Social Science & Medicine 265 (2020) 113472

Contents lists available at ScienceDirect

Social Science & Medicine

journal homepage: http://www.elsevier.com/locate/socscimed

Dynamics of interprofessional teamwork: Why three logics are better than one

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ARTICLE INFO

Keywords:
Norway
Professional boundaries
Professional roles
Interprofessionalism
Mental health
Substance use
Social work
Health care

ABSTRACT

Much research has used three logics to understand the dynamics of interprofessionalism: 1) assimilation, that is, adapting the work of others; 2) segregation, where professional roles are separated and boundaries defended; and 3) integration, a perspective on the complementarity of professional roles. However, we found no studies analysing all three logics in connection with each other. Based on an ethnographic study of interprofessional teamwork in the field of mental health and substance use in Norway, this article explores the dynamics of interprofessionalism from all three perspectives. The data collection consisted of 14 observation sessions and 18 in-depth interviews of professionals in the field of health and social work. Investigating how, when and why each logic came into play, the results show the importance of including all three logics to leverage each one's purpose and function, and how they appear almost simultaneously in many situations. By investigating all three logics, the paper provides a broader, more comprehensive view of interprofessional teamwork.

1. Introduction

This paper examines interprofessional teamwork and how different health and social professions work together as a group. The term "interprofessional" refers to a type of collaboration which involves professionals working closely together collectively and interdependently (Reeves et al., 2010, 8). Contrary to other forms of collaborative work, where contributions are parallel or sequential, interprofessionalism implies a high level of communication, mutual planning, collective decisions and shared responsibilities. To facilitate a comprehensive approach to patients' problems, each professional must take everyone's contribution into consideration (Thylefors et al., 2005, 104).

Starting with the literature on the field of interprofessionalism, we point to three existing logics to understand the dynamics of professional boundaries and roles in interprofessional collaboration. Although these terms are not used by all the authors we cite, we name them assimilation, segregation and integration. We found no studies analysing the connections between all three. Paying attention to only one, however, fails to capture important dynamics of interprofessionalism. The term "logic" refers to how a particular social world works. It provides a source of collective identity, power and status, social classification and categorisation, and allocation of attention (Ocasio et al., 2017, 510). This paper uses the term "logic" (1) to make a theoretical point about how some scholars have understood the dynamics of interprofessionalism and (2) as a perspective from which to understand how professionals manoeuvre within the context of interprofessionalism. With reference to segregation, assimilation and integration, we ask how, when and why all three logics may be present in interprofessional collaboration and teamwork.

The paper's basis is an ethnographic study of three interprofessional teams working in the field of mental health and substance use in Norway. To achieve comprehensive care and treatment for this patient group, close interaction and collaboration are necessary between various professionals in psychology, medicine, health care and social work. Although this paper links to a specific national context and field of work, the results are relevant both internationally and to other areas in health and social work, as it provides valuable insights into the relationships between professions and the contexts in which they collaborate.

2. Theoretical framework

In the literature we found three analytical perspectives on interprofessional teamwork and cross-professional collaboration: (1) a logic of assimilation, that is, the blurring of professional boundaries by

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https://doi.org/10.1016/j.socscimed.2020.113472
Received in revised form 13 October 2020; Accepted 19 October 2020
Available online 22 October 2020

adapting to the work and perspectives of other professions; (2) a logic of segregation, that is, how professionals separate their roles and actively encourage boundaries based on experiences of interprofessional work; and (3) a logic of integration, that is, the complementarity of professional roles, how they enhance or strengthen each other.

Starting with the logic of assimilation, Abbott (1988), in his classic, well-known book *The System of Professions*, discussed how boundaries between professional jurisdictions may disappear in the workplace as the division of labour is established through negotiation and custom. According to Abbott, professions are defined by "jurisdictional ties"; a profession's control over knowledge, skill and authority to perform specific work activities. However, by introducing the term "workplace assimilation" as a form of knowledge transfer between professions which enabled members of one profession to perform tasks formally belonging to another, Abbott (1988, 65–66) showed that in the context of the workplace, professional boundaries may change or even disappear to accommodate organisational imperatives.

Building on Abbott's (1988) ideas, several studies have examined the relationships between professions and highlighted a logic of assimilation. In two qualitative studies of medical and nursing work, Allen (1997) and Johannessen (2018) described how nurses routinely blurred professional boundaries towards doctors to ensure that work was completed. In Allen's (1997) study, boundary blurring occurred in situations characterised by high work pressure, where nurses had to take matters into their own hands, doing "doctors' work". By referring to Abbott's (1988) term "workplace assimilation", Johannessen (2018) showed how nurses blurred the boundary between nursing and medicine by doing "medicine-like" work to function in the turbulent nature of emergency work. In neither Allan's nor Johannessen's study was the assimilation total, but both argued for assimilation to increase the quality of nurses' work.

Other studies discussing professional boundaries have emphasised elements such as professional power and dominance as parts of interprofessional teamwork. Studying collaboration in health services, Nugus et al. (2010) characterised doctors as key decision-makers in patient pathways. Jones et al. (2013, 55) argued that the medical and health care professions, together with psychologists, had more "professional autonomy" and "more specific, in-depth knowledge" than professions in social work, for example. Differences in power and authority affect professional groups' opportunities to blur boundaries (assimilate). For example, Reevse et al. (2009) found that lower-status professions such as nursing and other allied health professions were reluctant to engage in interprofessional dialogue with professions of higher status, for example physicians. Similarly, Finn et al. (2010) concluded that lower-status professions had less space to challenge occupational structures.

As opposed to assimilation, the logic of segregation points to the division of professional roles and the establishment of professional boundaries. Instead of being blurred and overridden, Brown et al. (2000) argued that the experience of interprofessional teamwork actively encouraged boundaries between professions. By studying community mental health teams, the researchers found that drawing boundaries was a strategy for professionals to regain responsibility for and ownership of tasks. Clear professional boundaries and roles were important to make individuals feel secure in their work, set limits and avoid "professional generalisation". In comparison, Lewin and Reeves (2011) found that the doctor–nurse relationship involved parallel work, limited information-sharing and inefficient joint work. Other studies found that, based on the fear of losing a professional contribution or being subsumed by other professions, professionals may hold onto their specialised area of expertise by drawing boundaries and segregating (MacNaughton et al., 2013; Moran et al., 2007; Rose, 2011).

Illustrating a third logic of integration and how professional roles may enhance or strengthen each other, Annandale et al. (1999) and Tyan and Ross (2000) noted how nurses emphasised their holistic approach rather than a medical approach to underline their complementary role in relation to physicians. Stein (1967) further conceptualised the relationship between doctors and nurses as a game of interdependent interaction. Although his study is now more than 50 years old, Stein based his findings on relationships between health care professions that still exist today (Holyoake, 2011). Other studies have examined what the logic of integration promises, such as mutual trust and respect, communication and sharing of knowledge, and positive attitudes (O'Carroll et al., 2016; Sangaleti et al., 2017).

In this section, we have established three logics in the study of professional boundaries and roles. Although some studies may contribute to a nuance of these three logics (Caronia et al., 2020; Xyrichis et al., 2017), the studies to which we refer illustrate important dynamics of interprofessionalism. First, they illustrate how the blurring of professional boundaries and roles (assimilation) may provide the flexibility required to operate in a hectic working environment. Second, they show how maintaining professional boundaries (segregation) has an important function in achieving efficiency and task management in contexts where responsibilities and roles may be unclear. Third, they demonstrate how professionals may achieve and practise complementarity and the ideals of interdependent interprofessional collaboration (integration).

In the studies mentioned above, the three logics are discussed separately. However, when working with our own empirical data, we found not just one but all three logics present. To explore this further, we carried out several literature searches in various databases, looking for studies in the field of health care and social work that combined interprofessional teamwork with all three logics. Although Liberati (2017) added some nuance to the boundary-blurring, boundary-reinforcing dichotomy by discussing how professionals may separate, replace or intersect boundaries in different contexts, we found no studies on interprofessionalism that combined or compared the three logics in the same workplace setting. A perspective that includes all three logics would expand the research field by showing how each logic has its own purpose and function and, in some situations, appear almost simultaneously. In the following sections, we explore how team members with different professional backgrounds work together as a group, and we ask how, when and why the three logics of assimilation, segregation and integration operate in the context of interprofessional teamwork.

2.1. Assimilation, segregation and integration

Assimilation, segregation and integration are related to the concept of "acculturation", which originates in anthropology and cross-cultural psychology and includes the study of changes in behaviour and sociocultural adaptation by groups or individuals. The notion of acculturation helps describe patterns of cultural change initiated by the contact of two or more autonomous cultural systems (Berry and Sam, 1997).

By examining how individuals or groups adapt to new cultural contexts, Berry (1980) argued that a process of acculturation may cause one or more of four situations: assimilation, integration, segregation and deculturation. According to Berry, the characteristics of assimilation include relinquishing cultural identity, adjusting and moving into the larger society. While assimilation can go either way in theory, in general, the less dominant group assimilates into the more dominant one. However, a group's or individual's opportunity to assimilation are affected by power structures, which we will discuss later in the section "findings and discussions". Integration, in contrast, implies maintaining cultural integrity while becoming an integral part of a larger societal framework. In segregation or deculturation, rejection, withdrawal or separation from the dominant society occurs. However, deculturation is a rare choice and will not be addressed here.

Acculturation is related to the context of migration, in which individuals and groups must adjust to a new, often more dominant cultural environment. Although our study does not concern intercultural contact and cultural change but the interaction between people with different professional backgrounds, the two contexts have similarities. Like intercultural contact, interprofessional teamwork can be understood as a

set of interactions between different professional ethics and knowledge categories (Hall, 2005; Petrie, 1976). For example, while physicians are trained in medicine and to value data objectively, professionals such as psychologists and social workers may value patients' stories and life situation more. These encounters between professional perspectives and the movement towards coexistence bears similarities to the study of acculturation.

The roles performed by different members of an interprofessional team are subject to professional boundaries, which are contested spheres of practice produced by a "labour of division" and acts as "rules" governing interactions (MacNaughton et al., 2013, 2). By borrowing the terms "segregation", "assimilation" and "integration", we developed an approach to interprofessional teamwork that captures more of the dynamics of how professionals with different backgrounds work together. However, scholars often use these three concepts normatively. According to Berry (1980), assimilation and integration are positive, while segregation is negative in the sense that it represents a negative attitude towards others. In using these three terms, our aim is not to present a normative discussion. Our perspective is not that segregation is "bad" and integration is "good". Furthermore, these three terms should not be understood as definitive concepts, clear attributes or fixed benchmarks but as guiding concepts in approaching empirical questions: what Blumer (1954) called "sensitising concepts". Segregation, assimilation and integration, then, become concepts that gave us direction, helping us understand our field of study.

3. Setting, data and methods

3.1. Setting

In Norway, the law regulates interprofessional practice, giving individuals with challenges related to substance use and mental health the right to coordinated health and social services. Within this framework, the development of interprofessional teams aimed at individuals with great, complex health and social needs is a political priority. To strengthen both the quality and capacity of mental health and substance use services, many of the country's municipalities have deployed interprofessional teams supported by governmental funding.

This paper's basis is a study of three interprofessional teams in the field of mental health and substance use that cover densely populated urban areas in Norway. Each team comprised 8–14 employees with professional backgrounds in nursing, occupational therapy, medicine (psychiatry), psychology (clinical), social education (in Norway this is a bachelor's degree) and social work. The patient group for the teams was people above the age of 18 with problems related to mental health, substance use or both. Many patients also had interrelated challenges connected to housing, finances, somatic health and social life.

There was some variation in the organisation of the three teams. One team worked at a daytime clinic, where the same organisation employed all the team members. The patient follow-ups were not long-term, and the patients' challenges were less extensive than those of the other two teams. The other two teams were more similar. Both worked in outreach and extended follow-up care, and different organisations employed the team members. However, they all responded to the same team leader (Table 1).

Although there was variation in their organisations, the data from all three teams were comparable, as we found similarities in each professional's role and the management of patient issues. The goals of all three teams were treatment, rehabilitation and social support for the patients. On all the teams, each member's role was autonomous, but they still worked closely and had continual communication and interaction. Each member had a list of patients for whom they were responsible, individually or with the help of a colleague. In team meetings, they distributed tasks, shared information, discussed patient cases and received input from colleagues on complex problems. Consequently, the meetings functioned more as forums for discussion rather than decision-making.

The three teams were well resourced, having more time for each patient than many other health and social services. In the interviews, many participants emphasised their ability and willingness to work unconventionally and in close collaboration with other professions. The presence of the logic of integration was not surprising, as each team member was expected to consider everyone else's contribution. However, it was interesting how all three logics could operate in the same context, sometimes even in the same situation.

3.2. Data

Between April and December 2019, we conducted 14 observation sessions (approximately 35 h total) and 18 in-depth interviews. The first author collected all the data. We selected the teams based on two criteria: (1) consisting of both social and health professionals and (2) organised according to an interprofessional team model (Thylefors et al., 2005, 104). We recruited the teams through the first author's professional network. None of the authors had any direct affiliation with the field or the teams prior to the study.

We conducted observations by participating in team meetings once a week. The observations focused on how the professionals discussed patient cases: what they said, who said it, what types of questions they asked and what roles and positions the employees expressed. During observations, we noted keywords and near-verbatim quotations on a notepad; the same day, we expanded these notes to more complete field notes on a computer. Unfortunately, due to the confidentiality of patient information, we only carried out observations in two of the three teams. In the ethical approval of the study, we were not allowed to conduct observations in situations where identifiable patient information was

Table 1
Summary of the three teams

	Team members	Composition of team members (number of professionals)	Description
Team 1	8	Psychology (4), social work (1), nursing (1), psychiatry (1), employment consultant (1)	- Daytime clinic - Short-term treatment - Patients' challenges less extensive - Team meetings once a week - All team members employed in the same organisation
Team 2	10	Social work (3)[a], social education (3) psychology (3), psychiatry (1)	- Outreach and extended follow-up care - Long-term treatment - Patients' challenges extensive - Team meetings once a week - Team members employed in different organisations
Team 3	14	Nursing (4), psychiatry (2), psychology (1), social work (1), social education (1), occupational therapy (1), peer support worker (1), employment consulting (1), others (2)[b]	- Outreach and extended follow-up care - Long-term treatment - Patients' challenges extensive - Team meeting every morning - Team members employed in different organisations

[a] Two team members did not have degrees in social work but had worked in the social field for many years.

[b] These were team members who did not directly participate in discussions about the patients.

available. In two of the teams, patient cases were discussed without such information being mentioned. In the third team, such information was a part of team meetings discussions. In this team, we conducted only interviews.

We contacted all team members regarding interviews and interviewed those who responded to this inquiry. We covered all the professions – nursing, occupational therapy, medicine (psychiatry), psychology, social education and social work –in the interviews with one to four representatives of each. We made the interview guide semi-structured, questioning the participants about their professional roles, boundaries and experiences of working interprofessional. We conducted interviews after finishing the observations, so we based many of the questions on observational data. The interview guide consisted of open-ended questions asking the participants to provide their own reflections on the topics. For example, we asked, "How would you define your area of professional responsibility?" and then "How does this differ from other professional groups in the team?" The first author recorded the interviews and later transcribed them (Table 2).

We informed all the team members about the project both orally and in writing, and all gave either verbal or written consent to participate. The Norwegian Regional Committees for Medical and Health Research Ethics and the Norwegian Centre for Research Data approved the study. We collected no patient information during the study, and we have anonymised all the participants.

3.3. Analysis

We sorted and coded the collected data, both interview transcripts and field notes, into categories and themes using NVivo12 software. The first round of coding was open-ended and focused on identifying themes. While both authors worked with the codes from the first round, it was striking to see how the three logics of drawing boundaries emerged. Given our knowledge of the term "workplace assimilation", the data showed a surprising relevance to the three already-established logics of segregation, assimilation and integration. Consequently, in a second round of coding, we categorised the data according to these three logics. We specified the coding as follows:

1. Segregation, with a special focus on separating of professional roles and drawing boundaries: how professionals identified one field of practise as theirs, defined responsibility, created ownership of tasks or set competence thresholds.
2. Assimilation, as a way of blurring boundaries by adapting to the practice, language or knowledge of another profession, often to increase flexibility and potentially efficiency
3. Integration, with a special focus on the complementarity of professional roles and task performance, maintaining mutual autonomy while being willing to learn from team members

The first author coded the interview transcripts and field notes and the second author sifted through the data and coding to check the reliability of the first author's coding. In analysing the data, we looked for how, when and why dynamics seemed to trigger one of the logics to come into play. The interviews provided the professionals' subjective explanations and meanings of interprofessional teamwork, and the observations described the behaviour and context in which they arose.

Table 2
Data collection

	Number of team members	Team members interviewed	Observation sessions
Team 1	8	4	7 (14 h)
Team 2	10	7	7 (21 h)
Team 3	14	7	0
Total	32	18	14 (35 h)

4. Findings and discussions

4.1. Drawing boundaries: The logic of segregation

We found that professionals engaged in interprofessional teamwork drew boundaries by referring to jurisdiction or tasks that required specific professional expertise. Here, we identified two main areas of boundaries and professional segregation - medical work and psychological work - which arose from how the professionals in our study defined their professional roles, understood as their expert knowledge, areas of responsibility and contributions to their teams. However, these boundaries were not absolute. Professionals in various fields may see themselves playing several roles in the field of health and social work.

Regarding boundaries, one nurse we interviewed differentiated the nurse's role on the team as follows:

> What differentiates us is that nurses have more knowledge about medication and somatic health. (…) I think the sharpest distinction is medicine. And I think that the social worker and occupational therapist would say the same. That they do not deal with injections and things like that. (…) The psychiatrist is mainly responsible for medicine, but we (nurses) administer it and follow up on it.

By referring to an area of responsibility (medication), the nurse drew a boundary between professions that perform medical work and those that did not. Moreover, the nurse created a form of professional hierarchy by stating that the psychiatrist was responsible for medicine while the nurses administered it. The law regulates this division of labour and responsibility between nurses and doctors and it falls under the jurisdiction of these professions. However, it also refers to relationships of power and dominance between the professions. As one psychiatrist expressed in an interview, "I have my specific areas, where I am the sole ruler. Medication, use of coercion. Stuff like that. (…) These are tasks only I can do." Hence, the psychiatrist not only separated himself from the other professionals on the team but also placed the psychiatrist's role at top of this hierarchy by indicating areas over which the psychiatrist was the "sole ruler".

In distinguishing between medical and non-medical professions, one social educator stated, "Perhaps I am better at focusing on the patients' resources. Nurses and doctors have more focus on the general health of the person". One occupation therapist also identified her area of professional knowledge as something different from nursing:

> We are trained to look for different things. For example, nurses, as I see it, (…) are trained to look for symptoms of diseases, while us occupational therapists (…) try to see the patients' resources and how to lower the requirement in an activity to match the patient's level of everyday function.

In comparison, one social worker defined her field of knowledge by referring to a systemic approach to the patient's needs:

> As a social worker, maybe my approach is more systemic than some of the others [on the team]. I am focused on how a person acts in a family setting, which can be very defining. Sometimes I feel that the others can forget a patient's social network, or others [on the team] may think of it, but maybe that I have more knowledge.

In all these examples, professionals drew boundaries by defining what *distinguished* one profession from another. While the nurse and psychiatrist used medical work vs. non-medical work as a reference point, the social educator, occupational therapist and social worker referred to a systemic approach or a focus on the patients' resources as "theirs".

However, professionals not only draw boundaries based on medical work or a focus on patients' resources. In Norway, only professionals in

psychology and medicine (physicians) are qualified to conduct psychological diagnostic assessments. On the teams we studied, psychologists and psychiatrists shared this area of responsibility (jurisdiction). Confirming this distribution of professional roles and tasks while drawing a boundary, one psychologist stated:

> A psychologist has a deeper knowledge in doing psychological assessments. (…) I mean, I have more responsibility when it comes to that. As a psychologist, I know more about different mental disorders, neuropsychological conditions and [the] treatment of substance use [and] the whole screening processes. And psychologists may be more focused on therapy.

In this statement, "psychological work" became a field where some had more in-depth knowledge and responsibility than others. By comparison, a social worker defined his professional role on the team as something *outside* "psychological work":

> I am not a psychologist or a nurse. (…) What I am trying to say is that I do not see myself as a therapist. I feel that I do have an important role in the team when it comes to the patients, but at the same time, my role is not very relevant in the mental treatment of the patients.

Although not directly discussing his professional expertise, one social educator placed a restriction on his competence and role on the team:

> I would set a limit at somatic, medical and mental assessments. So, if the team is discussing such things, then maybe I would participate a little bit, but I would pull out quite quickly from the discussion if it is about things outside my field.

Just like the social worker's statement, the social educator drew a boundary for his professional competence at psychological work and medical work. However, the social educator did not only set a limit on his professional competence, but also discussed *withdrawing* himself from discussions about somatic, medical and mental assessments.

Our findings are notable in that both medical and psychological work stood out as areas of strong segregation, which the social worker and social educator both explicitly chose to withdraw themselves from or define themselves outside these areas. One reason for this may be the clear jurisdictions of medical and psychological work, which can produce differences in power and authority between the professions (Jones et al., 2013; Nugus et al., 2010). Like our findings, Reeves et al. (2009) found that nurses and other professionals were reluctant to engage in dialogue that was primarily medical. By highlighting power differences between professionals, the boundary towards medical and psychological work emerges as clearer and harder to breach for "non-professionals", than vice versa. This argument brings us to the next section: the blurring of boundaries and the logic of assimilation.

4.2. Blurring boundaries: The logic of assimilation

According to a logic of assimilation, professional boundaries are blurred through processes of knowledge transfers and the adapting of the work and perspectives of others (Abbott, 1988; Johannessen, 2018). Team meeting discussions, in particular, were an arena where we found examples of professional boundary blurring. The following is just one example of how professionals may draw a boundary by moving back from a discussion, but also blur boundaries by adapting the perspectives of another profession:

> The team was discussing a patient case. One of the social educators raised a question about a patient which he did not know how to approach. The patient had a traumatic background, and the team suspected that the patient might have a mental health diagnosis.
>
> "The patient is very quiet and does not talk much", the social educator told the team. One of the psychologists asked the social educator, "Do you think the patient is having flashbacks?"
>
> One other team member, a social worker, chimed in, "Is the patient traumatised?"
>
> Responding to this, the social educators said, "I do not know, but I am not a psychologist."
>
> The social worker continued the dialogue, "I think it sounds like something cognitive, or mental."

In this example, the social educator chose to segregate himself from the discussion by setting a limit on his professional knowledge: "I am not a psychologist" The social worker, however, continued to cross over to the field of psychology by making suggestions for diagnoses. In our study, most professionals had worked in the field of mental health and substance use for several years. Given their long experienced in the practice and language of other related professions - psychology, in this case - it was unsurprising to find this blurring of boundaries and corresponds to what Abbott (1988) characterised as "workplace assimilation".

Another example of this assimilation, or knowledge transfer, occurred when an occupational therapist explained how she had learned another profession's knowledge system and used it when working with the patients:

> I do not have much knowledge about medication from my education, but I have worked with psychiatrists and nurses for a while now and learn a lot. And I use that knowledge to talk to patients about medication.

This confirmed findings from other studies that the blurring of professional boundaries may provide the flexibility required to operate in a hectic working environment (Allen, 1997; Johannessen, 2018). Comparing the inflexibility of strict professional roles and boundaries to the flexibility of boundary-blurring, one team leader expressed:

> Many professionals set boundaries by saying, "that is not my responsibility", "not a part of my job", "somebody else must do that", etc. But then things often end up not being done.

However, although assimilation may be beneficial, it is not always so straightforward. Assimilation often takes the form of a dominant group contributing to a movement of knowledge, ideas and morals onto a weaker group (Berry, 1980), that is, a form of *"upward assimilation"*. In the studies by Johannessen (2018) and Allen (1997) discussed earlier, nurses followed a classic "rule" of assimilation by stepping into the field of a more dominant profession, blurring the boundary to doctors. However, our study showed that it may also occur the other way around: higher-status professionals, such as psychiatrists and psychologists, if not directly assimilating the work of other professions, might at least expand their professional roles. As one psychologist said:

> I have helped patients put up window blinds and stuff like that. That is not exactly what you think a psychologist should do, but by doing so, you get to build a good relation to the patient.

Describing a similar story, one psychiatrist explained:

> We had a very complex patient who was very difficult to approach. However, one of our psychiatrists went home to the patient and helped the patient to mount a bed, because the patient was sleeping on a mattress on the floor. And after that, the two of them built a strong relationship because the psychiatrists went beyond what was expected. I have also done the same. Helped moving, carried furniture and stuff like that. (…) The point is to get in touch with patients and manoeuvre yourself into position.

Although none of the professionals involved would claim ownership over tasks such as putting up blinds or mounting a bed, these tasks are more common in professions with less expert knowledge than psychology or psychiatry, such as social work and social education. However, in

both statements, the psychiatrist and the psychologist described actions that transcended expectations, moving beyond their professional roles and the boundary between medical and psychological work. Simultaneously, they justified these actions by claiming that building good relationships with patients was important to delivering treatment and fulfilling their roles as a psychologist and psychiatrist.

These examples illustrate how a psychologist or psychiatrist may step outside their professional roles and their fields of expertise by performing practical tasks, that is, engaging in a form of "*downward assimilation*". With this downward assimilation, we propose an extension in the use of Abbott's (1988) term workplace assimilation, as our finding differs from previous use on how lower-status professions blur the boundary towards higher-status professions (Allen, 1997; Johannessen, 2018). When looking at lower-status professions, however, we found that entering the field of medicine seemed more restricted. In the previous chapter, we argued that power differences between professions constrains entering the field of medicine and psychology more for non-professionals than vice versa. An example from our observational data illustrates this principle: a social worker raised a question in a team meeting about a patient who had been admitted to the hospital after an episode of psychosis:

> The social worker started by saying, "I am most curious about what medicine the hospital will give (the patient). Last time the patient was admitted, the hospital prescribed [the name of the medication], and that did not work so well."
>
> The team leader responded, "The hospital will probably make its own decisions about that."
>
> Replying to the social worker, the psychiatrist added, "You could call the hospital and talk to them."
>
> The social worker answered the psychiatrist, "Could you call them, then? They will probably listen more to you than to me. Since I do not have any medical expertise, it would be a weird if I called the hospital."

This example illustrates how the social worker might have had an opinion about the medication but was reluctant to cross the boundary to medical work. Asked about this episode in a later interview, the social worker answered:

> I have been working in this field for a long time, so clearly, I know something about medication. But I am careful to announce it. And probably the psychiatrist gets a better answer from the hospital than what I get. That I have experienced many times before.

Compared to the example in which the psychologist and psychiatrist could easily step outside their professional roles, performing a downward assimilation, this example demonstrates that the boundary towards medical work is less permeable for non-medical professionals. As briefly discussed in the previous section, this may be another expression of how boundaries formed around medicine and psychology are thicker than the boundaries of professions with lower status, in this case the social worker. The power inherent in the jurisdiction of medicine and psychology hinders social workers and other similar professions in crossing the boundary into medical and psychological work, more than it hinders psychologists and psychiatrists from expanding their professional roles as doctors and therapists. In other words, the boundary towards medicine and psychology becomes "thicker" because other professions lack the authority to cross over.

However, though solid, the boundary to medicine and psychology is not impermeable. Instead of using the direct logic of adapting to the practice, language or knowledge of medicine or psychology, many non-medical and non-psychological professionals described a less confrontational strategy when discussing issues outside their field of expertise. For example, asked how he would proceed if he had thoughts about a diagnosis, treatment or medication, one social worker said:

> I would be a bit cautious if I have an opinion on such things. I would maybe act as being a bit wondering. Ask questions. Like, why are we doing this? I could have strong opinions about it, but if I act as if I'm wondering, then it may sound as if I am a bit more careful.

Similarly, when asked if she would interfere in a discussion about medicine, another social worker started by defining boundaries: "The doctors are responsible for medication." However, she continued: "I could interfere by asking questions without trying to offend anyone.". Both social workers explained that when entering the field of medical or psychological work, they would not go "straight in" but seek a "back door", to avoid the risk of offending another (more hierarchically dominant) professional. In these examples, we only refer to statements from social workers, but our data contain similar statements from professionals in social education, occupational therapy and nursing.

To summarise, our findings show that while the psychiatrists and psychologists discussed stepping outside their professional roles as something beneficial, the social workers' tactic of boundary blurring referred to strategies to avoid professional conflicts. Studying teamwork in a hospital context, Finn et al. (2010) argued that lower-status professions had less space to legitimately challenge occupational structures. In comparison, our findings suggest that boundary blurring may occur in two vertical directions: (1) dominant professions expand their professional roles and cross boundaries into non-medical or non-psychological work while justifying it as beneficial, and (2) less dominant professions cross boundaries into medical or psychological work using less explicit strategies and emphasising a "wondering" approach. Although the assimilation was not total in either direction, our findings demonstrate that the two directions have different appearances: the dominant professions have more direct access to non-medical or non-psychological work than vice versa.

4.3. The complementarity of professional roles: The logic of integration

The logic of integration represents more than half the pages in our coded empirical data. This is no surprise, as the goal of interprofessional collaboration is to create a synergy of professional knowledge and practice. By "integration" we refer to the complementarity of professional roles – a focus on maintaining professional integrity and autonomy, while learning from others. For example, one social worker we interviewed referred to a logic of integration by describing the team and how it worked as a system of "rotating cogwheels". Similarly, one psychologist described the assembly of professions as the strength of interprofessional teamwork:

> In psychology, one is concerned with creating a kind of "shared therapeutic space" with the patient. Where the therapist is one circle, the patient is another. And then you have something in common where the circles overlap. And that is where things happen. I think you can use the same metaphor about our team. We have different tools that we use, and when we manage to assemble them, that is when interprofessional collaboration happens.

In our data we found the logic of integration relevant to managing complexity in patient cases. The following example (which is one of several) of handling the many tasks related to the patients is from our observational notes:

> The psychiatrist brought up a patient case, "I visited the patient at home. She seemed malnourished. She did not have any food or a refrigerator. The social services were supposed to arrange something, but they did not. We must do something about that. (…) And, also, she wants to change medication."
>
> One social educator responded, "I have already talked to the social services about food."

> The discussion went back and forth among the team members about the patient's situation related to housing and mental health. In the end, the team leader summarised, "Okay, food and medication. [the social educator] finds a solution for the refrigerator and food, and [the psychiatrist] looks at the medication."

In this case, the team leader distributed tasks concerning the patient based on the psychiatrist's and social educator's main areas of concern. The social educator had experience working in the social services and therefore knew how to assist the patient in contacting them. The psychiatrist, in contrast, took responsibility for the patient's medication. The distribution of tasks between the two professions was therefore differentiated but also complementary because the tasks matched the patient's complex situation and followed a logic of integration.

Our data also included examples of professionals expressing how they could use their professional knowledge to discuss the same topics, allowing a patient case to be viewed from multiple perspectives. For example, one nurse stated,

> I do not interfere directly with diagnostic assessments, but I can contribute with my observations and experience of the patient, which the psychologist and psychiatrist may consider when doing diagnostic assessment. But I am not trained in doing diagnostic assessment. So that is mainly what differentiates me from the psychologist and psychiatrist.

In this statement, the nurse limited her professional role and stated a boundary (referring to a logic of segregation) by saying, "I am not trained in doing diagnostic assessments". However, she also explained how she might contribute by sharing her observations and experience as a nurse. Like the nurse, one occupational therapist explained how she could contribute to the process of diagnostic assessments:

> I can contribute by saying something about how the patient functions, but it is the psychiatrist and the psychologist who do the diagnostic assessment. I remember one time, we had a patient who came to our team with a severe mental diagnosis, but quickly it became a question of "Does the patient really have that [diagnosis]?" The patient had some trouble functioning at home, so I went to the patient to do an assessment as an occupational therapist. After that, I went back to the psychologist and said that based on how I had observed the patient's function, it was not very typical of the diagnosis the patient had received. But I did not interfere with what kind of diagnosis the person was given. I only said something about function. (…) My contribution was just some extra information.

The occupational therapist had worked in mental health for several years and had some knowledge of diagnostic assessments. Instead of adapting to the language, knowledge and practice of psychology (assimilation) or withdrawing from the discussion (segregation), she explained how she could participate by contributing with her professional knowledge as an occupational therapist. In other words, she entered the professional field of the psychiatrist and psychologist, while remaining safely within her own professional field. This is similar to Stein's (1967) conceptualisation of the doctor–nurse game, where nurses gently provided inputs and their point of views to the doctors without appearing insulting.

These empirical examples suggest that when problems become too complex to be handled by just one profession, professionals may benefit from working together. Based on our study, the complementarity of professional roles (integration) differs from drawing boundaries (segregation) as boundaries suggest an independence in professional expertise. It also differs from blurring boundaries (assimilation), as complementarity is not about entering the field of the "other". Instead, the complementarity of professional roles appeared to contain both independent and interdependent elements (MacNaughton et al., 2013, 2). The complementarity of professional roles required independence because each professional contribution was unique and singular, but it also required interdependence because each professional contribution complemented the others and delivered something as an integral part of the larger professional aims of the team.

4.4. How, why and when the three logics came into play

We found several reasons for how, why and when different logics came into play. Starting with a logic of segregation, the literature has shown that a need for ownership of tasks, responsibility and efficiency triggers drawing boundaries and restricting roles (Brown et al., 2000; Lewin and Reeves, 2011; MacNaughton et al., 2013; Moran et al., 2007; Rose, 2011). As in the literature, we found the same regarding mental diagnoses and medication. Boundaries were stronger and more explicit around the psychologist and psychiatrist. Legal matters of jurisdiction seemed to be the main reason for this, although differences in professional power and authority may have also played a role. Like Reeves et al. (2009), we found that social workers and social educators were reluctant to engage in dialogue that was primarily medical or psychological. These are also professions perceived to have less professional autonomy and in-depth knowledge than other health care professions (Jones et al., 2013).

When different professional roles overlap, a logic of assimilation comes into play. Both our study and previous research (Allen, 1997; Johannessen, 2018) showed how professional expertise, such as knowledge of medication, flowed between doctors and other professionals during a long, close, collaborative, interactive practice. In Johannessen's (2018) study and our own, blurring boundaries typically happened where non-professionals had invitations to share their opinions but did not have the last word. In our study, non-professionals also expressed how, in team discussions, they found "back doors" into the fields of medicine and psychology by adopting a wondering attitude and asking questions instead of offering solutions, thereby avoiding the risk of challenging the expertise of the doctor or psychologist. This back-door approach seemed preferable when a jurisdiction clarified boundaries. However, for the psychiatrist and psychologist, this back-door approach was unnecessary. When they performed acts of "social work", they received higher respect because they moved beyond what was expected from them. This is comparable to Finn et al.'s (2010) argument about lower-status professions having fewer opportunities to challenge organisational structures.

In a sense, the logic of integration is the main reason for creating interprofessional teamwork. Complicated cases are reasons for these teams to exist in the first place. The teams typically manage such cases through long-lasting meetings in which all professions are represented and contribute with their specialised knowledge. The integrated collaboration of professions can help solve complex cases, but simply bringing professions together is not enough. Our findings indicate that each professional must actively listen to others, even when they (carefully) enter other professionals' domains using a back-door strategy. Without explicitly mentioning the logic of integration, other studies have highlighted the need for what such a logic promises: mutual trust and respect and communication and sharing of knowledge (Sangaleti et al., 2017). Under such conditions, it is possible to avoid a lack of understanding of roles and responsibilities and competing priorities (O'Carroll et al., 2016).

Looking critically at our data, it is possible to find differences in how the professionals expressed themselves in interviews and how they interacted during observations. For example, the act of drawing boundaries was more obvious in the interviews than in the observations. Conversely, in observations, boundary blurring and complementarity emerged. For the sake of clarity, we have presented examples of the logics as separate situations. However, we found situations where the different logics occurred almost simultaneously, such as when a social educator chose to segregate by answering, "I am not a psychologist", while the social worker assimilated by stating "I think it sounds like something cognitive?" Two other examples were the nurse and the

occupational therapist avoiding the performance of diagnostic assessments while contributing to the diagnostic assessment by sharing their observations on functions as additional information. Methodologically, this shows that in understanding interprofessionalism, it is important to combine data from both interviews and observations, that is, to include both the "saying" and the "doing". Analytically, it illustrates how combining all three logics provides a more comprehensive view of how professionals manoeuvre in the context of interprofessional collaboration.

5. Conclusion

Why is a focus on three logics better than a focus on one? Each logic has its own purpose and function, and by simply focusing on one logic at a time, one risks ignoring these dynamics. Understanding professional boundaries as rules governing our interactions with others, drawing boundaries according to a logic of segregation is important for structuring a division of labour, giving responsibility to qualified professionals and knowing whom to address when issues go unmanaged. Blurring boundaries according to the logic of assimilation is important in situations requiring overlap, enabling flexibility and ensuring issue management. Complementarity, the logic of integration, contributes to cumulative, broader information about a patient's case, especially when the patient's challenges require knowledge and skills from various professional perspectives.

Including all three logics, this study illustrates how different logics may come into play nearly simultaneously in many situations. This both supports and expands the conclusion that other studies have reached: the dynamics of interprofessionalism are far more complex than a strict division of labour (O'Carroll et al., 2016; Sangaleti et al., 2017). The combination of the three logics also highlighted how essential it was for team members to work well when (1) they accepted others crossing the boundaries of their profession, (2) necessary boundaries were drawn and (3) they were willing to offer their knowledge to complete the broader picture. Several participants highlighted the importance of recruiting personnel with such attitudes. This is a concrete, important contribution to the practice of interprofessionalism that should encourage other studies to explore this topic further.

One possible weakness of our perspective is that we used labels from the literature on acculturation, a highly normative field, claiming that integration is desirable and segregation is undesirable (Berry, 1980). If we have not succeeded in eliminating these normative connotations, we hope that future studies will support our ideas and suggest better labels to avoid them. By drawing on the idea of sensitising concepts (Blumer, 1954), using the three logics of acculturation as guiding concepts in approaching empirical questions, this study may be the beginning of a new discussion. Future studies may be able to refine its reasoning and offer a deeper understanding of how best to compare these logics and evaluate their empirical validity. For example, is the logic of integration really about complementarity or is it more a question of interdependency between professions?

Finally, we developed our findings within the field of mental health and substance use, where there is a great extent of overlap between the professions. This perhaps enabled a logic of integration to a special extent. However, many models of interprofessional work exist in medicine and health services, so it would be interesting to explore the presence of the three logics in a different context, such as surgery for example, where one might presume that a logic of segregation dominates.

Credit author statement

Skyberg, Henriette: Project administration, Conceptualization, Methodology, Investigation, Formal analysis, Writing - Original Draft; Innvaer, Simon: Conceptualization, Methodology, Validation, Writing - Original Draft

Acknowledgments

We would like to thank all our informants for participating in this study. Lars Johannessen and Dag Jenssen at the Department of Social Work, Child Welfare and Social Policy at Oslo Metropolitan University and our anonymous reviewers for their comments and suggestions.

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