with a pedagogical or a medical perspective, respectively. The former is concerned with learning, and the latter is concerned with therapy.

Second, we should acknowledge the similarities between the findings we have presented here and the earlier work reported by Hutzler (2008, p. 5):

> Surprisingly, most differences suggested in 1961 by Lorenzen are still evident today namely: (a) medical orientation in PT [physical therapy], compared to pedagogical in APA; (b) intervention goals are mostly referring to the impairment in PT compared to the whole person and participation in APA; (c) activity is typically prescribed in PT, compared to self-motivation in APA; (d) participant is passive and active in PT but only active, mostly in group settings, in APA; (e) the goal in PT is mostly restricted to specific biological changes, while in APA the goal is promoting activity across the lifespan; and (f) the intervention is mostly identified as treatment in PT, compared to self-determined action in APA.

Although we acknowledge the similarities between these remarks and our findings, we also would like to point out that findings from the Norwegian context can throw some additional light on the relationship between the APA as, on the one hand, a cross-disciplinary field of knowledge and, on the other hand, as professional

practice. The quote from Hutzler (2008) alludes to a difference between a pedagogical and a medical approach. The same is true for other, theoretically driven studies on APA in rehabilitation (e.g., Hutzler, 2008; Standal, Kissow, & Morisbak, 2007; Verellen et al., 2010). Our study, however, illustrates that although this could be seen as a principled distinction, professional practice seems to take place on a continuum between learning and therapy.

Much of the discourse on APA in rehabilitation is theoretical. To our knowledge, the study presented here is the first empirically driven study on the professional role and status of APA professionals. What our results contribute with then is to illustrate the challenges of cross-professional cooperation, where there can be blurred lines between *who does what*. Our results also show that the pedagogical approach would—to use ICF terminology—be concerned with activity and participation through skill learning and focusing on the potential. In our study, the main work tasks of the sports pedagogues were to teach sports and recreational activities, such as swimming, biking, or skiing, or they did motor skill learning and fitness activities. The therapeutic approach to APA in rehabilitation would be concerned with body structures and functions through therapeutic intervention where the focus is on the impairment. What the sports pedagogues told us that their therapy colleagues did were individual examination and treatments. The blurring of the lines between the pedagogical and therapeutic efforts take place because an activity such as skiing can have both learning (e.g., developing technique) and therapeutic (e.g., developing balance) goals. What our study adds to earlier nonempirical sources is a realization that in actual practice, there might be some form of blending between therapy and learning, which hitherto has not been sufficiently acknowledged in the theoretical work.

Further studies in this area are needed. Our study has been done in a specific location, where particular historical developments and political issues (such as the Nordic welfare state) probably have had large influence on the emergence of sports pedagogues in rehabilitation. Following up on the European project about standards for professional practice in APA (Kudláček et al., 2010), it might be interesting to do comparative studies between different countries. This kind of research, however, must consider the cultural and political differences that enable and constrain the professional practice of APA. Furthermore, there is a need for research that can quantitatively survey the number of sports pedagogues working in rehabilitation, measure, for instance, their job satisfaction, and the relevance of their educational background. In addition, our study has focused on physical rehabilitation. APA professionals are also employed in rehabilitation institutions catering for people with psychiatric diseases. The roles and responsibilities of APA professionals might be different in such contexts. Finally, complementing our study with both more in-depth studies of actual practice through observational research as well as more broad survey research would be recommended.

Note

1. The specialist health care services in Norway is divided into four regions. The four regional health authorities are responsible for ensuring that the population in the region has access to necessary specialist health care services. Specialist health care services include somatic

and psychiatric hospitals, outpatient clinics and treatment centers, training and rehabilitation institutions, institutions for interdisciplinary specialized drug abuse treatment, prehospital services, private practitioners, and laboratory and X-ray activities.

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