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## Table of Contents

### Articles

- Measuring Outcomes of Interprofessional Education: A Validation Study of the Self-Assessment of Collaboration Skills Measure  
*Kaja Braathen* e4307
- Changing Cultural Conditions for Knowledge Sharing in the Teaching Profession: A Theoretical Reinterpretation of Findings Across Three Research Projects  
*Karen Ida Jensen, Monika Bærøe Nerland, & Eli Tronsmo* e4267
- Social Closures: Reconfiguration of Professional Work in the Danish State School  
*Marianne Brodersen* e4516
- Strategic Compliance: A study of Professionals' Responses to Sales Management Control  
*Nina Singh & Jens Rennstam* e4454
- Students' Interprofessional Workplace Learning in Clinical Placement  
*Tove Törnqvist, Pia Tingström, Annika Lindh Falk, & Madeleine Abrandt Dahlgren* e4289
- Social-Health Operators as Mediators in E-Health System  
*Angela Genova & Willem Tousijn* e3960

## Measuring Outcomes of Interprofessional Education: A Validation Study of the Self-Assessment of Collaboration Skills Measure

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### Abstract

Increased attention is being focused on the need for interprofessional collaboration between professional actors, in various fields. In turn, this creates a demand for validated, context-neutral instruments to measure outcomes of interprofessional education. The initial validation of one such measure, the Self-Assessment of Collaboration Skills (SACS) measure, has shown promising results in this regard. The aim of this article has been to contribute to the validation process of the SACS measure by presenting the results of a cross-validation of the measure in a sample of Norwegian students (N= 499) attending a children and youth-focused IPE programme. The study's findings both indicated that the measure is quite stable across the different settings and supported the claim that the SACS is a context-neutral instrument—one that is well-suited to measuring collaboration skills in various IPE settings. These findings may prove important for professionals seeking to evaluate IPE programmes with broad study profiles.

### Keywords

Interprofessional collaboration, interprofessional education, instrument validation, collaboration skills measure, IPE programmes with broad study profiles, SACS

## Interprofessional educational programmes with broad study profiles

Interprofessional collaboration (IPC) is relevant within a diverse range of contexts and fields. The need for collaboration across professional boundaries when working with children and youth (0–18 years) is highlighted through national<sup>1</sup> and international<sup>2</sup> political documents. Just as important is the recognised need for IPC from the point of view of the actors themselves. In Norway, the formal responsibility for ensuring that children and youth benefit from good conditions during their upbringing is often divided among various agencies and professions. All children in Norway will interact with professional actors in their everyday lives in general health care settings, kindergarten, schools, after school care etc. Some children will also interact with professionals in more specialised services such as specialised health care or through children’s protective services. However, the distribution of roles and communication between the different professions is not always as clear or effective as one would wish. Communication and collaboration among the various parties may thus be insufficient, and hence the services offered become fragmented and badly coordinated. Another troubling issue is that it is easy to neglect the children's and youths' own opinions under these circumstances. It is thus necessary to increase collaboration among the involved professions, to better meet the needs of all children and youth in their vital years of growing up (Gulbrandsen, 2014; Johannessen & Skotheim, 2018).

The increasing demand for IPC may also be recognised by recent debates on the development of professions, highlighting the increasing differentiation and heterogeneity within and between professional groups (Pacchi & Mariotti, 2021). In a recent editorial in this journal Parding, Bellini, and Maestripieri (2021, p. 1) argue: *“that the transformation towards a post-industrial society has impacted on the composition of professional groups, on the relations between different professional groups, as well as on the role of professionals in society.”* When collaborating across disciplines, professionals may encounter boundaries between different perspectives and practices (Akkerman & Bakker, 2011b). In this context, a boundary can be understood as: *“a socio-cultural difference leading to discontinuity in action or interaction”* (Akkerman & Bakker, 2011a, p. 133). Well-orchestrated IPC is one way to explore and negotiate boundaries within and across professions.

The overall attention drawn to interprofessional collaboration has also affected the field of interprofessional education (IPE). Interprofessional professional qualification has been and still is, high on the political agenda, both in Norway and internationally (Hagland & Koren Solvang 2017). This has resulted in a widespread growth of interprofessional educational programmes across, within, and beyond the health and social care sectors—which are

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<sup>1</sup> For example: Report no. 13. (2011-2012). Education for Welfare—Interaction as Key; Report no. 20. (2012-2013). On the right track.

<sup>2</sup> WHO Framework for Action on Interprofessional Education and Collaborative Practice

offered to learners at all levels (from undergraduate students to continuing education) and in various settings (Barr, Gray, Helme, Low, & Reeves, 2016; Molloy, Greenstock, Fiddes, Fraser, & Brooks, 2014; Reeves et al., 2016). The increase in—and diversity of—the IPE programmes offered are, in turn, influencing the evaluation field of IPE. Reliable instruments to measure the impact of IPE are essential, to ensure the quality of IPE evaluations (Mahler, Berger, & Reeves, 2015).

This article takes, as its point of departure, the assessment of learning in an interprofessional educational programme (INTERACT), which focuses on the effective learning and teaching of interprofessional work with children and youth. INTERACT is developed as an IPE programme for a broad spectrum of university students on their path into professions within education, health, and social care. This broad professional landscape requires a suitable instrument to evaluate the programme. Currently, few non-context specific instruments are readily accessible to evaluators seeking to assess the development of interprofessional collaboration skills in learners (Hinyard, Toomey, Eliot, & Breitbach, 2019) within a wider professional landscape. The purpose of this study is to contribute to the validation process of one such instrument—the *Self-Assessment of Collaboration Skills (SACS) measure* (ibid.)—through a cross-validation of the measure, based on data from Norwegian students attending INTERACT.

The research questions to be discussed in this article are:

- 1) *To what extent can the original factor structure of the SACS be retraced, when the SACS items are answered by Norwegian students?*
- 2) *To what extent do scores on the SACS measure vary with background factors—such as educational programme, age, etc.—among Norwegian students?*

### ***The Use of IPE instruments to measure the impact of IPE interventions***

For the past two decades, researchers within the IPE field have developed a range of instruments to measure the impact of IPE interventions across various educational and health care settings (Mahler et al., 2015); Schmitz & Cullen, 2015). The use of scales to measure IPE activities has become a dominant feature in the research discourse (Lawn, 2016). However, even where instruments are commonly applied, Mahler and colleagues argue that these instruments' psychometrics—as well as the theoretical frameworks upon which the instruments are based—should be critically examined before use (Mahler et al., 2015). Few systematic reviews of existing instruments, and subsequent evidence of their validity, are found in the scholarly literature (Schmitz & Cullen, 2015). Still, there are some exceptions. Thannhauser, Russell-Mayhew, and Scott (2010) systematic review of quantitative instruments currently available for research evaluating IPE and IPC is of particular interest for the current study. The authors focused on those measures applicable to a broad range of occupations and settings. Included instruments had to be relevant to a

wide range of professions. They found that, although a substantial number of instruments are available to be used to measure various aspects of IPE/IPC, only a limited number of these are relevant when assessing professions working/learning together within a broader health care setting. They concluded: *“Despite the numerous tools available for measuring different aspects of IPE and IPC within a broad field of study, there are limited choices with sound psychometric properties and adequate time spent on development”* (Thannhauser et al., 2010, p. 340).

Even as the use of instruments has become a dominant feature in IPE evaluations and there are a number of such tools available, there is still a lack of validated instruments measuring central aspects of IPE that can be applied to professionals working/learning together beyond the traditional IPE boundaries—that is, between various health care professions or between health and social care professions, respectively. This article aims to contribute to filling this gap.

### ***Collaboration: A key characteristic of interprofessional education***

Interprofessional education is commonly described as comprising *“occasions when members or students of two or more professions learn with, from and about each other to improve collaboration and the quality of care and services”* (Statement of Purpose CAIPE 2016).

Working interprofessionally hence requires not just a willingness to learn *about* others and *from* others, but *with* others, to produce new *common knowledge* (Edwards, 2012). A part of this is accepting that knowledge creation can only happen through collaboration with others (Hean, Craddock, & Hammick, 2012). A key characteristic of IPE is, consequently, the social dimension of the learning situation (ibid.). Adhering to such a learning perspective, learners in IPE settings share their knowledge and understanding to negotiate meaning (Maddux, 1997, in Hean et al. 2012). Their success relies upon the learners’ ability and willingness to enter into new experiences; to reflect upon them; and, finally, to make use of them (Barr, 2013).

The responsibility for the learning thus rests not only on the individual but on the whole group, as a *community of practice* (Lave & Wenger, 1991). Each member contributes to a socially constructed learning process—in which meaning is negotiated through an exchange among learners, and where reflections on new experiences from different perspectives and the alignment of values are central (Barr et al., 2016).

This is in line with what Edwards (2011, p. 33) writes about *“responsive collaboration”* and *“relational expertise”*. She suggests that *“responsive collaboration calls for an additional form of expertise which makes it possible to work with others to expand understandings of the work problem (...)”*. Ideally, successful IPE should facilitate this. Responsive collaboration thus concerns the capability of recognising the knowledge that underpins one’s own professional practice and being able to identify and adjust to the interpretations of others (ibid.). From such an encounter, another level of understanding—what Edwards (2012)

refers to as “*common knowledge*”, where professional boundaries are respectively both included and exceeded—may also occur.

A key feature of interprofessional education, then, becomes the development of interprofessional collaboration skills among attending students: “*IPE aims to enhance attitudes, knowledge, skills, and behaviors for collaborative practice, which in turn can make improvements to clinical practice*” (Reeves et al., 2016, p. 656). Yet there is no clear-cut understanding of what this entails. Ødegård and Bjørkly (2012) describe how systematic literature reviews depict the complexity of interprofessional collaboration—namely with a diversity of definitions and collaboration models. It is important to take this diversity into consideration when developing, or presenting, an instrument to measure collaboration skills. A key challenge—when designing IPE evaluations based on the theoretical framework presented above—may accordingly be to find instruments that take the students’ ideas and self-assessment of their collaborative orientation and activities in their interprofessional learning group, into account.

### **“Collaboration” in the SACS**

The measure used in this study, the *Self-Assessment of Collaboration Skills*, was chosen in line with a theoretical framework that emphasises processes of joint meaning-making and mutual support in interprofessional group work. The SACS consists of three dimensions of collaboration: information sharing, learning, and team support (Hinyard et al., 2019). The developers used the Collaboration Skills Assessment Tool (CSAT) (Ofstedal & Dahlberg, 2009), an educational rubric used as a tool to develop an awareness of one’s collaboration skills, as a starting point for the development of the SACS. However—where the CSAT includes both intrapersonal and interpersonal skills believed to be associated with collaboration—the SACS focuses solely on interpersonal skills, as it is argued that the two domains refer to separate constructs (Hinyard et al., 2019). The SACS is further developed as a self-reporting measure for students’ skills and behaviours, rather than as a measure of their perceptions about the value of those behaviours, or their attitude towards them (ibid.). In their validation article, Hinyard et al. (2019) conclude:

The SACS measure also helps to provide a comprehensive measure of collaboration that assesses not only a student’s ability to contribute to and support fellow team members’ performance but also examines his or her ability to engage in productive conversations and contribute to the learning of the team. Previous measures have often examined these dimensions separately (Edmondson, 1999; Garvin et al., 2008; Ofstedal & Dahlberg, 2009; Van Dyne & LePine, 1998). Thus, the SACS integrate these skills as being representative of the larger collaboration construct. (p. 19)

The distinction of the scale between intra- and interpersonal skills believed to be associated with collaboration skills is an important one. It can be argued that the focus on

interpersonal skills fits well with the social learning dimension of IPE, as described by Hean et al. (2012), Barr (2013), Barr et al. (2016), and Edwards (2011, 2012).

### ***INTERACT: An IPE programme focusing on the everyday life of children and youth***

INTERACT, the IPE programme from which the current study's data is gathered, aims to increase future collaboration among professionals who may form a part of children's and youths' everyday lives. The programme is offered to students attending seven different professional programmes<sup>3</sup> at Oslo Metropolitan University.

The rationale behind INTERACT can be found in the Norwegian model for the care of children and youth. Legally<sup>4</sup>, in Norway, it is primarily the task of parents to raise, nurse, and take care of children in ways that provide them with a good childhood (Gulbrandsen, 2014). Yet various public services within the fields of education, health, and social care also take part in children's lives in modern welfare states like the Norwegian. Through INTERACT, participating students should gain knowledge and experience of cooperation with participants from other professional paths and should learn about communication and cooperation with children, youths, and their families.

This specific IPE focus, in turn, has had implications for the evaluation process of which the current study forms part. In the case of INTERACT, it proved difficult to find a suitable instrument to measure the outcomes of the programme, which had both: 1) been through a validation process portraying the psychometric properties of the instrument, and 2) was suitable to assess an IPE programme with a broad IPE profile. The choice of the SACS (Hinyard et al., 2019) was initially justified by the measure's sensitivity and openness towards both clinical and nonclinical interprofessional settings. The scale is considered context-free, in the sense that it does not favour specific professional activities or settings in its statements. Further, the initial validation of the SACS demonstrated high internal consistency and both convergent and discriminant validity as a measure of collaboration (Hinyard et al., 2019).

Still, the SACS is a relatively new instrument and there is a need to further validate the measure in different settings. In a study further evaluating the psychometric characteristics of the SACS Breitbach, Pole, Rauvola, Kettenbach, and Hinyard (2020) conclude that the instrument holds up as a valid tool in the new context, but also suggest that it may be a stronger tool for early IPE learners. They point to the need to validate instruments in multiple contexts (ibid.). The objective of this article is to contribute to the validation process of the SACS, by cross-validating the measure using data from Norwegian students attending INTERACT. The discussions in this article will be based on factor and regression

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<sup>3</sup> At the time of the data collection of the current study.

<sup>4</sup> Act Relating to Children and Parents (the Children Act), 1981

analyses of the Norwegian dataset. The focus points for discussion will be on the stability of the SACS when applied in a new context, as well as on how variations in the students' scores on the SACS can be explained by background factors such as educational programme, age, and work experience. The latter is motivated by systematic reviews showing that learner characteristics such as gender, age, work experience and professional background may affect the delivery of IPE (Reeves et. al., 2016). An exploration of whether such background factors can explain the variance in student scores on the SACS may prove valuable to a discussion of the SACS' context- neutrality.

## **Methods**

### ***About the study***

The current study is part of a mixed-methods evaluation project of INTERACT.

### ***The initial validation of the SACS measure***

The SACS measure is an 11-item scale consisting of three dimensions of collaboration: information sharing, learning, and team support (Hinyard et al., 2019). The 11 SACS items are scored on a 1–7 Likert-type scale, with answer categories pertaining from "strongly disagree" to "strongly agree". When developing the measure, Hinyard and colleagues (2019) first used exploratory factor analysis to assess its scale factor structure. This was done in a two-phase pilot study—comprising 160 and 131 students, respectively, in phases 1 and 2. Their samples consisted of students from several professions (pre-medicine, nursing, occupational therapy, physical therapy, nutrition/dietetics, medical laboratory sciences, biology, pre-physician's assistant, athletic training, radiation therapy, and "other"). In a later validation sample with 181 students, the researchers applied confirmatory factor analysis to confirm the factor structure found in the pilot study. Additionally, they assessed convergent and discriminant validity —comparing scores on the SACS with scores on the Morgeson et al.'s (2005) measure of contextual performance and the short-form CWB-C (ibid.). A thorough description of the measure, its psychometric properties, and its theoretical foundation is available in the original article. The initial validation of the SACS measure in these American student samples showed the scale to have satisfactory factor structure, reliability, and internal consistency—along with both convergent and discriminant validity as a measure of collaboration (Hinyard et al., 2019).

### ***The SACS measure in a Norwegian setting***

The SACS measure had prior to this study been applied only in English-speaking settings. Thus, several preparatory steps had to be taken to use it in a Norwegian context. First, ethical approval was provided by the Norwegian Centre for Research Data (NSD) and permission for usage in this context was obtained from the instrument developers. Translation into Norwegian was then performed, using forward-backward translation. The SACS measure was first translated into Norwegian by the project group, assisted by an



academic who was a native English speaker. The Norwegian version was then translated back into English, by a team consisting of a Norwegian medical professor who has been living in the U.S. and an American headmaster living in Norway. Finally, the two English versions, which showed only slight discrepancies, were compared, and discussed by the project group. This resulted in the final version of the measure in Norwegian.

The entire questionnaire was then piloted with a group of students at the Norwegian university. They filled in the questionnaire electronically and gave written feedback afterwards

### ***Data collection***

The data used in this article were collected in autumn 2019. All students (N=1096) enrolled in one of the modules of INTERACT (INTER 1200) received a digital questionnaire before participating in the module. Apart from including the SACS measure of interprofessional collaboration skills, the questionnaire contained questions around—for example—students' background characteristics, attitudes towards interprofessional collaboration and education, and knowledge about the everyday lives of children and youth. The questionnaire was made available on a digital learning platform for the INTER 1200 students, the evening before the module began. Since the first data point would function as a pre-survey, it was crucial that the students answered the survey at the beginning of the class. Those who had not yet filled it in when the module started were asked to spend the first 15 minutes of the class filling in the questionnaire, on the following morning. Participants completed the questionnaire anonymously.

### ***Sample***

Of the entire population of 1096 students attending INTER 1200 in autumn 2019 who were targeted for the survey, 538 students responded. Of these, 39 respondents were removed from the sample due to duplicates or due to the timing of their response, one outlier was also removed. The response rate ended up being 45.6 %. The distribution of students participating, from each of the seven educational programmes included in the study, can be found in Table 1.

## **Data analysis**

### ***Descriptive statistics***

Descriptive statistics are presented in Tables 1, 2, and 3 below. Table 1 shows the total number of students enrolled in each of the seven educational programmes, and the numbers and percentages of students participating in the current study. The students' age and work experience are seen in Tables 2 and 3.

**Table 1.** The total number of students enrolled in the INTERACT programme, the number of students participating in the current study, and the percentage of students from the different educational programmes participating in the study.

Educational programme	Students in INTERACT, N=1096	Students in the study, N=499	Educational background by percentage
Nursing	144	63	12.6 %
Social work	103	58	11.6 %
Teacher education	341	169	33.9%
Physiotherapy	101	26	5.2%
Occupational therapy	54	21	4.2%
Child welfare services	83	40	8 %
Kindergarten teacher	270	122	24.4 %

**Table 2.** Age distribution of students participating in the study (N=499)

Age	N	Percent
21 years or younger	203	40.7
22–24 years	166	33.3
25–27 years	77	15.4
28 years or older	53	10.6

**Table 3.**<sup>5</sup> The percentage of students in the study with experience from, respectively: a) at least a two-week internship period during their studies; b) work experience relevant to the educational programme, current or present, and c) work experience related to children and youth

Background variables	Yes	No
Internship in the study	93.4 (n=466)	6.6 (n=33)
Relevant work experience	68.3 (n=341)	31.7 (n=158)
Work with children or youth	61.3 (n=306)	38.7 (n=193)

<sup>5</sup> In the table, missing data (N=2,0,1) is included in the most frequent category.

## **Data analysis strategies**

### ***Exploratory factor analysis***

Exploratory factor analysis (EFA) was chosen as an analytical strategy to answer Research Question 1, about identifying the *original factor structure of the SACS*.

In the original validation of the SACS measure on the U.S. samples, the factor structure in the data was investigated using both EFA and confirmatory factor analysis (CFA). One of the current study's aims is to explore to what extent the reported factor structure can be replicated in the Norwegian sample. EFA is suitable when examining the structure of measures or constructs, where previous exploration of the structure is limited. Given the new context with Norwegian students, an explorative factor approach was chosen as the analytical strategy for this part of the study, with principal axis factoring (PAF) as the extraction method. PAF is one of the most commonly used extraction methods when carrying out factor analysis (Bandalos & Finney, 2010). Further, the oblique rotation strategy was chosen since theory suggests correlation between the factors. Costello & Osborne (2005, p. 7) emphasise that: *"Since oblique rotation will reproduce an orthogonal solution but not vice versa, we recommend oblique rotation"*. Direct oblimin is the main form of oblique rotation (Cohen, Manion, & Morrison, 2018, p. 822), and was chosen for the rotation. Moreover, Tabachnick and Fidell (2014) suggest, as a rule of thumb, 0.32 as a minimum loading of an item for the item to be interpreted. The cut-off for size of loading to be interpreted in this study was set to  $\geq 0.32$ .

The one negatively worded item in the scale was reverse rescored and missing data were set to item means.

### ***Multiple regression analysis***

A multiple regression analysis was applied to answer Research Question 2, regarding to *what extent the scores on the SACS measure vary with background factors such as educational programme, age, and work experience*.

The students' total scores on the SACS were used as the dependent variable. Regression analyses, where each of the three factors identified in the factor analysis were set as dependent variables, were also run. However, as there was no substantial change in the beta values with this solution, this article reports only the analysis with the students' total scores on the SACS as dependent variable. The background variables presented in Tables 1–3 were included as independent variables. The variable *"educational programme"* was recoded into three dummy variables (values 0 and 1). The sample was divided into three groups, based on the type of educational programme the students attend: health education (nursing, physiotherapy, occupational therapy, n=110); social care education (child welfare services, social work, n=98); and teacher education (kindergarten teacher, teacher education, n=291). This was to ensure that the sample size within each group was sufficiently large. All predictors were entered simultaneously in the analysis. This strategy

was chosen because no a priori reasons, either from statistics or theory, suggested otherwise (Field, 2018). The largest group, teacher education, became the reference group used in the model.

## Results

### ***Factor structure and reliability (N=499)***

#### *Factor structure:*

An EFA using principal axis factoring with oblique rotation (direct oblimin) was conducted on the 11 items, using SPSS 27. The Kaiser-Meyer-Olkin measure verified the sampling adequacy for the analysis, KMO= 0.81. All KMO values for individual items were greater than 0.69. Bartlett's Test of Sphericity was statistically significant. Factor extractions should be guided by multiple approaches (Williams, Onsman, & Brown, 2010). Hence, an initial analysis was run to obtain eigenvalues for each factor in the data, as well as a scree plot. A scree plot is a visual presentation of the factors on a chart, presenting them in descending order of the magnitude of variance explained. The breaking point, where the scree plot flattens out, gives an indication of which variables account for a great amount of variance and which do not (Cohen et al., 2018). Three factors had eigenvalues over Kaiser's criterion of 1 and, in combination, they explained 60.87 % of the variance. The scree plot was unambiguous and confirmed the three-factor structure.

Table 4, below, shows the rotated factor loadings. The results confirm the three-factor structure of the SACS and, for most items, replicate the structure reported in the initial validation study of the measure. However, one item (*"I consistently participate in team discussions with an open mind"*) has small to moderate loadings on all three factors; and the highest loading is on a different dimension than expected, from the initial validation of the SACS. This finding will be discussed in more detail in the Discussion- section. Table 4 summarises the results of the EFA.

**Table 4.** Results of an explorative factor analysis on the SACS measure using SPSS, based on a Norwegian student population (N=499)

SACS Item	Factor loading		
	1	2	3
I voice my ideas about how the team could work better together (L).	<b>.68</b>	.13	.29
I encourage other team members to get involved in the decisions that affect the team (L).	<b>.61</b>	-.04	.30
I frequently seek feedback from my team members about the quality of my work (L).	<b>.58</b>	.02	-.08
I seek out different views than my own during team discussions (L).	<b>.53</b>	-.10	-.01
I routinely go out and get all the information I can from my teammates (L).	<b>.50</b>	-.11	-.17
I regularly acknowledge the efforts of my team members (TS).	-.00	<b>-.82</b>	.05
I routinely listen to the opinions of my fellow team members (TS).	-.09	<b>-.78</b>	.05
I consistently support the efforts of others (TS).	.09	<b>-.66</b>	-.07
I consistently participate in team discussions with an open mind (L).	.23	<b>-.36</b>	.22
It is hard for me to share my ideas with others (R) (IS).	-.07	-.01	<b>.71</b>
I share information with others easily (IS).	.12	-.17	<b>.50</b>
Eigenvalues	3.90	1.44	1.35
% variance	35.46	13.11	12.28
Cronbach's alpha	0.73	0.78	0.58
Correlations factor 1	1.00	-.44	.22
Correlations factor 2	-.44	1.00	-.23
Correlations factor 3	.22	-.23	1.00

Note. N = 499. Factor loadings above .32 are in bold. Reverse-scored items are denoted with an R. Dimensions (Learning, Team Support, Information Sharing) as reported in Hinyard and colleagues (2018) in brackets (L, TS, IS).

### **Reliability analyses**

The Cronbach's alpha for the whole scale is 0.78. The reliability scores for both factors (dimensions) "*learning*" ( $\alpha = 0.73$ ) and "*team support*" ( $\alpha = 0.78$ ) are relatively high, especially considering the fairly low number of items included in the measure. The reliability score is somewhat lower for the third factor, "*information sharing*" ( $\alpha = 0.58$ ). Yet this is not unnatural, considering that this dimension only consists of two items. The results of the EFA further show that factor 2, "*team support*", includes one item (I consistently participate in team discussions with an open mind) that loaded on the dimension "*learning*" in the initial validation study of the SACS (Hinyard et al., 2019). To examine the belonging of this item more thoroughly, additional reliability analyses were run. When this item was removed from factor 2, "*team support*", Cronbach's alpha increases slightly to  $\alpha = 0.79$ . Likewise, when including this item in the "*learning dimension*", as in the original validation study, the Cronbach's alpha increases slightly for this factor to  $\alpha = 0.75$ . This may support the structure of the SACS from the initial validation study. Moreover, if this item is deleted from the scale, the Cronbach's alpha for the whole scale decreases slightly to  $\alpha = 0.76$ . This suggests that the item "*I consistently participate in team discussions with an open mind*" does contribute to explaining some of the overall variance of the scale. This will be further discussed in the Discussion- section.

### **Multiple regression analysis (N=499)**

A multiple regression analysis was run to explore Research Question 2. The results presented include the R square (.010), ANOVA ( $p > .55$ ), and the standardised beta coefficient of each component variable. The analysis shows that almost none of the variation in the dependent variable can be explained by the predictors. No statistically significant relationships between the students' scores on the total SACS measure and any of the included predictors (educational background, age, previous work experience [general], previous work experience [with children and youth], or internship) was found ( $F = .821$ ).

**Table 5.** Results of a multiple regression analysis, testing the effect of students' background variables on their scores on the SACS measure.

Model	Unstandardised		Standardised	Sig.	95.0% Confidence	
	Coefficients				Coefficients	Interval for B
	B	Std. Error	Beta		Lower Bound	Upper Bound
(Constant)	5.568	.171		.000	5.231	5.904
Health education	.003	.077	.002	.966	-.147	.154
Social care education	.055	.072	.036	.446	-.086	.194
Age	-.003	.028	-.005	.910	-.058	.052
Internship period	-.049	.119	-.020	.679	-.282	.184
Relevant work experience (present or past)	-.089	.064	-.068	.162	-.214	.036
Work experience related to children and youth	-.055	.062	-.044	.379	-.176	.067

Note. R square= .010, all  $p$ 's >.55

## Discussion

Findings from the current study provide overall evidence for the claim that the SACS measure is a reliable instrument—one well-suited to measuring interprofessional collaboration skills, as defined in the instrument, across groups of students, within and beyond the health and social care sectors. The examination of the factor structure of the instrument, in a Norwegian dataset, confirmed the three-factor structure found in the original validation samples of students from the U.S. This study's findings further support the assumption that the SACS is context-neutral. The students' total scores on the SACS were neither significantly related to the type of educational programmes the students attended nor to background factors (like age, whether they had previous work experience with children and youth, etc.).

These results will be discussed in more detail below.

### ***The psychometric properties of the measure***

Overall, the EFA provided evidence supporting the psychometric soundness of the SACS measure when applied in a Norwegian context. The three-factor structure of the original SACS measure was confirmed, and the overall reliability was satisfactory. The results thus confirmed the consistency of the total scale. However, when looking at the subscales/dimensions separately, there are some discrepancies between the results of the initial validation of the SACS measure and the results of the EFA based on the scores from the Norwegian sample.

Firstly, two of the factors/dimensions, *“learning”* and *“team support”*, both had relatively high reliabilities ( $\alpha = 0.73$  /  $\alpha = 0.78$ ). However, the results for the third factor, *“information sharing”*, indicate a somewhat lower relationship between the items belonging to this factor ( $\alpha = 0,58$ ).

One explanation may be found in the battery itself. The SACS is short and easy to administer with only 11 items that might be divided into three dimensions. A consequence of this is, however, that the dimension *“information sharing”* only includes two items. The EFA literature suggests that *“at least three to five measured variables reflecting each common factor should be included, although even more is generally desirable”* (Fabrigar & Wegener, 2011). The relatively low reliability of the third dimension may also be a potential threat to the validity of this dimension. In the future, work might be done to strengthen this dimension.

Another result that should be further discussed is to which factor the item *“I consistently participate in team discussions with an open mind”* belongs. In the Norwegian sample, this item has small to moderate loadings on all factors, with the highest loadings on *“team support”*. However, in the initial validation of the SACS measure, this item loads highest on the factor *“learning”*. Further examination showed that Cronbach’s alpha increased when the item was included in the *“learning”* dimension. It also showed that the reliability score increased for the *“team support”* dimension when the item was removed from this dimension. These statistically driven results may indicate that the item *“I consistently participate in team discussions with an open mind”* should belong to the *“learning”* factor, as originally intended.

Yet theories on interprofessional collaboration may suggest otherwise. Hinyard and colleagues (2019) note that the SACS was developed as a measure of collaboration that assesses a student’s ability to contribute to and support fellow team members’ performance, her/his ability to engage in productive conversations, and her/his ability to contribute to the learning of the team. One may, then, argue that the item in question, *“I consistently participate in team discussions with an open mind”*, is theoretically a better fit within the *“team support”* dimension than the *“learning”* dimension. The introduction section highlights that interprofessional education concerns two or more professions that are learning with, from, and about each other (CAIPE) to create common knowledge (Edwards, 2012). Barr (2013) argues that learners in interprofessional settings thus need to be aware of their own professional knowledge, acknowledge the knowledge of others, be willing to engage in negotiations of meaning, and adjust actions accordingly (Barr, 2013). As Hean et al. (2012, p. 94) point out: *“Being able to give up a particular professional view of the patient/clients situation and take in the professional knowledge of others is at the heart of working interprofessionally”*. Being open to the perspectives of others is an important part of this. Conceptually, then, the item *“I consistently participate in team discussions with an open mind”* can fit well with both dimensions. However, it is argued here that—when



scrutinising the item more closely—this item, content-wise, may be a better fit with the items relating to the dimension “*team-support*”, which focuses on contribution to and support of team member’s performance, rather than with the items relating to the learning dimension. This said, it should be acknowledged that openness to the perspectives of others may also be an important prerequisite to learn with, from, and about others. Thus, both from a theoretical point of view and based on the results of this study, the belonging of the item “*I consistently participate in team discussions with an open mind*” can be further discussed. Nonetheless, the results of the reliability analysis did show that this item contributed to explaining some of the variance of the total scale and, thus, that it should be included in the SACS measure. Future research may provide better answers to the question of within which dimension this item fits best.

Finally, a note should be made that translation issues could also be the cause for the discrepancy between the results of the initial validation study of the SACS and this study, related to the issue of on which factor the item “*I consistently participate in team discussions with an open mind*” loads. A threat to validity in research across nations and cultures may, for example, be that the same items are interpreted differently by different groups (Cohen et al., 2018). In the case of applying the SACS in a Norwegian setting, “back-translation” was used as a technique to address this potential threat to validity. The questionnaire was also piloted in a group of students. However, there is still a risk that the item may be interpreted differently in the different samples, and that this could influence the students’ answers.

Overall, though, the findings do support the reported factor structure of the SACS measure and confirm the reliability of the scale. The three dimensions of the SACS were retraced—although with some discrepancy, as discussed above. These results thus support findings from previous research (Hinyard et al., 2019) of the SACS as a measure of collaboration skills with sound psychometric properties.

### ***Background factors’ influence on variations in student scores on the SACS***

The second research question in this study concerns how students’ scores on the SACS vary according to background factors—such as which educational programme the students are attending, their age, etc. A major characteristic of the SACS measure is that it was developed to be implemented in both clinical and nonclinical interprofessional settings and is considered to be context-free (Hinyard et al., 2019). The SACS’ context-neutrality was thus one of the rationales for its selection as an assessment tool in the INTERACT evaluation project. Yet work still needs to be done to strengthen this claim. The results of the regression analysis in this study, exploring how students’ background factors influence variations in student scores, may contribute to this.

In the current study, students attending seven different educational programmes answered the SACS. The students were also asked to provide background information on their age; on

their previous work experience in general, and with children and youth more specifically; and on whether they had done an internship during their studies. The participants covered a satisfactory spectrum in terms of educational background, age, and work experience.

The results of the multiple regression analysis showed no statistically significant relationship between the students' scores on the SACS measure and any of the background variables. The non-significant results of the regression analysis thus show that, in the current study, background factors cannot explain the variation in SACS scores among the students. This finding supports an assumption that the SACS can be considered a context-neutral measure of collaboration skills.

These findings may prove valuable to professionals within higher education, who seek to evaluate IPE programmes with broad study profiles. Currently, there is an expressed need for IPE and IPC in various contexts. The point of departure for this article was a search for a validated instrument that could be used to assess learning in an IPE programme focusing on children and youth. The availability of validated and context-neutral instruments that are well-suited to measuring the outcomes of IPE programmes with a broad spectrum of profiles may become even more important in the future. The SACS may prove to be a useful contribution to meet such needs.

### ***Strengths and limitations of the study***

There are several strengths and limitations to this study, which should be taken into consideration. One potential limitation concerns the use of the SACS measure in a different context than that for which it was originally intended. The SACS was developed in the U.S. and initially validated in an English-speaking sample. Translation into another language can always be problematic. Here, this risk was attempted minimised by applying a back-translation technique when preparing the measure for the Norwegian context. Yet, language issues may be a limitation when validating instruments in other contexts than those for which they were originally intended. Possible response-bias is another limitation to this study. Approximately half of the entire student population invited to participate in this study (students attending INTER 1200) decided to participate. Potentially, this could affect the results. In the case of the current study this is not, however, judged to be a major threat. The survey did not contain sensitive topics and was answered anonymously. Thus, no obvious reasons why the students who chose not to participate in the study would answer differently than the respondents are identified. Another limitation to be considered is the lower reliability of the dimension "*information sharing*" than the other dimensions. Despite relatively high overall reliability, the reliability of this dimension was substantially lower than the rest. This could be further explored in future research. One practical solution to this, if it is considered central, may be to use the measure mainly as an overall scale and not use the subscales/ dimensions separately. Another solution is to add a small number of additional items to this subscale.

There are also several strengths to this study. One strength is its sample size. The sample is rather large (N=499), which is generally valuable when using statistical analyses. The sample size in the current study is also larger than the size of the samples used in the initial validation study, upon which the SACS measure is based. Still, corresponding results were found in the two validation studies—across cultures and languages. The sample size of this study thus utterly strengthens the results of the initial validation of the SACS. Another strength of the current study is the diversity among the participating students. They represent seven different educational programmes, covering programmes within health, social care, and education. There was a good spread among the participants in terms of age; previous work experience in general; and work experience related to children and youth, more specifically. This strengthens the findings related to the context-neutrality of the measure. It may also be a valuable point for evaluators seeking validated instruments to assess IPE outcomes within a broad field of study. The confirmation of the factor structure of the SACS, in a new cultural setting, strengthens the validity evidence of the measure and—consequently—also boosts the significance of the findings from the current study.

## Conclusion

In modern welfare states such as Norway, effective collaboration among professionals—across various professional borders—is increasingly recognised as being essential to providing high-quality services to users. Key government policy documents, for example, conclude that it is necessary to increase collaboration among professionals involved in the lives of children and youth to meet their needs growing up (Gulbrandsen, 2014). Yet despite the increased attention focused on interprofessional collaboration across established borders—and, consequently, also the development of corresponding IPE programmes—there is still a shortage of validated instruments that are well-suited to assess the outcomes of such programmes. It is vital that the higher education professionals evaluating such programmes have access to validated instruments that can capture essential aspects of IPE, such as collaboration, and that are not hampered by such obstacles as professional jargon connected to specific disciplines. Moreover, it is also pertinent that the instruments' theoretical frameworks are reported by the developers of the instruments. This article has aimed to help fill this gap, by cross validating the SACS measure within a group of Norwegian students. The study's findings provide support to the validity claims put forward in the initial validation process of the SACS, where it was found to be a measure of collaboration skills that shows high internal consistency and can be applied in various IPE settings. Overall, the results of the EFA on the Norwegian data support the factor structure of the SACS measure and indicate that it is quite stable across the different settings. The three dimensions of collaboration in the SACS (information sharing, learning and team support) were retraced, though with a slight exception for one of the items. The results of the multiple regression analysis—which explored how student scores on the SACS might vary according to the students' background variables—revealed no such statistically

significant relationship. This finding provides a contribution to the claim that the SACS is context neutral.

Conclusively, this study supports previous research (Hinyard et al., 2019) presenting the SACS as a validated measure of collaboration skills that can be applied in various IPE settings. This may prove to be valuable, in turn, to higher education professionals who seek to assess the IPE outcomes of IPE programmes with non-traditional profiles. The SACS is short and easy to administer. It has also been proven to have promising psychometric properties when applied in the Norwegian setting. Thus—while additional research could still be carried out, both to explore the three dimensions of the SACS more thoroughly and to explore the SACS' suitability for advanced learners (Breitbach et al., 2020)—the SACS has shown promising results as a context-neutral measure of collaboration skills in IPE programmes.

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## References

- Akkerman, S. F., & Bakker, A. (2011a). *Boundary crossing and boundary objects. Review of Educational Research, 81*(2), 132-169. <https://doi.org/10.3102/0034654311404435>
- Akkerman, S. F., & Bakker, A. (2011b). Learning at the boundary: An introduction. *International journal of educational research, 50*(1), 1-5. <https://doi.org/10.1016/j.ijer.2011.04.002>
- Bandalos, D. L., & Finney, S. J. (2010). Factor Analysis: Exploratory and Confirmatory. In Hancock, G.R., Mueller, R.O. & Stapleton, L.M. (Eds.), *The Reviewer's Guide to Quantitative Methods in the Social Sciences*. New York: Routledge, 93-114. <https://doi.org/10.4324/9780203861554-15>
- Barr, H. (2013). Toward a theoretical framework for interprofessional education. *Journal of Interprofessional Care, 27*(1), 4-9. <https://doi.org/10.3109/13561820.2012.698328>

- Barr, H., Gray, R., Helme, M., Low, H., & Reeves, S. (2016). Steering the development of interprofessional education. *Journal of Interprofessional Care*, 30(5), 549-552.  
<https://doi.org/10.1080/13561820.2016.1217686>
- Breitbach, A. P., Pole, D., Rauvola, R. S., Kettenbach, G., & Hinyard, L. (2020). Longitudinal assessment of students' perceived collaboration skills at an institution with a structured interprofessional education curriculum. *Journal of allied health*, 49(4), 235-245.
- CAIPE (2016) Statement of Purpose CAIPE 2016. Retrieved from: [www.caipe.org](http://www.caipe.org), accessed 27 November 2020
- Cohen, L., Manion, L., & Morrison, K. R. B. (2018). *Research methods in education (8th ed.)*. London: Routledge. <https://doi.org/10.4324/9781315456539>
- Costello, A., B., & Osborne, J. (2005). Best practices in exploratory factor analysis: four recommendations for getting the most from your analysis. *Practical assessment, research & evaluation*, 10. <https://doi.org/10.7275/jyj1-4868>
- Edwards, A. (2011). Building common knowledge at the boundaries between professional practices: Relational agency and relational expertise in systems of distributed expertise. *International journal of educational research*, 50(1), 33-39.  
<https://doi.org/10.1016/j.ijer.2011.04.007>
- Edwards, A. (2012). The role of common knowledge in achieving collaboration across practices. *Learning, culture, and social interaction*, 1(1), 22-32.  
<https://doi.org/10.1016/j.lcsi.2012.03.003>
- Fabrigar, L. R., & Wegener, D. T. (2011). *Exploratory factor analysis: Exploratory factor analysis*. Cary: Oxford University Press, Incorporated.  
<https://doi.org/10.1093/acprof:osobl/9780199734177.001.0001>
- Field, A. (2018). *Discovering statistics using IBM SPSS Statistics (5th edition. ed.)*. Los Angeles: SAGE.
- Gulbrandsen, L. M. (2014). Barns deltakelse i hverdagsliv og profesjonell praksis: En utforskende tilnærming [Children's participation in everyday life and professional practices. An exploratory approach]. Oslo: Universitetsforlaget.
- Hagland, H. & Koren- Solvang, P. (2017). Kvalifisering til tverrprofesjonell praksis [Qualification for interprofessional practice]. In Mausethagen, S. & Smeby, J-C (Eds.), *Kvalifisering til profesjonell yrkesutøvelse [Qualification for professional work]* (p.83-93).Oslo: Universitetsforlaget.
- Hean, S., Craddock, D., & Hammick, M. (2012). Theoretical insights into interprofessional education: AMEE Guide No. 62. *Medical Teacher*, 34(2), 78-101.  
<https://doi.org/10.3109/0142159X.2012.650740>

- Hinyard, L., Toomey, E., Eliot, K., & Breitbach, A. (2019). Student perceptions of collaboration skills in an interprofessional context: Development and initial validation of the self-assessed collaboration skills instrument. *Evaluation & the Health Professions*, 42(4), 450-472. <https://doi.org/10.1177/0163278717752438>
- Johannessen, B., & Skotheim, T. (2018). Barn og unge i midten: Tverrfaglig og tverretatlig arbeid i barn og unges oppvekst [Children and young people in the middle: Interdisciplinary and interagency work in children and young people's upbringing]. Oslo: Gyldendal Akademisk.
- Lave, J., & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. Cambridge: Cambridge University Press.  
<https://doi.org/10.1017/CBO9780511815355>
- Lawn, S. (2017). Moving the interprofessional education research agenda beyond the limits of evaluating student satisfaction. *Journal of Research in Interprofessional Practice and Education*, 6(2). <http://dx.doi.org/10.22230/jripe.2017v6n2a239>
- Mahler, C., Berger, S., & Reeves, S. (2015). The readiness for interprofessional learning scale (RIPLS): A problematic evaluative scale for the interprofessional field. *Journal of Interprofessional Care*, 29(4), 289-291.  
<https://doi.org/10.3109/13561820.2015.1059652>
- Molloy, E. K., Greenstock, L., Fiddes, P., Fraser, C., & Brooks, P. (2014). Interprofessional education in the health workplace. In S. Billett, C. Harteis, & H. Gruber (Eds.), *International handbook of research in professional and practice-based learning* (p. 535-559). Dordrecht: Springer Netherlands. [https://doi.org/10.1007/978-94-017-8902-8\\_20](https://doi.org/10.1007/978-94-017-8902-8_20)
- Ofstedal, K. K., & Dahlberg, K. (2009). Collaboration in student teaching: Introducing the collaboration self-assessment tool. *Journal of Early Childhood Teacher Education*, 30(1), 37-48. <https://doi.org/10.1080/10901020802668043>
- Pacchi, C., & Mariotti, I. (2021). Shared spaces or shelters for precarious workers? Coworking spaces in Italy. *Professions and Professionalism*, 11(1).  
<https://doi.org/10.7577/pp.3911>
- Parding, K., Bellini, A., & Maestripieri, L. (2021). Heterogeneity among professions and professionals. *Professions and Professionalism*, 11(1).  
<https://doi.org/10.7577/pp.4398>
- Reeves, S., Fletcher, S., Barr, H., Birch, I., Boet, S., Davies, N., McFayden, A., Rivera, J. & Kitto, S. (2016). A BEME systematic review of the effects of interprofessional education: BEME Guide No. 39. *Medical Teacher*, 38(7), 656-668.  
<https://doi.org/10.3109/0142159X.2016.1173663>

- Report No. 13. (2011- 2012). *Utdanning for velferd [Education for welfare: Interaction as key]*. Ministry of Education and Research.  
<https://www.regjeringen.no/no/dokumenter/meld-st-13-20112012/id672836/>
- Report No. 20. (2012-2013). *På rett vei [On the right track]*. Ministry of Education and Research. <https://www.regjeringen.no/no/dokumenter/meld-st-20-20122013/id717308/>
- Schmitz, C. S. & Cullen, M. J. (2015). *Evaluating IPECP: What should I consider when selecting a measurement tool?* National Center for Interprofessional Practice and Education: University of Minnesota.
- Tabachnick, B. G., & Fidell, L. S. (2014). *Using multivariate statistics* (6th ed., new international ed.). Harlow: Pearson.
- Thannhauser, J., Russell-Mayhew, S., & Scott, C. (2010). Measures of interprofessional education and collaboration. *Journal of Interprofessional Care*, 24(4), 336-349.  
<https://doi.org/10.3109/13561820903442903>
- Williams, B., Onsmann, A., & Brown, T. (2010). Exploratory factor analysis: A five-step guide for novices. *Australasian Journal of Paramedicine*, 8(3).  
<https://doi.org/10.33151/ajp.8.3.93>
- World Health Organization. (2010). *Framework for action on interprofessional education and collaborative practice*. Geneva: WHO.
- Ødegård, A., & Bjørkly, S. (2012). A mixed method approach to clarify the construct validity of interprofessional collaboration: An Empirical research illustration. *Journal of Interprofessional Care*, 26(4), 283–288.  
<https://doi.org/10.3109/13561820.2011.652784>

## Changing Cultural Conditions for Knowledge Sharing in the Teaching Profession: A Theoretical Reinterpretation of Findings Across Three Research Projects

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### Abstract

How professionalism relates to developments in society has been widely discussed, and concepts such as “hybrid” and “connective” professionalism have been proposed to account for the way professionals interact with a range of actors and organisations beyond the professional realm. However, the critical role of knowledge-sharing practices for developing and maintaining professionalism has attracted less attention. Such practices have been conditioned by wider cultural dynamics, thus subjected to changes over time. In this paper, we present a theoretical reinterpretation of findings from three projects targeting knowledge-sharing practices in the Norwegian teaching profession over 14 years. We employ Knorr Cetina’s theory of epistemic cultures as nourished by the wider knowledge culture in society to analyse how changes in knowledge-sharing practices relate to cultural conditions. The paper contributes to current debates about professionalism by highlighting how connectivity and legitimacy depend on productive knowledge relations within and beyond professional boundaries.



## Keywords

Teachers, Knowledge sharing, Professionalism, Epistemic culture, Knowledge culture

## Introduction

Professional work is closely related to knowledge, which includes searching for existing knowledge, creating new knowledge, applying knowledge in specific situations and tasks, and processing and sharing knowledge (Vanthournout, Noyens, Gijbels, & Van den Bossche, 2014; Lehtinen, Hakkarainen & Palonen 2014). In our knowledge-intensive society, it is generally agreed that being cut off from the loop of knowledge and know-how is a disaster for professionals and other expert groups. As Styhre (2011) claims, the very idea of a profession is maintained from the capacity of a specific community to effectively circulate and institutionalise knowledge. However, little attention has been given to the critical role of knowledge-sharing practices in developing and maintaining professionalism.

In the knowledge society, knowledge-sharing practices are conditioned by dynamics that reach beyond professional organisations, workplaces, or institutions. Although professions and professional practice have always been embedded in webs of relations and meaningful connections with state actors, clients and other members of the public, other professionals, and stakeholders (Adams, 2018), it is well documented that the landscapes professionals navigate are becoming more complex and demanding (Adams, 2020; Faulconbride, Henriksen, & Seabrooke, 2021; Francis, 2020; Hoff, 2021). In the wake of these changes, new terms, such as “hybrid professionalism” (Evetts, 2016; Noordegraaf, 2007) and “connective professionalism” (Noordegraaf et al., 2014), have been suggested to account for new modes of professionalism. A contributor to this literature is Noordegraaf (2016, 2020, 2021), who points to how the classic notion of professionalism that rested on closure, protection and entry barriers, jurisdictions, and autonomy (e.g., Abbot, 1988; Freidson, 2001) no longer has exploratory power alone. Rather, Noordegraaf (2020) suggests that analyses have to be widened to include the way a professional community interacts with its stakeholders. Such generic descriptions of new modes of professionalism require specific investigations and elaborations, depending on professional field, periods of time and geographical area. This paper responds to this agenda by investigating the dynamic interplay between the knowledge-sharing practices of the Norwegian teaching profession and the wider culture in which these practices are embedded.

In most countries, a specific feature of the teaching profession is its close association with the state. The literature on teachers thus typically addresses professionalism in relation to state regulations, autonomy, and space of manoeuvre (Sachs, 2016). Following Noordegraaf’s perspectives, however, we address teacher professionalism beyond the relationship to state and state regulations. Noordegraaf’s (2021) key message is that it is neither practice alone (what professionals “do”) nor the regimes of regulations that define a

profession. Professionalism manifests “in-between,” beyond identifiable agents and in relation to broader societal developments, including far-reaching technological developments (Noordegraaf, 2021). These perspectives have, to a limited extent, been used in analyses of the teaching profession<sup>1</sup>.

In this paper, we approach professional knowledge sharing as a critical aspect of professionalism and as an important entry point for examining the dynamic interplay between the wider landscapes to which professionals relate and the collective practices in a given field. We thus present a theoretical reinterpretation of the summarised findings from three projects addressing knowledge sharing in the teaching profession (primary and secondary education) in Norway over 14 years. By employing Karin Knorr Cetina’s (2007) theory of epistemic cultures as conditioned by the wider knowledge culture in society, we present a theoretical reinterpretation of the findings to conceptualise how changes in teachers’ knowledge-sharing practices and their cultural conditions can be understood. As expert cultures that generate knowledge and specific forms of know-how, professions can be studied as epistemic cultures constituted by their distinctive practices and knowledge relations (Knorr Cetina and Reichmann, 2015). Such practices and relations exceed the boundaries of the specific workplace or, in our case, school and provide a ground for professionalism by reflecting the professions’ systematic and institutionalised forms of knowledge sharing (Styhre, 2011). As for the teaching profession, the professional knowledge is multifaceted and complex, including knowledge of learning; methods; didactics; subjects, and the use of pedagogical resources, to mention a few. Some of these resources are based on research; others are adapted and shared models, procedures, and instruments that over time are recognized by the profession as part of their common knowledge base.

In that sense, knowledge sharing is about the systems, arrangements, and principles that make up “how teachers know what they know”, to paraphrase Knorr Cetina (1999, p. 2), including how they get access to learn in practice. Hence, attending to changes in a profession’s knowledge-sharing practices are not solely about how knowledge is shared, but equally about *what* is shared. The latter, then, becomes a question of what is valued and considered important in the epistemic culture; and what counts as valid knowledge worth sharing at given points in time. Against this backdrop, we ask the following research question: *How do changes in knowledge sharing practices in the teaching profession relate to wider cultural conditions?*

We commence with a brief description of the characteristics of the organisation of teachers’ work and the conditions for professional practice in the period in which the three projects

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<sup>1</sup> For exceptions, see for instance Hilferty (2008) and Osmond-Johnson (2018).

were conducted. Then, we introduce the theoretical framework used in the reanalysis before presenting a summary of the three projects. We provide a theoretical reinterpretation in which the findings from the three projects are discussed in light of the changing dynamics of teachers' knowledge sharing practices. The paper concludes by discussing possible implications for research and practice.

## **Contextualising the teaching profession in Norway**

The projects that provide the empirical findings for this paper focus on teachers in primary and lower secondary education, which means that their qualification routes comprise four- or five-year teacher education programmes offered by universities and regulated by national guidelines. Furthermore, primary teachers and most secondary teachers specialise in several subjects and primary teachers, in particular, often have responsibilities as class teachers. However, as we describe below, educational routes have become more specialised and research-oriented.

A characteristic of the context of teacher professionals in Norway is a general increasing focus on the knowledge dimension of professional practice, fuelled by new reforms in different parts of the sector in recent years. First, as in many countries, initiatives to reform teacher training in Norway emerged in 2010, in which the teacher training programme differentiated the courses of study required to teach at various grade levels (OECD, 2013). These initiatives were followed by other efforts to improve teacher education, such as upgrading to a master's level and competitive entry requirements. Second, a new competence development model for schools to develop collaborative professionalism at every layer of the education system was recently introduced and consisted of in-service professional development (OECD, 2019). Partnerships with universities and higher education institutions were considered essential in making this happen (Government of Norway, 2017). Third, the recent curriculum reform called "The Subject Renewal" (effective from 2020) emphasised knowledge work and knowledge sharing, among other things, by explicitly obligating teachers to participate in the professional community in the workplace. Finally, a broad range of other initiatives and actors has appeared in the sector during the last two decades (OECD, 2013). Examples are efforts and national strategies to "boost competence" (Hatch, 2013), including the Assessment for Learning Programme (2009-2017) and the emergence of knowledge brokering initiatives during recent years to facilitate access to and the diffusion of knowledge (Wollscheid & Opheim, 2016). The National Programme for School Leader Training was established in 2009 to strengthen the professional empowerment of school leaders. In 2015, the introduction of teacher specialists was introduced to establish a more differentiated expert teacher role (2015). Put together, the school system in Norway *requires* teachers to engage in collaborative knowledge sharing practices. At the same time, the Norwegian context is characterised by a high level of trust, in the sense that schools enjoy a relatively large degree of local autonomy (Hatch, 2013).

Taken together, the external and internal conditions for knowledge sharing in the teaching profession are in motion. Against this backdrop, the Norwegian context is specifically relevant for analysing changes in knowledge-sharing practices and the conditions for such practices over a longer time span. In line with developments in other professions, the landscapes of the teaching profession have become increasingly complex, involving multiple knowledge producers, and changing infrastructures for knowledge sharing. To our knowledge, few studies have investigated how new modes of knowledge sharing manifest in the teaching profession and have led to new knowledge connections over time.

## **Analytical framework**

To investigate these issues, we draw on two theoretical accounts that we find productive in elucidating forms of connectivity that relate specifically to professional knowledge and know-how. First, we elaborate on our stance on professionalism as knowledge sharing by drawing on the work of Alexander Styhre. Next, and as our main analytical frame, we introduce Knorr Cetina's theory of epistemic cultures as dynamically interrelated with the wider knowledge culture in society. While Noordegraaf's perspectives provide a broader intake to our approach to knowledge sharing and professionalism, theoretical accounts from Styhre and Knorr Cetina, on the other hand, are operationalized to gain analytical input into the epistemic dimension that the article addresses.

### ***Professionalism as knowledge sharing***

Following Styhre's (2011) notion of professionalism as a form of systematic and institutionalised knowledge sharing, the development of efficient arrangements to circulate knowledge is seen as the very "life-blood of the professions" (p. 165). Professional work, Styhre (2011) asserts, is characterised by authority and the ability to execute agency within a particular domain of expertise. However, to achieve and maintain such qualities, professionals need access to information, knowledge and even small talk, without which they gradually lose their professional expertise (Styhre, 2011, p. 153). Nevertheless, in most professional fields, advancements in knowledge are rapid and can be overwhelming for individuals. Thus, knowledge sharing has increasingly become a collective accomplishment. Further Styhre (2011) notes that different fields underline different conditions for circulating knowledge in different periods. For example, the implementation of new technologies in a field of expertise may restructure that field's "conditions of circulation". More broadly, the key to understanding professionalism, is understanding the exchange and circulation of professional knowledge and the factors that matter in this respect. Styhre (2011) identifies the following factors as critical: (1) types of knowledge forms, resources and infrastructures that serve knowledge sharing; (2) knowledge sharing's communication modes and spatial/geographical outreach; and (3) the wider set of actors, networks and relations to profession-specific knowledge circuits that inform and nourish prevailing knowledge-sharing

patterns. In the presentation of the three projects, we used these three factors to organise the summary of the findings, which allowed us to highlight changes we observed over time.

### ***Knorr Cetina's (2007) "culture in culture" model***

Neither knowledge-sharing practices nor the actor constellations that they involve exist in a vacuum. Rather, they are culturally embedded in ways that are partly distinct for each field of expertise—in our case, the teaching profession—and partly influenced by general structures and societal belief systems. To conceptualise these intertwined relations, Knorr Cetina's (2007) model of "culture in culture" is helpful because she has linked the developments in specific fields of expertise to contemporary transformations of what she calls "the global architecture" in society and, in particular, to the growing importance of macro-epistemic agents that serve knowledge at a (trans)national level. Such macro-epistemic agents take on responsibilities for accumulating, warranting, and distributing knowledge that is believed to have general validity manifested, for example, by way of clearing houses or other institutions mandated to provide research-based advice for professional practice. In addition, professional communities, she asserts, may take on new roles as "macro-epistemic agents" (Knorr Cetina, 2007). Although their concrete products may take profession-specific forms, the increased presence of such agents and agencies reflects developments in society at large.

To conceptualise these dynamics further, Knorr Cetina (1999, 2007) uses the concepts of "epistemic cultures" and "knowledge cultures". Her concept of epistemic culture draws on a critique of the all-encompassing concept of *culture* in anthropology and sociology. Knorr Cetina (1982, 1983) limited the use of culture to small and clearly delimited environments. As such, the initial versions of "epistemic culture" focused on laboratories and other environments in which knowledge was produced, disseminated, and applied. In her later work, Knorr Cetina (1991, 1999) shifted attention from the construction of knowledge to the conditions for such construction, that is, the construction of environments, tools and infrastructures, as well as the ways in which these are combined by the form of reason or logic pertaining to the particular system. Thus, Knorr Cetina (1999) defines epistemic cultures as "those amalgams of arrangements and mechanisms—bonded through affinity, necessity and historical coincidence—which, in a given field, make up how we know what we know" (p. 1). Hence, in professional contexts, such cultures comprise different actors and their various knowledge-generating activities and responsibilities, which together provide the basis for what is recognised as knowledgeable professional practice (see also Knorr Cetina and Reichmann, 2015).

In her studies of organisations or other small environments of knowledge production, Knorr Cetina attempted to reconstruct the emic distinctions and forms of reason that mark these environments. A main tenet of her work is that epistemic cultures cannot be understood without referring to an internal logic or form of reason; that is, the very factors that Styhre (2011) identified as important for knowledge sharing (infrastructures, methods, concepts, and tools) cannot be understood without referring to a particular form of reason or mission. However, while recognising this internal logic's power, Knorr Cetina did not envision epistemic cultures as closed environments. Rather, she viewed society as an encompassing environment; thus, the notions prevalent in society at large can influence epistemic

cultures. Examples of such notions are general trust in large-scale studies or the notion of user involvement in experts' knowledge generation. However, their influence is indirect because elements are not copied from the environment or shared with the environment. External factors exert different effects in different cultures because everything is reinterpreted according to the receiving culture's internal logic. As Knorr Cetina (1999) suggests, if everything was shared and the boundaries of epistemic cultures had no implications for the flow of knowledge, the concept of epistemic culture would be rather pointless. Thus, in Knorr Cetina's (2007) frame, knowledge cultures can be understood as a wider concept – specifically, as the culture nurturing or hindering the working of epistemic cultures. For instance, a knowledge culture that emphasises global infrastructures, transparency in professional decision making and open access to research may provide better conditions for professional knowledge sharing than cultures that highlight individual discretion and give preference to local variations in ways of knowing.

We argue that Knorr Cetina's (2007) approach provides a useful starting point to understand changes in knowledge-sharing because it encourages us to consider the ways in which teachers' professionalism is nested within a broader context and how the relationship between the two may differ over time. Moreover, the originality of Knorr Cetina's contribution regarding discussions about teachers' professionalism goes beyond an oversimplified "either/or" logic regarding the influences that often have characterised debates on professionalism (see Noordegraaf et al. [2014] for an overview of the literature that examines this issue). Rather, her model encourages an investigation of what fault lines run between the inner and outer in different periods and how they inter-relate. Elaborating further on the challenges of our times, Knorr Cetina (1999) describes how expert groups continually turn inward or, in her words, "curl up upon themselves" (p. 2), focusing on and further developing a densely articulated, symbolic world of their own making. On the other hand, expert groups need to look outward and struggle to make use of what is offered elsewhere to become increasingly dependent on external support. Thus, expert groups must grapple with the dilemmas, risks, and ambiguities as they act to webs of relations and the wider outside world (Noordegraaf, 2021).

In our reinterpretation of knowledge-sharing practices among Norwegian teachers, we applied Styhre's and Knorr Cetina's perspectives to understand more of knowledge sharing as an aspect of connective professionalism and as a condition for professionalism between internal and external dynamics. We organized our process in two stages. First, we conducted an overview of the main findings from the three projects. We used Styhre's three key factors of knowledge sharing as a focal point for summarizing findings. Next, we used Knorr Cetina's theory to analyse how changes in knowledge-sharing practices relate to cultural conditions. The approach of synthesising and integration of findings across sets of case studies and projects is not common in research on professionals' work. However, a growing literature calls for cross-study syntheses, as they are particularly fruitful when seeking to build integrative understandings of a problem space taken up in the individual

cases and for identifying generative theories (see e.g., Rossman and Yore 2009). The next section presents a summary of the three empirical projects and their findings.

## **A summary of the three projects and their findings**

### ***Project 1 (2004-2008): Locally bounded knowledge-sharing practices and opportunities***

The first project, conducted in 2004-2008, examined how novice professionals in four professions related to knowledge and continued to learn during their first working years after graduation. Using survey data, in-depth interviews and learning logs, the project analysed how knowledge sharing and learning opportunities took distinct forms in different professions, depending on powerful knowledge discourses and practices, as well as ways of organising work. These analyses were further related to ways of regulating knowledge in the wider profession, manifested in the strategies of the teacher's union and in national regulations for teacher education (for more details, see Jensen et al., 2012).

The analyses pertaining to the novice teachers showed that teachers' knowledge-sharing practices predominantly concerned the sharing of *personal and experience-based knowledge*. These practices often took spoken forms, in which the teachers shared examples and experiences from their own teaching with colleagues in informal contexts. The results also showed that the teachers' epistemic environment was marked by a scarcity of profession-specific knowledge resources (Lahn, 2012). The lack of such resources strengthened the focus on experience-based knowledge as the main component of professional expertise. A common narrative was that the individual teacher needed to build up a wide repertoire of first-hand experiences gained in a variety of teaching and learning situations and that knowledge sharing took place on a need-to-know basis. Thus, knowledge sharing was related to informal interactions in which teachers were implicitly asked to take personal responsibility for seeking advice and ideas (Nerland, 2012; Klette & Smeby, 2012). Regarding *spatial/geographical outreach*, the teachers' practices were mostly limited to local workplaces and communities, thereby lacking stimulating connections to wider knowledge networks that we could observe in other professional groups. Moreover, when considering the wider set of actors and relations that support knowledge sharing in the profession, the results showed that the forms of knowledge sharing were supported by the main discourses in the profession. For instance, analyses of the Union of Education Norway's (UEN) strategic documents and discussions stressed the importance of practice-based and personal knowledge (Karseth & Nerland, 2007). Furthermore, the teachers' union was more concerned with protecting teachers' space for discretion in their choice of teaching approaches than with supporting the sharing of procedural models and advice based on international research <sup>2</sup>. In sum, the analyses conducted in this project found that

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<sup>2</sup> A distinctive feature of the Norwegian educational context is that virtually all teachers are organised by this one trade union, which has strong engagement and political influence in knowledge-related issues.

teachers' knowledge sharing was linked closely to their everyday teaching in the local workplace and that few other spaces existed for knowledge to circulate. This pattern distinguished teachers from the other professional groups included in the project, leading to questions about whether the emphasis on personal autonomy in the profession created hindrances in preparing professionals for the challenges of the knowledge society (Jensen et al., 2012).

### ***Project 2: Emerging infrastructures for knowledge sharing and casual connections***

The second project was conducted in 2009-2011 and was designed to build upon Project 1 in two ways. First, the project extended the time frame for examining novice teachers' knowledge relations and learning at work by approaching the participants from Project 1 two years later through surveys and in-depth interviews. Second, the project more thoroughly investigated the practices of knowledge sharing that were facilitated by the introduction of new artefacts and objects in the workplaces. This was achieved by conducting observation-based case studies of teachers' collaborative work with new devices and procedures, such as digital tools and assessment guidelines. In addition, the research team performed a follow-up study of knowledge-regulating policies and approaches in the relevant professional associations.

The results showed how epistemic environments for teachers were about to be reconfigured. Synthesising the results from the interview study and the observation-based case studies, we found that teachers' knowledge-sharing practices included a range of artefacts and materialised knowledge resources that incorporated not only research-based knowledge but also experience-based knowledge generated in the local community or from schools nearby that was shared in the form of assessment templates, mapping tools, models for technology use and procedures (Hermansen, 2014; Nerland & Jensen, 2014). Through the circulation of such knowledge resources, knowledge-sharing practices stretched beyond the local school community, and signs of emerging infrastructures were observed.

Simultaneously, an important finding in the project pertained to variations among schools because of infrastructure differences (Hermansen, 2017; see also Vennebo and Ottesen, 2014). Some schools deliberately established connections to research communities by engaging consultants to lead development initiatives and by giving teachers responsibilities to access a wider set of profession-specific knowledge resources, thereby creating new spaces for knowledge sharing and epistemic work. Other schools were still characterised by more informal knowledge sharing, with casual connections to external actors and resources. Regarding the wider set of actors and relations, the results showed how the UEN had developed a more positive position towards "research-based" knowledge during this period (Nerland & Karseth, 2015). However, the union did not involve itself in developing knowledge resources or standards for its members' professional work — in contrast to a



development that we noted in other professional associations, such as those serving nurses and accountants. The UEN was sceptical of the various forms of pre-packaged knowledge and standards that local schools imposed on teachers. Rather than seeing these resources as a way to secure a professional knowledge base and knowledge sharing, they were viewed as a threat to professional discretion and were not endorsed during this phase. Nevertheless, the analysis of the findings from Project 2 depicts a knowledge landscape involving multiple knowledge producers, who, in turn, generated different types of knowledge resources. In particular, this project identified the ways in which engagement with these new resources involved practitioners in wider circuits of knowledge advancement and served as a vehicle for knowledge sharing locally.

### ***Project 3: The intensification and formalisation of knowledge sharing***

The third project was conducted in 2012-2016 and was designed as an in-depth study at the school/organisational level. It built upon Project 2 in two ways. First, it investigated how practices of knowledge sharing were facilitated by the introduction and further development of artefacts and objects in the workplace, and second, by tracing emerging infrastructures of knowledge sharing. In addition, the in-depth study was supplemented by ongoing analyses of the educational context of teachers carried out by colleagues in our research group, providing input for the broader dynamics of change (see Afdal and Damsa, 2018; Damsa, 2018).

The project investigated practices of knowledge sharing by following teams of teachers during their work with collaborative curriculum making. The results showed how teachers' knowledge-sharing practices not only intensified but were formalised in new ways. First, the teachers had a wealth of knowledge resources and infrastructures to support them in their work (Tronsmo & Nerland, 2018; Tronsmo, 2019). Although some of the resources and infrastructures were internal to the profession, others were established in collaboration with external actors and stakeholders, such as universities and local educational authorities, thereby implying closer relations between teachers and various knowledge-generating actors (Tronsmo, 2020). Tracing the teachers' local curriculum development, the study also revealed how the plurality of knowledge resources and infrastructures gave rise to more collaborative practices that formed collective spaces for work. On the one hand, these spaces paved the way for innovation, creativity, and transformative endeavours in which we could observe systematic knowledge sharing and cumulative development processes among the teachers. On the other hand, these knowledge spaces were typically complex and diverse and created new dilemmas. The findings showed that in these situations, the emergence of explorative practices in which the teachers assumed responsibility for assessing the validity of the various knowledge contributions circulating in the networks was observable (Tronsmo, 2019). Regarding the wider outreach of actors and networks, we noticed knowledge-sharing practices that operated on many layers. The infrastructures and resources for knowledge sharing served to link teachers' work to wider sets of actors and

agendas, engaging the teachers in sorting out connections and delineating between contributions.

Employing a multilevel perspective, the findings from Project 3 also show how teachers' enhanced agency is intricately related to policy changes and developments outside local schools. For instance, international and national standards play a strong role in teacher education through outcome-based curriculum models, which are reflected in dual ambitions to strengthen the programmes' research-based grounding and professional relevance (Afdal & Damsa, 2018). Generally, Project 3 shows that more complex and multi-sited knowledge dynamics were emerging in the organisational landscape serving the teaching profession, thereby generating a need to engage in processes of knowledge reconfiguration at the various sites in which knowledge should be brought to bear on practice (Nerland et. al, 2018).

Taken together, the summarised findings of the three target projects show significant differences in Norwegian teachers' knowledge-sharing practices. A pressing question to be addressed is how these changes can be explained. To answer this question, we turn to a theoretical reinterpretation and discuss the findings from the three projects through a new analytical lens.

## **Cultural dynamics of change: A theoretical reinterpretation**

The summarised findings from the three projects show that the teachers' knowledge-sharing practices have been subjected to change along all the dimensions Styhre (2011) identified as critical and that these are interrelated. The gradual growth in materialised knowledge and infrastructures encourages more diversified communication patterns, which in turn allows for increased interaction with settings and actors beyond the local workplace. Knorr Cetina's (2007) model of "culture in culture" allows us to explore the interdependent combination of influences between the epistemic culture of teaching and the more encompassing knowledge culture of society and to examine how this changes over time.

The findings from the first project portrayed a bounded epistemic culture that realises itself within the context of the profession and its internal interactions. Knowledge sharing rested primarily on local exchanges, with few links to external knowledge worlds. Moreover, the teachers' internal knowledge world was not densely articulated because the exchanges were primarily of a spoken nature and few infrastructures existed for more systematic knowledge sharing. Thus, in this period, we found a profession in which outreach and knowledge opportunities are restricted.

In the findings from the second project, we saw a profession that is being reconfigured slowly to better meet the changes that emerge from the "global architecture" of knowledge (Knorr Cetina, 2007). Instead of clear boundaries between professional work and outside worlds, we discern an epistemic culture that is gradually influenced by new agents in the

wider professional context and endeavour to tap into knowledge resources developed elsewhere. For instance, new assessment methods and principles that circulated in national and international school policies were introduced by way of new infrastructural arrangements and chains of actors. Thus, we saw how the wider knowledge culture provides scaffolding for the epistemic cultures of teaching. This scaffolding was facilitated through an increase in the material tools and arrangements that support knowledge sharing by making it possible to externalise, share and recontextualise knowledge. However, the internal logic of the profession as creating boundaries for knowledge sharing remains because it is the receiving culture's own knowledge structures and belief systems that determine which knowledge is brought in and what changes in existing knowledge structures are made at any given point in time. In other words, new knowledge triggers epistemic work through which whatever is brought in is interpreted and, if accepted, serves to update, or expand current knowledge. This interpretative process is important because it means that "instructive interactions" are still limited; that is, an agent outside the profession cannot determine its effect on the profession. At the same time, the main insight from this project was that local schools differed heavily from each other in their outreach capacities, owing to local possibilities and strategies. Thus, we saw signs of what Knorr Cetina (2007) described as "a divide between global knowledge and its expert cultures [...] and those areas of practice and mentality which remain local" (p. 372) within the same profession.

The findings from the third project revealed that the new connections in education, as well as the investments in developing epistemic infrastructures for professional work, increased substantially in later years, and led to what we observed as the potential for the transformation of teachers' epistemic culture in several ways. First, the local infrastructures and collective spaces for work allowed teachers to access larger networks of knowledge-generating actors, with the consequence that the teachers' knowledge-sharing practices were no longer limited to local schools and included a range of opportunities to access knowledge produced elsewhere. Although the school selected for the work-based studies may have been a forerunner, it was not unique, and the findings illustrate how teachers were increasingly part of a network of connections of which knowledge sharing and epistemic work were at the forefront. The networks tended to criss-cross each other so that teachers were located in several different constellations with different tasks—in one, a teacher may be a producer of material or ideas; in another, a recipient; and in yet another, a translator. Second, a range of other initiatives and arrangements existed, aimed at supporting teachers' outreach: new master's programmes, a stronger emphasis on research-based education; and new and more formalised networks for knowledge sharing across research, education, and practice in the teaching profession.

The analyses conducted in the three projects represent observations at given points in time, and the changes in knowledge-sharing practices are thus likely to be more incremental and co-emerging than what this project-based organisation can give the impression of.

Nevertheless, we can see how the epistemic culture of teaching has become linked with and nurtured by the wider knowledge culture in increasingly extensive and systematic ways. Moreover, we also observed that the dynamic goes both ways. By opening up the profession's boundaries and catering more systematically to knowledge sharing in subject-related and profession-specific work groups, the profession, through its responsibilities in educating the next generation, may also serve to nurture society's wider knowledge culture. In this transformational process lies widespread development of the external influences; that is, the profession increasingly was dependent on the goals set by actors external to the profession and the continuous acceleration of underlying streams of support from external agents for the creation and maintenance of its instruments, networks, and environments.

In the context of the discussion on professionalism, an important question is whether external influences and increased connectivity serve to challenge or strengthen the profession as a knowledge-based occupation. Thus, it was important to detail external actors' expanding influences. In doing so, we saw signs that such involvement may put teachers in a position of renewed power and agency, which in turn leads increasingly to renewal and an awakened consciousness. As indicated earlier, we also saw how the combination of initiatives and infrastructures is important from the profession's own perspective, in that they enhance their capacity for interaction. Furthermore, when considering the findings from the three projects, we saw how teachers reshape their identities over time and take on extended roles and responsibilities for knowledge sharing and development in the profession. In these efforts, teachers critically include the new goals that external stakeholders have set in their professional repertoires and are generally more accountable for these broader educational objectives and for their professional knowledge and experience. For instance, in their work to design and develop curricula, they engaged in justifying practices and became more proactive in terms of establishing legitimacy for their work. Rather than undermining the teaching profession's self-creative capacity, the widespread development of external influences is balanced through criteria internal to the profession. Although the question of educational policies and governance is a topic for a larger research programme, we note that a possible reason for achieving this balance is a shift in focus among political agents to emphasise facilitating support rather than exerting more blatant forms of external control and intervention. In particular, we note the work done to build infrastructures that, in Knorr Cetina's (1999) words, were designed to serve knowledge. Rather than dictating teachers' actions, this reorientation facilitates a self-transformation of the profession, the direction of which may coincide with policymakers' intentions but reflect the forms of reason and overall mission characteristics of the profession. This trend is in part continued in the work with the curriculum reform from 2020, which entrusts teams of teachers and subject matter specialists with the responsibilities to renew the subject content and work out the specific framework regulations for the various school subjects (Karseth, Kvamme, & Ottesen, 2020). What this suggests is that although external support and recognition are central, they are insufficient

to generate change. As our analysis suggests, it is still the teachers' practices that transform the profession. This active role requires extended responsibilities and forms of knowledge work from teachers, as well as a wider encompassing environment of actors and knowledge relations through which the professionals are entrusted a continued mandate to secure the quality of schooling as a key sector in society.

## **Concluding discussion**

This article presented and discussed changes in the practices and conditions for knowledge sharing among teachers in Norway over 14 years. The theoretical reinterpretation of how knowledge-sharing practices are interlinked with a range of factors and developments in a society's wider knowledge culture has implications for how we can understand teacher professionalism and how it can be enhanced in the future.

First, by understanding professionalism as a matter of systematic and institutionalised knowledge sharing constituted through dynamic relations between epistemic cultures and the wider knowledge culture in a society, we have suggested a framework that allows for attending to the level of practice while accounting for the wider dynamics of knowledge and change. In particular, the model of "culture in culture" (Knorr Cetina, 2007) opens an analytical space to investigate how the idea of connective professionalism, which was first introduced by Noordegraaf (2016), plays out in daily life. Our analysis suggested that this framework advances thinking about professions in three ways: (1) it requires consideration of the interconnections between a culture's elements, dynamics and relations with the environment; (2) it allows for analysing the boundaries, linkages, synergies and emergent properties with the objective of understanding and considering interdependencies and dynamics; and (3) it reminds us to keep the "bigger picture" in mind, even when a study focuses on a specific aspect or subsystem. Thus, it offers a framework for tracing the broader societal forces that reconfigure professional work. The model of "culture in culture" also emphasises that professional cultures are distinct in their knowledge dynamics and that productive relations between epistemic cultures and the wider knowledge culture will take different forms in different professions. These differences call for more group-specific analyses in studies of professions as a basis for comparative analyses and further theorising.

Second, our analyses bring about methodological reflections on how changing forms and conditions for professionalism can be captured. In this article, we focused on the teaching profession in the context of one country, and we are aware that the cultural conditions in Norway differ from analyses and accounts in some other countries. Norway has, as described earlier, shown several political initiatives to strengthen the research base and knowledge sharing in the profession during the later years. Nevertheless, we think our findings and interpretations are of broader relevance. Although there are signs of an ongoing transformation in the teaching professions in many countries, as well as a growing trend to scrutinise these change processes to learn from them, large-scale studies that

capture global trends and illustrate how professions may be empowered by them are rare. One exception is the work of Darling-Hammond et al. (2017), which explored developments in the teaching profession and serves to illustrate the value of learning from accumulated experience. In a large-scale research project, she assembled a team of leading scholars to gain insights into what is being done in five high-performing countries (Australia, Canada, China, Finland and Singapore) to prepare teachers for a changing world. Although each country has its own history, context and culture for education, all jurisdictions have identified strategies for improving teacher learning and teaching to inspire other contexts. However, despite their usefulness, studies like this are rare, and Darling-Hammond et al.'s (2017) study is unprecedented in scope and scale. Given that ample published qualitative studies on various aspects of teaching exist, another way to benefit from international experience is to draw out the potential added value generated through various types of research syntheses. As this article illustrates, reinterpreting findings from focused studies that bear similarity and that are conducted over a longer period allows for new insights by interpreting the findings from a broader perspective and for theorising beyond what individual studies allow.

Third, the analysis and discussion presented in the current article underline how expert cultures should never be taken for granted. Rather, we suggest highlighting the intricate blend of influences that exist during different periods and enhancing our understanding of the mixed systems of care and attention that drive change processes and render professionalism a truly collective project. Professional expertise is a relational and constantly shifting entity shaped and reshaped according to the altering dynamics of political and social institutions, as well as changing societies. However, an issue that remains unclear and should be researched further relates to the historical change that occurs if external influences become dominant. Although Norwegian studies so far have suggested productive interactions between internal and external influences, we are curious about whether there is a tipping point here and, if so, where does it lead? More research is therefore needed to explore the interplay between the internal and external cultural spheres that currently fuel teachers' work and knowledge-sharing practices.

For the profession itself, one takeaway message relates to how the interactions between external and internal initiatives depend on the professions' capacity to balance influences in a productive manner. How the practices of knowledge sharing are supported and institutionalised is key here because it is through these practices that teachers take ownership of their work and are entrusted with capacities for professional judgment and development. An implication for practice, therefore, is the need to recognise knowledge sharing and epistemic engagement as important to teachers' competencies. This recognition implies shifting attention from individual autonomy to the performance of a collective teacher community and their epistemic agency as well as a recognition of more

specialisation—a research-oriented teacher role in which collaboration, capacity and innovation become part of work.

Questions of autonomy and responsibility continue to lie at the heart of the professionalism debate; however, what these terms imply requires rethinking. Our analysis suggests that the epistemic dimensions of professional work need more attention regarding knowledge sharing, ways of relating to external agents and extended responsibilities for knowledge.

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## References

- Abbott, A. (1988). *The systems of professions: An essay on the division of expert labour*. Chicago, IL: University of Chicago Press.  
<https://doi.org/10.7208/chicago/9780226189666.001.0001>
- Adams, T. L. (2018). *Regulating professions*. Toronto, ON: University of Toronto Press.  
<https://doi.org/10.3138/9781487515447>
- Adams, T. L., Kirkpatrick, I., Tolbert, P. S., & Waring, J. (2020). From protective to connective professionalism: Quo Vadis professional exclusivity? *Journal of Professions and Organization*, 7(2), 234–245. <https://doi.org/10.1093/jpo/joaa014>
- Afdal, H. W., & Damşa, C. (2018). Research-based education: An exploration of interpretations in two professional higher education programmes. In P. Massen, M. Nerland, & L. Yates (Eds.), *Reconfiguring knowledge in higher education* (p. 129–148). Switzerland: Springer International Publishing. [https://doi.org/10.1007/978-3-319-72832-2\\_8](https://doi.org/10.1007/978-3-319-72832-2_8)
- Damşa, C. (2018). Research and Development Tasks in Teacher Education: Institutional Framing and Student Experiences. In Massen, P. Nerland, M. & Yates, L. (Eds.), *Reconfiguring Knowledge in Higher Education* (p. 149-167). Switzerland: Springer International Publishing.
- Darling-Hammond, L., Burns, D., Campbell, C., Goodwin, L., Hammerness, K., Low, E. L., & Zeichner, K. (2017). *Empowered educators: How high-performing systems shape teaching quality around the world*. San Francisco, CA: Jossey-Bass.

- Evetts, J. (2016). Hybrid organizations and hybrid professionalism: changes, continuities, and challenges. In: Wilkinson, A. Hislop, D. & Coupland, C. (Eds.), *Perspectives on Contemporary Professional Work* (p. 16-34). Cheltenham: Edward Elgar Publishing.  
<https://doi.org/10.4337/9781783475582>
- Faulconbridge, J., Henriksen, L. F., & Seabrooke L. (2021). How professional actions connect and protect. *Journal of Professions and Organization*, 8(2), 214–227.  
<https://doi.org/10.1093/jpo/joab008>
- Francis, A. (2020) Law's boundaries: Connections in contemporary legal professionalism. *Journal of Professions and Organization*, 7(1), 70–86.  
<https://doi.org/10.1093/jpo/joaa003>
- Freidson, E. (2001). *Professionalism: The third logic*. Cambridge, UK: Polity.
- Government of Norway. (2017). *Overordnet del: Verdier og prinsipper for grunnsopplæringen [Core curriculum: Values and principles for primary and secondary education]*. Oslo: Kunnskapsdepartementet.
- Hatch, T. (2013). Beneath the surface of accountability: Answerability, responsibility, and capacity-building in recent education reforms in Norway. *Journal of Educational Change*, 14(2), 113–138. <https://doi.org/10.1007/s10833-012-9206-1>
- Hermansen, H. (2014). Recontextualising assessment resources for use in local settings: Opening the black box of teachers' knowledge work. *Curriculum Journal*, 25(4), 470-494. <https://doi.org/10.1080/09585176.2014.956771>
- Hermansen, H. (2017). Knowledge relations and epistemic infrastructures as mediators of teachers' collective autonomy. *Teaching and Teacher Education*, 65, 1–9.  
<https://doi.org/10.1016/j.tate.2017.03.003>
- Hoff, T. (2021). Covid-19 and the study of professionals and professional work. *Journal of Management Studies*, 58(5), 1395–1399. <https://doi.org/10.1111/joms.12694>
- Jensen, K., Lahn, L., & Nerland, M. (2012). *Professional learning in the knowledge society*. Rotterdam, Netherlands; Boston, MA; and Taipei: Sense Publishers.  
<https://doi.org/10.1007/978-94-6091-994-7>
- Karseth, B. & Nerland M. (2007). Building Professionalism in a knowledge society: Examining Discourses of Knowledge in Four Professional Associations. *Journal of Education and Work*, 20(4), 335-355. <https://doi.org/10.1080/13639080701650172>
- Karseth, B., Kvamme, O.A., & Ottesen, E. (2020). *Fagfornyelsens læreplanverk: Politiske intensjoner, arbeidsprosesser og innhold (EVA Rapport 1). [The subject renewal curriculum: Political intentions, work processes and content. Report 1, evaluation research]*. Retrieved from  
<https://www.uv.uio.no/forskning/prosjekter/fagfornyelsen-evaluering/>



- Klette, K., & Smeby, J.-C. (2012). Professional training and knowledge sources. In K. Jensen, L. Lahn, & M. Nerland (Eds.), *Professional learning in the knowledge society* (Vol. 6, p. 143–162). Rotterdam, the Netherlands: Sense Publishers.  
[https://doi.org/10.1007/978-94-6091-994-7\\_8](https://doi.org/10.1007/978-94-6091-994-7_8)
- Knorr Cetina, K. (1982). Scientific communities or transepistemic arenas of research? A critique of quasi-economic models of science. *Social Studies of Science*, 12(1), 101–130. <https://doi.org/10.1177/030631282012001005>
- Knorr Cetina, K. (1983). The ethnographic study of scientific work: Toward a constructivist interpretation of science. In K. Knorr Cetina (Ed.), *Science observed: Perspectives on the social study of science* (p. 115–140). London: Sage.
- Knorr Cetina, K. (1991). Epistemic cultures: Forms of reason in science. *History of Political Economy*, 23(1), 105–122. <https://doi.org/10.1215/00182702-23-1-105>
- Knorr Cetina, K. (1999). *Epistemic cultures: How the sciences make knowledge*. Cambridge, MA: Harvard University Press.
- Knorr Cetina, K. (2007). Culture in global knowledge societies: Knowledge cultures and epistemic cultures. *Interdisciplinary Science Reviews*, 32(4), 361–375.  
<https://doi.org/10.1179/030801807X163571>
- Knorr Cetina, K. & Reichmann W. (2015). Professional epistemic Cultures. In: I Langmeyer, M. Fischer, and M. Pfadenhauer (Eds.), *Epistemic and Learning Cultures: Wohin sich Universitäten entwickeln* (p. 18-33). Weinheim: Juventa Verlag.
- Lahn, L. C. (2012). The use of knowledge sources among novice accountants, engineers, nurses and teachers: An exploratory study. In K. Jensen; L.C. Lahn & M. Nerland (Eds.), *Professional Learning in the Knowledge Society* (p. 109-123). Rotterdam, Netherlands: Sense Publisher.
- Lehtinen, E., Hakkarainen, K., & Palonen, T. (2014). Understanding learning for the professions: How theories of learning explain coping with rapid change. In S. Billett, C. Harteis, & H. Gruber (Eds.), *International handbook of research in professional practice-based learning* (p. 199-224). New York: Springer.  
[https://doi.org/10.1007/978-94-017-8902-8\\_8](https://doi.org/10.1007/978-94-017-8902-8_8)
- Mieg, H. A., & Evetts, J. (2018). Professionalism, science, and expert roles: A social perspective. In K. A. Ericsson, R. R. Hoffman, A. Kozbelt, A. M. Williams. (Eds.), *The Cambridge handbook of expertise and expert performance* (2. ed., p. 127–148). Cambridge, UK: Cambridge University Press.  
<https://doi.org/10.1017/9781316480748.009>
- Nerland, M. (2012). Professions as knowledge cultures, In K. Jensen; L.C. Lahn & M. Nerland (Eds.), *Professional learning in the knowledge society* (p. 27-48). Rotterdam, Netherlands: Sense Publisher.

- Nerland, M., & Jensen, K. (2014). Changing cultures of knowledge and professional learning. In S. Billett, C. Harteis, & H. Gruber (Eds.), *International handbook of research in professional and practice-based learning* (p. 611–640). Dordrecht, Netherlands: Springer. [https://doi.org/10.1007/978-94-017-8902-8\\_23](https://doi.org/10.1007/978-94-017-8902-8_23)
- Nerland, M. & Karseth, B. (2015). The knowledge work of professional associations: approaches to standardization and forms of legitimization. *Journal of Education and Work*, 28(1) 1-23. <https://doi.org/10.1080/13639080.2013.802833>
- Noordegraaf, M. (2007). From pure to hybrid professionalism: Present-day professionalism in ambiguous public domains. *Administration and Society*, 39(6), 761–785. <https://doi.org/10.1177/0095399707304434>
- Noordegraaf, M., Van der Steen, M., & Van Twist, M. (2014). Fragmented or connective professionalism? Strategies for professionalizing the work of strategists and other (organizational) professionals. *Public Administration*, 92(1), 21–38. <https://doi.org/10.1111/padm.12018>
- Noordegraaf, M. (2016). Reconfiguring professional work: Changing forms of professionalism in public services. *Administration & Society*, 48(7), 783–810. <https://doi.org/10.1177/0095399713509242>
- Noordegraaf, M. (2020). Protective or connective professionalism? How connected professionals can (still) act as autonomous and authoritative experts. *Journal of Professions and Organization*, 7(2), 205–223. <https://doi.org/10.1093/jpo/joaa011>
- Noordegraaf, M. (2021). Protective and connective professionalism: What we have learned and what we still would like to learn. *Journal of Professions and Organization*, 8(2), 228–236. <https://doi.org/10.1093/jpo/joab009>
- OECD. (2013). *Education policy outlook: Norway*. Retrieved from [http://www.oecd.org/norway/EDUCATION%20POLICY%20OUTLOOK%20NORWAY\\_EN.pdf](http://www.oecd.org/norway/EDUCATION%20POLICY%20OUTLOOK%20NORWAY_EN.pdf)
- OECD. (2019). *Improving school quality in Norway: The new competence development model, implementing education policies*. Paris: OECD Publishing. Retrieved from <https://doi.org/10.1787/179d4ded-en>
- Rossman, G. B., & Yore, L. D. (2009). Stitching the pieces together to reveal the generalized patterns: Systematic research reviews, secondary reanalyses, case-to-case comparisons, and metasyntheses of qualitative research studies. In M.C. Shelley, L.D. Yore, & B. Hand (Eds.), *Quality research in literacy and science education* (p. 575–601). Dordrecht: Springer. [https://doi.org/10.1007/978-1-4020-8427-0\\_26](https://doi.org/10.1007/978-1-4020-8427-0_26)
- Sachs, J. (2016). Teacher Professionalism: Why are we still talking about it? *Teachers and Teaching Theory and Practice*, 22(4), 413-425. <https://doi.org/10.1080/13540602.2015.1082732>

- Styhre, A. (2011). *Knowledge sharing in professions: Roles and identity in expert communities*. Farnham, UK: Gower Publishing.
- Tronsmo, E., & Nerland, M. (2018). Local curriculum development as object construction: A sociomaterial analysis. *Teaching and Teacher Education, 72*, 33–43.  
<https://doi.org/10.1016/j.tate.2018.02.008>
- Tronsmo, E. (2019). Investigating teachers' work with multiple knowledge resources in local curriculum development. *Pedagogy, Culture & Society, 27*(4), 555-574,  
<https://doi.org/10.1080/14681366.2018.1539025>
- Tronsmo, E. (2020). Changing conditions for teachers' knowledge work: new actor constellations and responsibilities. *The Curriculum Journal, 31*(4), 775-791.  
<https://doi.org/10.1002/curj.60>
- Vanthournout, G., Noyens, D., Gijbels, D., & Van den Bossche, P. (2014). The relationship between workplace climate, motivation and learning approaches for knowledge workers. *Vocations and Learning, 7*(2), 191–214. <https://doi.org/10.1007/s12186-014-9112-1>
- Vennebo, K. F., & Ottesen, E. (2014). The emergence of innovative work in school development. *Journal of Educational Change, 16*(2), 197-216.  
<https://doi.org/10.1007/s10833-014-9234-0>
- Wollscheid, S., & Opheim, V. (2016). Knowledge brokering initiatives in education—A systematic map of the Nordic countries. *Nordic Journal of Studies in Educational Policy, 2016*(1), 311111. <https://doi.org/10.3402/nstep.v2.31111>

## **Social Closures: Reconfiguration of Professional Work in the Danish State School**

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### **Abstract**

The interconnectedness between the formation of a professional group and its specific tasks and competencies is at the core of sociological theories of professions. In neo-Weberian approaches to social closure, the shaping and maintenance of professional groups have been conceptualised as state-sanctioned efforts to gain control over a specific task area. However, whereas legally sanctioned monopolies have been subject to certain attention, the social dynamics of processes of professional closure in everyday work practices seem relatively unexplored. This article demonstrates how social closure can be analysed as interrelated processes, covering legal as well as practical, symbolic elements. Drawing on the case of the 2014 Danish School Reform and its introduction of a new professional group in Danish schools, “pedagogues”, the article sheds light on the interplay between a state-driven reconfiguration of a task area and the subtle dynamics of symbolic struggles between the two professions teachers and pedagogues.

### **Keywords**

Professional formation, social closure, symbolic struggles, professional collaboration, pedagogues, teachers

For decades, Max Weber's concept of social closure has been central to professional studies, both as a theoretical approach to studies of professionalisation and in debates on how to conceptualise Weber's thinking methodologically (Harrits, 2014; Harrits & Larsen, 2014; Larson, 1977; Saks, 2010, 2012). As such, the academic discussion has revolved around how to operationalise Weber's concept in specific studies, and, as part of this, how and where to localise important dynamics of social closure. In these discussions, it has been argued that neo-Weberian studies of professions have neglected the importance of state sanction in processes of professionalisation and have overlooked the analytic potential of studying the role of legal closure (Saks, 2012; Saks & Adams, 2019). Others point to the untapped potential in examining the intersections of knowledge and power—the symbolic dimensions of professionalisation—and, as such, developing an expanded concept of social closure (Harrits, 2014; Harrits & Larsen, 2014; Hindhede & Larsen, 2020).

This article seeks to contribute to professional studies by drawing on these discussions to analyse processes of legal as well as symbolic forms of closure. Using the case of the changing boundaries between two professions, *teachers*, and *pedagogues*, in the Danish state school, the article presents new insight into the intricate relationship between the state-driven reconfiguration of a task area and the symbolic processes performed in the new working relationship. Against the backdrop of the political altering of professional boundaries, the article sheds light on the nature and dynamics of symbolic struggles between professional groups. It thus seeks to demonstrate the fruitfulness of analysing social closure as interrelated processes in the state-legal field as well as in the field of practice.

## **Social closure and the continuing development of professional studies**

The interconnectedness between the formation of a professional group and its specific knowledge and licensure is at the core of sociological theories of professions. Following from Max Weber and his thinking on “social closure”, the formation and maintenance of professional groups have been conceptualised as efforts to gain status and control over a specific task area and, at the same time, to exclude other groups (Larson, 1977; Parkin, 1979; Weber, 2003a, 2003b). However, scholars continue to discuss the concept of social closure and how Weberian thinking can contribute to the sociology of professions.

According to Saks, neo-Weberians have defined professions in terms of “exclusionary social closure in the marketplace sanctioned by the state”, downplaying the role of knowledge and expertise, which were ascribed significant importance in the taxonomic tradition of professional studies (Saks, 2012, p. 4). More recently, Saks and Adams have stressed the need for studies that can shed light on state decision-making and its role in professional formation, or what they term as the *black box* of policy formation (Saks & Adams, 2019). As

a contribution to the “un-black-boxing” of this issue, these authors and others have conducted studies on state-legal support of professionalisation processes such as the medical profession in UK (Saks & Adams, 2019), Canadian health care (Adams & Saks, 2018), and veterinarian medicine in Britain (Whiting, May & Saks, 2020).

Adding to the discussion on how professions are constituted, Harrits and Larsen examine the role of the social closure concept in the sociology of professions, stating that “legal codification is only one way of establishing professional closure” (Harrits & Larsen, 2014, p. 18). Referring to Tilly and Bourdieu, they suggest considering symbolic mechanisms as sources of social closure in order to understand closure as a result of relational struggles of power between professional groups. Harrits, therefore, suggests a revision of the closure concept, conceptualising professional closure as the intersection of legal, social and symbolic forms (Harrits, 2014, p. 5-8).

The study presented in this article takes its starting point in these discussions. It draws on neo-Weberian thinking as it examines political-legal processes that were guided by the thought that a new profession—in this case, the *pedagogue*—and its associated knowledge and expertise could help to renew the Danish state school. Further, the study examines the effects of state-legal reforms in professional practice. Here the concept of social closure works as an analytical lens to reveal the nature of struggles between professions, specifically the symbolic divisions and distinctions in everyday practices (Bourdieu, 1977). The article thus analyses social closure as both a legal and symbolic process, showing how state decision-making establishes new jurisdictional boundaries between two professional groups in the Danish state school and how those boundaries are performed and challenged in processes of collaboration.

The study is enabled by a research design combining a study of policy papers and ethnographic fieldwork in schools. As they are based mainly on sociological traditions, professional studies do not have a strong tradition of incorporating ethnographic studies of the interaction between professional groups. However, ethnographic fieldwork can be a fruitful methodology to gain insight into the subtle processes of symbolic struggles performed in everyday practice. The article thus explores symbolic aspects of social closure as performed through professional practice and the knowledge invested herein. This part of the study draws on theory of practice and the *New Sociology of Knowledge*, both of which conceptualise knowledge as practices (Bourdieu, 1977, 1990; Camic, Gross & Lamont, 2011). Further, to be able to capture the nature of professional practice as underpinned by the materiality of institutional settings, methodological inspiration is drawn from new materialism (Coole & Frost, 2010). By taking this approach, the study aims to un-black-box professionalisation processes studied as everyday practices, here conceptualised as symbolic boundary struggles between professions (Lamont & Molnar, 2002).

Social closure is thus studied as processes played out not only in the political field but also in the field of practice. The point is that struggles to determine jurisdictional boundaries between professional groups can be observed in both fields, and that jurisdictions claimed through legal processes do not present a clear-cut space waiting to be filled by the professionals. Rather, state legal reconfigurations can actually fuel the reinforcement of boundaries and the testing of them through everyday practices. As such, the article does not only contribute a study from the Nordic context to the body of research on state-sanctioned professionalisation processes, it also provides insight into power struggles that can follow from a political altering of boundaries between professions, and how these types of processes can be studied as micro-practices.

### **Legal and symbolic aspects of social closure: Methods and analytical strategy**

The analyses presented in this article are based on a study of policy documents and a study of professional practice in classrooms; the latter of which was conducted as part of a PhD project on professional knowledge in welfare work (Brodersen, 2019). In the first section, the analysis takes a political starting point from the Danish state school (folkeskole) reform in 2014, focusing on the actors and rationales that fed into the reform process. This analysis is based on political documents that were selected to examine how diverse actors—politicians, ministerial departments, trade unions—stated their arguments in the process leading to the 2014 Danish School Act. The analytical strategy addresses the question of how different elements of their visions for the Danish folkeskole created a discursive necessity for a new profession in Danish classrooms, the pedagogue, and how the drafting of the new legislation reflects a political will to alter the traditionally dominant position of teachers in Danish classrooms.

In the second section, the analysis takes its departure in the school setting, focusing on how professional knowledge—as practised in the classrooms—is central to the adaptations of and struggles between teachers and pedagogues. In relation to the previous section, this analysis aims to highlight what happens when state-initiated changes to school staffing actually materialise in the classrooms. This section draws on ethnographic fieldwork conducted in Danish schools, illuminating how professional knowledge and tasks are performed in the new context. The concept of social closure is used as a way to comprehend the logics of boundaries in classrooms' day-to-day practices. Analysing knowledge as practice can thus shed light on the nature of symbolic closure, which is observed as hierarchical divisions of roles and tasks between the two professional groups.

The following section illustrates how the pedagogue started to be framed as a necessary profession in Danish schools through political debate and legislation work. It draws inspiration from Bacchi's (2009) approach to policy analysis, aiming to highlight implicit representations of what is perceived to be "the problem". The political and governmental

documents are analysed in order to identify the core rationales that fed these processes and how they led to claims that new professional knowledge was needed in schools. The intention is to explore the multiple rationales that fuelled the shaping of a need for reform, and, as such, influenced processes of legal closure.

## **Making pedagogues a “necessity” in Danish state schools**

Under the latest school reform, *pedagogues* entered the Danish classroom, a work setting that, until then, had primarily been the domain of the teachers. Pedagogues are a professional group specific to Denmark; they are trained for three-and-a-half years at University Colleges and, on top of their broad qualification, they are specialised in three areas: early childhood education and care, social work, and school and leisure time pedagogy. In comparison, teachers employed at the Danish *folkeskole* study for four years at University Colleges in curriculum and subject-specific areas.

The general integration of pedagogues into Danish classrooms was a consequence of the 2014 state school reform and its stated objective to strengthen the academic performances of Danish pupils (Ministry of Children and Education, 2013b). However, the Danish schools' employment of pedagogues was a continuation of a process that had been underway for some time. School authorities in a number of municipalities had in previous years made use of pedagogues in the younger classes. In some cases, this was due to efforts to obtain better results, especially among pupils from a migrant background, including the introduction of extended school hours, which also became an element of the 2014 school reform (Holm, 2009; Jacobsen, 2012).

The political decision to staff classrooms with pedagogues as well as teachers can be regarded as the culmination of a range of political efforts aimed at changing the *folkeskole*. Taking a closer look at Danish school policies and reforms over recent years, it can be argued that three main rationales fuelled the “need” for pedagogues in schools: A rationale of *inclusion*, focusing on children's needs and rights; a rationale of *performance*, emphasising the academic achievement of Danish pupils; and a rationale of *efficiency* as “value-for-money” thinking. Whereas these rationales could be considered as conflicting, they all had an influence on the political arguments that eventually prompted changes to how the schools operate in practice. To support this claim, I unfold how evidence of these rationales can be observed in the recent school reform and how they have constituted struggles in relations between teachers' and pedagogues' unions and politicians.

## **Inclusion policy: Equality and efficiency**

Drawing on international human rights movements, the Salamanca Statement in 1994 was approved by a large number of states, including Denmark (UNESCO, 1994). The statement entails an obligation to ensure that children with special education needs have access to public schools, and that these schools should provide “a child centred pedagogy capable of



meeting these needs” (UNESCO, 1994, §2). However, the Danish approval of the Salamanca Statement and the UN convention on the rights of persons with disabilities in 2009 did not seem seriously to affect Danish school policy until 2010, when the Ministry of Finance published a report on special education (Ministry of Finance, 2010; Ratner, 2012, p.107). Despite stating that special education has positive effects, the report concludes that “special education, as the political objectives pledge, could be organised more inclusively within the regular *folkeskole* setting to a greater extent than it is today” (Ministry of Finance, 2010, p. 11). Indirectly, this statement was supported by an outline of state funds for special needs education, which amounted to DKK 12.8 million in 2008/2009 (Ministry of Finance, 2010, p. 13). In 2012, the reform known as the “inclusion law” was enacted, which entailed that children who needed less than nine hours of special educational support a week were no longer eligible to attend special needs education (The Danish Parliament, 2012). In practice, this meant that a larger group of children had to be taught together with their peers in “normal” classrooms.

Whereas teachers have generally found it difficult to disagree with the underlying principles and ideals of inclusion policy, the debate following the “inclusion law” was harshly critical towards the actual conditions for realising these ideals (e.g., Schmidt & Langager, 2012). The Danish Teachers’ Union (DLF) acknowledged the overall aim of inclusion, but at the same time, it purported a demand for more resources. Specifically, DLF called for the staffing of classrooms to include two teachers at a time, and in their statement on “inclusion” DLF did not mention pedagogues, although at the time pedagogues had already started entering Danish classrooms (DLF, 2013b).

Inclusion policy in the Danish *folkeskole* can be regarded as being carried by two main arguments: a democracy and equality argument in tune with human and disability rights movements, and an economic efficiency argument underpinned by an alleged demand to reduce expenditure in the Danish public sector. According to economist Henrik H. Lund, the passing of the “inclusion law” was equally caused by a “restoration and zero growth policy” launched by the Venstre-Konservative government (liberal and conservative parties) in 2010, targeting the Danish municipalities under which the *folkeskole* belongs (Lund, 2012, p. 20). Thus, the democracy-equality argument and the economic efficiency argument are closely linked and together they have influenced the political reasoning behind the integration of pedagogues in the Danish *folkeskole*.

### **The 2014 Danish School Act: Better performance via new means**

Political efforts to reform the Danish *folkeskole* continued over the following years. The reform work took its departure in a problematising of Danish pupils’ performances, thus continuing a long political discussion on the capability of schools and teachers to raise

academic standards. As part of the law-forming process, a letter of the agreement stated some of the “major challenges” experienced in the Danish *folkeskole*:

“The academic standards—particularly in Danish and mathematics—are not at a sufficient level. Danish pupils are ranked as “average” in the OECD in Danish, mathematics, and science at the time when they complete school. In addition, we do not improve the potential of the poor academic achievers or the stronger pupils” (Ministry of Children and Education, 2013a, p. 1).

Further, the letter problematises the number of pupils that are referred to special education and stresses the need to improve the performances of all pupils, “so we are able to perform in the increasing international competition” (Ministry of Children and Education, 2013a, p. 1). As such, the key rationale behind making a school reform necessary is primarily focused on performance and is thus in line with international trends. National governments are often found to orchestrate school policy to provide “answers” to the international ranking of pupils and education systems (Steiner-Khamsi, 2017, p. 69). As stated by Swedish educational historian Joakim Landahl, international comparative systems like PISA have provoked an “awareness of crisis” in national school debates, which urges governments to take action (Landahl, 2017).

In the Danish case, this action was taken through the 2014 school reform, which was launched as the *New Nordic School*, as it was claimed to build on Nordic traditions of social orientation and progressive education, as well as taking inspiration from the school system in Ontario, Canada (Antorini, 2012). Under the headline “An extended and diverse school day with better teaching and learning”, the central reform elements were more *exercise* during school days, the idea of an *open school*—implying active involvement in the local community—and *supportive teaching*. The latter element assigned a specific task to pedagogues in the school setting (Ministry of Children and Education, 2013b). Minister of Education Antorini stated that “Pedagogues play a central role in our school reform proposal, because the whole vision of pupils receiving more teaching lessons in a more varied manner requires a close cooperation between teachers and pedagogues” (Antorini, 2013). Further, the minister emphasised that the school reform depended on the development of new teaching and learning methods utilising the pedagogues’ skills, which build on pedagogical traditions from leisure centres.

The reform thus represented a new answer to the persistent Danish *folkeskole* “performance crisis”, framing *inclusion* more as a matter of boosting the academic achievements of all children than of enabling equal opportunities to be part of a school environment. A central part of the reform was its emphasis on new means of achieving schools’ political goals, meaning new ways of teaching, and, as part of this, deploying other types of professional skills in the school setting. In other words, teachers were no longer regarded as the only professionals capable of coordinating the learning processes of Danish

pupils. As discussed by other scholars, a discursive shift in the framing of the task of coordinating learning processes, from the teacher-centred term “teaching” to the pupil-centred “learning”, took place (Kampmann, 2015). In line with this shift, the Pedagogues’ Union (BUPL) welcomed the new role of the pedagogue, describing the reform as “an opening to a broader perspective on learning and Bildung” (BUPL, 2013). Conversely, the teachers’ union DLF emphasised the school as a “learning site”, meaning that activities in school should be goal-oriented and not “loose” (DLF, 2013a). Thus, the school reform was open to interpretation—and contention—about the purpose of the school and, consequently, of what the teachers’ and pedagogues’ actual tasks should be in future classrooms (Thingstrup, Schmidt & Andersen, 2017). These attempts to define the central purposes and methods of the school can be seen as a boundary work, where the two professions strive to either “fence in” or expand their territory (Abbott, 1988; Lamont & Molnár, 2002). During the reform process, DLF fought to maintain control over teaching work in schools and succeeded in this, as in the letter of the agreement it was stated that “the teacher possesses the general competence to teach” (DLF, 2018; Ministry of Children and Education, 2013a, p.18). However, the pedagogues’ union BUPL expressed great expectations regarding their role in the reformed school, as stated by the chairman of BUPL: “I am convinced that our many skilled pedagogues will make a great difference, as they, together with the teachers, will succeed in creating a genuinely new and different school day” (BUPL, 2014).

Summing up, the 2014 school reform offered a new response to ongoing political concerns about academic performance and efficiency in Danish state schools. The integration of pedagogues into the school setting and the introduction of new subjects and activities under the “New Nordic” banner (drawing on ideas from progressive educational traditions) formed a practical and discursive attempt to alter (what was framed as) an ineffective and outdated school structure. Although the teachers’ union succeeded in asserting its stance on the overall competence of teaching in schools, the integration of a new profession in classrooms constituted an attempt to curtail teachers’ jurisdiction over what had previously been their undisputed task area. The framing of pedagogues as a necessity in classrooms can be regarded as state-initiated pressure on the jurisdictional boundaries of the teacher profession. The new situation also put pressure on pedagogues, although this pressure was perceived by the pedagogues’ union as a stepping-stone towards a higher status for their profession. As such, the case of the Danish school reform can be discussed as a state-driven process that has succeeded in forcing a partial “opening” of the legal boundaries between the two professional groups, teachers, and pedagogues.

Whereas the political reform established a new framework for the school, the impact of this framework on classroom practices was yet to be determined. In the next section, the study makes an empirical and analytical shift by focusing on how teachers and pedagogues performed classroom work after the school reform. The focus is not on whether the school

reform is implemented according to its ideals, but on the patterns of practise whereby the two professional groups carry out their tasks in the context of the reformed school.

## **Performing classroom tasks: Practical and symbolic divisions and boundaries**

Turning to the study of classrooms in Danish schools, the aim of the following section is to examine symbolic struggles embedded in the collaborative practices of the two professions. Whereas the previous analysis illustrated the making of legally supported boundaries between teachers and pedagogues, this section examines how professional boundaries are performed and shaped in and through classroom practices during lessons staffed with both a teacher and a pedagogue. The analysis is concerned with how professional tasks and knowledge constitute a social dynamic in the relationship between professional groups over a period of time in which school and classroom work is being reconfigured. “Social closure” is used as inspiration for an analytical strategy that asks how the knowledge of teachers and pedagogues is performed respectively; that is, whether and how tasks are being divided or fought over in classrooms, and what the distribution of tasks reveals about the relationship between the two professions. Knowledge is studied as socio-material practices, as ways of doing things (Bourdieu, 1977, 1990; Camic, Gross & Lamont, 2011; Coole & Frost, 2010). Analytically, symbolic closure is thus captured as an ongoing process in which knowledge and task areas are struggled over and eventually divided.

The first part of the analysis focuses on how classroom work is being realised through a complex of bodily and material practices, whereby tasks are distributed between teachers and pedagogues. The second part illustrates how pedagogues and teachers are engaged in occupying a specific task area, namely supporting children’s wellbeing and their conditions to thrive at school. By adopting a processual and micro-ethnographic perspective, the analysis focuses on the processes which, through symbolic dimensions, are becoming effective as dynamics of closure. The analysis draws on empirical data from fieldwork taking place in 3rd-grade classrooms in two Danish schools from 2015-2016, here termed the South school and the North school. The schools were selected taking into account socioeconomic diversity in the student base. The analyses below draw on classroom observations during lessons staffed with both a teacher and a pedagogue as well as interviews with these professionals.

### ***Divisions of labour: Zones, things, bodies***

The school bell is ringing, and the pupils are entering the classroom from the schoolyard. They sit on their chairs, all facing the whiteboard. Their teacher, Hanne, comes in and settles on the office chair by the whiteboard. She then reaches out to press the top of a bell, which makes a loud “ding!” sound. This makes the pupils stop chatting—almost. The teacher looks intensely at a pupil whose face is turned

towards another pupil, and then everybody is quiet, now looking at the teacher. Martin, the pedagogue, is standing alongside the rows of pupils. From this position, he is looking alternately at the teacher and the pupils. If one of them starts talking or moving, he moves to them and lays a hand on the noisy pupil. (Field note, South school)

A scene like this was typical of how school days and lessons started at the South school, and a similar practice was observed at the North School. Most often, this introduction was followed by a teacher-initiated dialogue (the teacher asking questions and the pupils answering after having put up their hands), a presentation of the day's subject and learning objectives and the children being put to work, either by themselves or in small groups. This classroom practice seems to be carried out within a relatively firm frame in which the pupils, teachers and pedagogues are situated in specific places at specific times during the school day and work in accordance with a common knowledge of what is to be done and by whom. What has frequently been described as a collaboration between professionals can thus be studied in the form of tacit agreements on how to perform practice, which the actual division of labour in classrooms can reveal. In the following, the spotlight is pointed at such divisions and how they work as—and mirror—mental and practical orientations for teachers and pedagogues as well as pupils.

The empirical snapshot above can point to how the material arrangement and use of classrooms draw on implicit expectations of what a teacher, a pedagogue and a pupil should perform in the room. Based on the observations, classrooms can be viewed as being divided into an “upper” and “lower” zone that mark the divisions of tasks between the teacher and the pedagogue. During the lessons, teachers are generally more often situated in the whiteboard area “in front of” the pupils, while the pedagogues are most often situated “down” by and next to pupils. This division of the room into zones is interwoven with differentiated bodily practices. For instance, teachers generally use their voices as a means to manage the class, either by using “teaching language” (i.e., introduction, dialogue) or by telling pupils to be quiet, often with the sound “schh-schh” during lessons. Some teachers generally lower their voice, which is supposed to make pupils prick their ears up and listen. Pedagogues, on the contrary, are often (expected to be) quiet and let the teachers do the talking. From their position “down” by and close to the pupils, they move around, often putting an arm around or a hand on a pupil. Expectations of the role of pedagogues in classrooms were expressed during teacher interviews, for instance by a teacher who praised a pedagogue for “not being too forward (...) but listening”.

The whiteboard is located on the end wall and close to an office chair and a table. This area and these things are generally only used by teachers; at the beginning of the lessons, they always place themselves close to the whiteboard, placing materials like books and papers on the table. Pedagogues do not have a table or equipment that marks their presence or belonging to the room. Along the walls, bookcases are

situated; pupils have their own boxes where they place their books and the work they have done. There is also a locker where teachers keep their materials. (Field note, North school)

The differentiated use of speech and positioning of bodies in the room is interconnected with the use of things. The bell, the whiteboard, papers, and books are things connected to teachers, whereas the material support of the pedagogue in the room is weak but reflects the fact that he or she is expected to move around the classroom, often to handle disruption. In both a practical and symbolic sense, pedagogues appear to be “empty-handed” in the room, although pedagogues do have tasks of their own, in particular to observe the pupils and quickly take action when needed. However, pedagogues express dissatisfaction with this empty-handedness, as the fieldwork revealed. One day at the North School, when a teacher, Jacob, asked a pedagogue, Sanne, to distribute some papers among the pupils, Sanne looked at me and said, “For once, I am allowed to distribute the papers. Jacob uses to split the papers between us, and it is annoying not to be allowed to do it yourself”. This uneasiness with being “empty-handed” can be viewed in relation to the fact that pedagogues working in schools are still based in after school centres, where the use of materials and activities are part of a long-standing pedagogical tradition (Hansen, 1999; Krab & Andersen, 2015). As such, the “belonging” of classroom materials and things to teachers leaves a material and bodily vacuum for pedagogues and seems to evoke a sense of alienation among them.

### ***A space of one's own: Struggles around the division of tasks***

Based on the previous analysis, the basic structure of classrooms can be interpreted as being relatively untouched by the integration of pedagogues, as they are generally engaged in supporting well-established teaching practices in school. In this respect, the presence of pedagogues can be seen as supporting the teacher-centred pedagogical tradition, which the rationales of inclusion, performance and efficiency might have intensified. However, the establishment of the pedagogues' tasks and the processes leading to divisions of labour in classrooms can be observed as still *in the making*. Findings from the fieldwork thus point to pedagogues' struggles to capture—or construct—a “space of their own” in the school, that is, a domain where (what they see as) their specific competencies can be unfolded. The domain in which the pedagogues' skills are distinctly being applied is the promotion of children's well-being in school, which the pedagogues often call “relational work”.

During the interviews, the teachers generally acknowledged the pedagogues as having a good grip on relational work, but at the same time, they emphasised that nurturing children's well-being was an important part of a teacher's job. As stated by teacher Hanne, this “makes our job really fascinating, because you need to get to know particular groups of children (...) and how you adjust them”. Teachers express frustration because the weekly scheduled *class time* previously allocated to relational work was abolished as part of the

school reform, which described pupils' well-being as a main focus of supportive teaching and, as such, chiefly a task for pedagogues. Teacher Karin remarks, "I do not understand how they could even think of cutting back a thing like this. I simply don't understand it". In response to the teachers' dissatisfaction, the school management at both of these schools decided to revert some lessons to the previous "class time" format to keep this element as a part of the teachers' portfolios.

Whereas neither the school reform nor the actual practices in the classrooms can be seen as seriously questioning the notion that teaching, as a field of work, belongs to teachers, the task of promoting children's well-being in school has turned out to be a disputed area that both the teachers and the pedagogues claim to have specific competencies in and a commitment to. However, in everyday classroom practice, this dispute seems to have been settled by dividing the task between the teachers and pedagogues. Interestingly, it appears that different ways of dealing with the promotion of well-being are related to the actual spaces, that the school and classroom traditions leave open for these practices. For teachers, their ways of dealing with children's well-being are shaped according to the teaching practice of addressing the whole class as a group. This becomes apparent when teachers emphasise the importance of *class time* and the way it is being performed. The following excerpt is from *class time* at the North school:

The pupils and the teacher, Jacob, are sitting on chairs placed in a circle. Jacob tells the pupils to suggest themes they want to bring up during the meeting. A girl puts her hand up and says "there is someone who smashes [the ball] when we play cheese". Many pupils have their hands up. Jacob says they should suggest solutions to the problems they mention. Nobody suggests any solutions and instead they go on telling about problems they experienced in the game. Jacob tells them to reach an agreement on the rules of the game. (Field note, North School)

The excerpt illustrates how working with well-being in the class is framed within a common type of pedagogical arrangement, teacher-initiated dialogue, which is a predominant method used in the two classrooms. In the context of the module *class time*, this pedagogical form is levelled towards teaching children a sort of participatory democracy (de Coninck-Smith, Rasmussen & Vyff, 2015, p. 27), expressed through the teachers' attempts to get pupils to participate in proposing themes to discuss as well as their solutions. Whilst aiming to downplay the hierarchical relationship between the teacher and pupils, materialised through the arrangement of chairs in a circle, the dialogue follows an instructional logic with the teacher positioned as a leader of the group.

In contrast to this approach, the pedagogues' engagement in promoting well-being can be observed as operating in different ways. During school days, this kind of work takes place in rather quiet and unnoticeable modes, often during breaks or intervals while the teacher is teaching, and rather than addressing the whole class, the pedagogues' work with children's

well-being focuses on small groups or individual pupils. Pedagogue Kasper emphasises his particular focus on the dynamics of small groups of children stating, “Actually, I’m one of the best at handling groups of girls”. He describes the promotion of a good atmosphere in the classroom as being dependent on specific knowledge about groups of girls and boys respectively. Pedagogue Jonas also discusses groups of children who call for his attention, “quiet girls”, for instance. Talking about a specific girl, he says, “I do not like her being so quiet. And there are more of these types of girls, I want to reach them as well. They should be happy to go to school”.

During school days, pedagogues can be observed moving around, keeping an eye on specific pupils and, as such, monitoring and intervening when considered necessary—as is the case with Jonas and a boy who is often involved in fights. Jonas explains that in order to avoid the boy feeling under surveillance and, not least, his classmates observing the presence of the pedagogue, Jonas follows the boy from a distance. During breaks, Jonas is in the schoolyard, and while he talks to the other children, he is keeping an eye on the boy. If any trouble starts, Jonas subtly makes a sign, signalling to the boy that he should withdraw. Jonas explains that this use of signs is something he initiated, and the boy reacts to without them ever talking about it.

The analysis in this section illustrates how promoting children’s well-being in school is regarded as a core task by both teachers and pedagogues, but also how this task is being understood and addressed in different ways by the two groups. Whereas teachers in ‘class time’ deal with ‘well-being’ as an activity involving the whole class as a group, positioning pupils as participants in a democratic setting, the pedagogues’ approaches take place in less formally planned settings and more as day-to-day actions. Rather than being an open conflict about who has the responsibility and competence to manage the task of well-being in school, there appears to be a state of balance. However, this balance draws on the division of space, things and activities in classrooms whereby teachers primarily deal with the class as a whole group and pedagogues, from their alert positions, respond to perceived needs from individual children or smaller groups. The ordering of the classroom can be described as reflecting a symbolic order of things, positioning the teacher—physically and symbolically—close to tasks and items that are regarded as crucial to the school and teaching work, such as the whiteboard, the bell, the papers and books. At the same time, pedagogues can be observed as being attentive to whenever the teachers or their schedules are at risk of being interrupted by the pupils.

## Discussion

The article has examined processes of social closure in two fields: a state-legal field and a field of practice in the Danish *folkeskole*. The analysis of the political processes leading to the introduction of pedagogues in Danish classrooms illuminated three rationales behind the political push to alter the Danish state school. Policies actively constitute “problems” by



giving them specific shapes and shedding light on the policy rationales that fuelled the reform process provides insight into the dynamics of state-legal closure. The analysis thus illustrates how a new legal framework seems to be urged by arguments founded in broader rationales with which the professional groups concerned cannot disagree; in this case the claim for inclusion of all children and for better academic achievements among Danish pupils. Accepting these premises, the unions for both professional groups — the teachers and pedagogues — actively sought to optimise their situations. Whereas the teachers' union struggled and broadly succeeded to maintain control over the teaching domain, the pedagogues' union embraced the school reform, welcoming it as an acknowledgement of the pedagogues' skills and knowledge. Processes of legal closure can thus be observed as being captured and utilised by the unions of the professional groups as a means to either maintain or gain control over specific expertise and work areas.

Although, in the political process, the professional group pedagogues was positioned as having the knowledge and skills needed to achieve a "reformed school", the second part of the analysis demonstrates that legally establishing a new task area does not necessarily create a clear-cut space in which pedagogues can work in the classrooms. Pedagogues' knowledge can be observed as a supporting practice aimed at ensuring that the children pay attention during the lessons planned and led by the teachers. In this setting, the pedagogues' dubious position—both physically and figuratively *in between* the pupils and the teacher—is materialised in the absence of distinct work tools for the pedagogues as well as in their physical placement in the classrooms. As such, the ordering of the classrooms can be interpreted as a symbolic closure, where the teacher is placed (practically and symbolically) in front of the pupils and the pedagogue is placed next to the pupils, watching. From this position, the pedagogues can be observed as practising "relational work", a task often discussed as an important feature of a pedagogue's skills (Sauzet, 2019). However, both the teachers and pedagogues make jurisdictional claims for the task of promoting children's well-being. The mutual performance of this task can be interpreted as—for the moment—being stabilised through a practical division of labour. Observed through the lens of everyday practices in school, the reform and its "opening" of classrooms as a common work area for the two professions seem to place pedagogues in a supporting position as the teachers' right-hand-men, which in light of the political pressure on schools to fulfil political demands for inclusion, performance and effectiveness are understandable.

The article has thus illuminated the nature of processes of social closure in two fields and their intricate relationship. As demonstrated, legal reconfiguration of professional boundaries performed by state actors does not shape a well-defined space for a "newcomer profession" like the pedagogue in itself. Rather, it opens up a space that is to be filled out through the actors' everyday interactions. The newcomers struggle to define a task area of their own, as illustrated by the pedagogues working during the breaks and pauses throughout the school day, where they perform relational work. Analysing social closure as

processes played out in the state-political field, on the one hand, and in the field of professional practice, on the other, can demonstrate how the legal restructuring of jurisdictional boundaries does not necessarily result in changes that correspond with the political aspirations. Professional practice in schools can be regarded as structured by historical traditions that permeate teachers' work and the socio-material setting of the classroom (Bourdieu & Passeron, 1996; Jackson, 1990).

The hierarchical relationship between the two professional groups, which was observed for this study in the first year after the school reform, could be considered as mirroring a temporary state of things. However, a recent study of collaboration between teachers and pedagogues in Danish schools shows that pedagogues are still often placed in subordinate positions (Cordsen, 2020). The political intentions to mobilise pedagogues as a means to change the Danish *folkeskole* do not seem to have reconfigured the underlying structure of the school and the classroom practice. The study presented in this article has not only shed light on the institutional inertia of the school and the professional domain of practice interwoven with this institution, it has also demonstrated how state-legal changes work as a disturbance of professional practice in the school, feeding continuous negotiations and power struggles in classroom work. Following Weber, such power struggles amongst (semi)professional groups should not be interpreted as an urge to strive for economic power (Weber, 2003a, p. 29). Rather, they reflect attempts to achieve honour; in this case, gaining symbolic status by being regarded as possessing the necessary expertise.

### Conclusion

This article has demonstrated how social closure can be analysed as micro-processes of symbolic closure, observed as divisions of physical space and tasks, leaving the newcomers with the least prestigious elements and spaces. Such processes are not static in nature, as the pedagogues actively question the boundaries between what is considered as their tasks and what the teachers' tasks are respectively. Symbolic closure studied as practices can be regarded as ongoing processes, whereby the division of work is sometimes stabilised in specific forms, and at other times is continuously contested by the presence and practice of pedagogues in the classrooms.

The article has argued for the potential of applying a social closure analysis to cover processes in a state-political field as well as in professional practice, and to consider the relationship between these processes. The analysis of the case of the Danish School reform has thus shown how a state-driven legal "opening" of a new professional task area, at the same time opens up a space for struggles over jurisdictions. Using ethnographic data and analyses, the article has contributed to a deeper understanding of the nature of social closure processes in a field of practice, as they are played out as symbolic struggles and divisions of work.

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## References

- Abbott, A. (1988). *The system of professions: An essay on the division of labor*. Chicago and London: The University of Chicago Press.
- Adams, T. L., & Saks, M. (2018). Neo-weberianism and changing state-profession relations: The case of Canadian health care. *Sociologia, Problemas e Práticas*, 2018(88), 61-77.
- Antorini, C. (2012, August 7). Vær med i ny nordisk skole [Join the new Nordic school]. *Jyllands-Posten*. Retrieved from <https://jyllands-posten.dk/debat/kronik/article4800310.ece>
- Antorini, C. (2013, January 14). Antorini: "Pædagogerne spiller en central rolle" [Antorini: "Pedagogues play a central role"]. *Information*. Retrieved from <https://www.information.dk/indland/2013/01/antorini-paedagogerne-spiller-central-rolle>
- Bacchi, C. (2009). *Analysing policy: What's the problem represented to be?* Australia: Pearson.
- Bourdieu, P. (1977). *Outline of a theory of practice*. Cambridge: University Press.
- Bourdieu, P. (1990). *The logic of practice*. Cambridge: Polity Press.
- Bourdieu, P., & Passeron, J. (1996). *Reproduction in education, society, and culture*. (2nd ed.). London: Sage Publications.
- Brodersen, M. (2019). *Forstyrret og forstyrrende: Analyser af velfærdsarbejdets viden om elever, som skolen har vanskeligheder med [Disturbed and disturbing: Analysing knowledge in welfare work addressing the issue of pupils regarded as being troublesome in school]* (Doctoral dissertation). Roskilde University, Roskilde. <https://www.ucviden.dk/da/publications/forstyrret-og-forstyrrende-analyser-af-velf%C3%A6rdsarbejdets-viden-om>
- BUPL (2013). Folkeskolereformen: Kort fortalt [The reform of the Folkeskole: In brief]. *BUPL, Børne- og Ungdomspædagogernes Landsforbund*. Retrieved from <https://bupl.dk/wp-content/uploads/2017/12/uncategorized-folkeskolereform-kort-fortalt-web-2163.pdf>
- BUPL (2014, September 30). Pædagoger skal være på alle klassetrin i skolen [There must be pedagogues at all grade levels in the school]. Press Statement. *BUPL Presse*. Retrieved from <https://bupl.dk/nyhed/paedagoger-skal-vaere-paa-alle-klasse-trin-i-skolen/>

- Camic, C., Gross, N. & Lamont, M. (2011). *Social knowledge in the making*. Chicago: The University of Chicago Press.
- Coole, D., & Frost, S. (2010). *New Materialisms: Ontology, Agency, and Politics*. Durham, N.C: Duke University Press.
- Cordsen, R. F. (2020). *Samarbejde mellem lærere og fritidspædagoger: Intensitet, potentialitet og problemer [Collaboration between teachers and leisure time pedagogues: Intensity, potentiality, and problems]* (Doctoral dissertation). Aarhus University, Aarhus.
- de Coninck-Smith, N., Rasmussen, L. R., & Vyff, I. (2015). *Da skolen blev alles: Tiden efter 1970 [When the school became everyone's: The period after 1970]*. Aarhus: Aarhus Universitetsforlag.
- DLF (2013a, June 7). Skolereformen bliver dyr for kommunerne [The school reform will be expensive for the municipalities]. *DLF, Danmarks Lærerforening*.
- DLF (2013b, June 10). DLF mener: Inklusion [DLF Opinion: Inclusion]. *DLF, Danmarks Lærerforening*. Retrieved from <https://www.dlf.org/dlf-mener/inklusion-1/inklusion-1>
- DLF (2018, April 11). DLF mener: Pædagog samarbejde [DLF opinion: Collaboration with pedagogues]. *DLF, Danmarks Lærerforening*. Retrieved from <https://www.dlf.org/dlf-mener/samarbejde-med-paedagoger>
- Ministry of Finance (2010). *Specialundervisning i folkeskolen: Veje til en bedre organisering og styring, 2010. [Special needs education in the folkeskole: Roads to a better organisation and administration]*. Retrieved from <https://fm.dk/nyheder/nyhedsarkiv/2010/juni/specialundervisning-i-folkeskolen-veje-til-en-bedre-organisering-og-styring/>
- The Danish Parliament (2012). *L 103. Lov om ændring af lov om folkeskolen, lov om friskoler og private grundskoler m.v. og lov om folkehøjskoler, efterskoler, husholdningsskoler og håndarbejdsskoler (frie kostskoler)*. [Act on revision of the Folkeskole Act]. The Danish Parliament. Retrieved from [https://www.ft.dk/samling/20111/lovforslag/L103/som\\_vedtaget.htm](https://www.ft.dk/samling/20111/lovforslag/L103/som_vedtaget.htm)
- Hansen, M. (1999). *Yrkeskulturer i möte: Läraren, fritidspedagogen och samverkan [The meeting of work cultures: the teacher, the leisure time pedagogue, and cooperation]* (Doctoral dissertation). Gothenborg University, Gothenburg. <https://gupea.ub.gu.se/handle/2077/7609>
- Harrits, G. S. (2014). Professional closure beyond state authorization. *Professions and Professionalism*, 4(1). <https://doi.org/10.7577/pp.567>

- Harrits, G. S., & Larsen, L. T. (2014). Social lukning og professioner: Fra juridiske monopoler til symbolske mekanismer for professionel lukning [Social closure and professions: From legal monopolies to symbolic mechanisms of professional closure]. In G.S. Harrits, G. S. & Svith, F. (Eds.). *Professioner under pres: status, viden og styring* (p. 11-29). Copenhagen: Via Systime.
- Hindhede, A. L., & Larsen, K. (2020). Prestige Hierarchies and Relations of Dominance among Healthcare Professionals. *Professions and Professionalism*, 10(2).  
<https://doi.org/10.7577/pp.3447>
- Holm, L. (2009). *Heldagsskolen som uddannelsespolitisk initiative: Tredje statusrapport 2008-2009*. [All day schools as educational policy initiative: Status report no. 3, 2008-2009]. Copenhagen: Aarhus University.
- Jackson, P. W. (1990). *Life in Classrooms*. New York: Teachers College Press.
- Jacobsen, G. H. (2012). *Lighed gennem særbehandling? Heldagsskoler og spredning som ekspliciteret særbehandling af etniske minoritetsbørn og udtryk for aktuelle tendenser* [Equality through differential treatment? All day schools and bussing as explicit differential treatment of ethnic minority children and expression of current tendencies] (Doctoral Dissertation). University of Copenhagen, Copenhagen.
- Kampmann, N. E. S. (2015). *Kampen om professionelt arbejde i folkeskolen: En styringsanalyse af læreres og pædagogers professionaliseringsbetingelser* [The struggle on professional work in folkeskolen: A governmental analysis of the conditions for the professionalisation of teachers and preschool teachers] (Doctoral dissertation). Roskilde University, Roskilde.  
[https://rucforsk.ruc.dk/ws/portalfiles/portal/57132045/Kampen\\_om\\_professionelt\\_arbejde\\_PhD\\_afhandling\\_af\\_No\\_Emil\\_Kampmann.pdf](https://rucforsk.ruc.dk/ws/portalfiles/portal/57132045/Kampen_om_professionelt_arbejde_PhD_afhandling_af_No_Emil_Kampmann.pdf)
- Krab, J., & Andersen, R. (2015). Ind i kampen [Into the fight]. *VERA*, 2015(73), 48-53.  
<https://forskning.ruc.dk/da/publications/ind-i-kampen>
- Lamont, M., & Molnár, V. (2002). The study of boundaries in the social sciences. *Annual Review of Sociology*, 28(1), 167–195.  
<https://doi.org/10.1146/annurev.soc.28.110601.141107>
- Landahl, J. (2017). Kris och internationella jämförelser [Crisis and international comparisons]. In J. Landahl & C. Lundahl (Eds.), *Bortom PISA: Internationell och jämförande pedagogik* (p. 41-63). Stockholm: Natur & Kultur.
- Larson, M. S. (1977). *The rise of professionalism: A sociological analysis*. Berkeley: University of California Press.
- Lund, H. H. (2012). Inklusionens økonomi er en spareøvelse [The economy of inclusion is a cost reduction]. *Dansk pædagogisk tidsskrift*, 2012(4), 17-22.

## Social Closures: Reconfiguration of Professional Work in the Danish State School

- Parkin, F. (1979). *Marxism and class theory: A bourgeois critique*. New York: Columbia University Press.
- Ratner, H. (2012). *Promises of reflexivity: Managing and researching inclusive schools* (Doctoral dissertation). Copenhagen Business School, Copenhagen.  
<https://research.cbs.dk/da/publications/promises-of-reflexivity-managing-and-researching-inclusive-school>
- Saks, M. (2010). Analyzing the professions: The case for the neo-Weberian approach. *Comparative Sociology*, 9(2010), 887-915.  
<https://doi.org/10.1163/156913310X522624>
- Saks, M. (2012). Defining a profession: The role of knowledge and expertise. *Professions and Professionalism*, 2(1). <https://doi.org/10.7577/pp.v2i1.151>
- Saks, M., & Adams, T. L. (2019). Neo-Weberianism, professional formation and the state: Inside the black box. *Professions and Professionalism*, 9(2).  
<https://doi.org/10.7577/pp.3190>
- Sauzet, S. (2019). *Pædagogers faglighed i skolen: Udspændtheder i litteratur og praksis*. [Professional competences of pedagogues: Spaces of opposites in literature and practice]. Copenhagen: Samfundslitteratur.
- Schmidt, M. C. S. & Langager, S. (2012). Jeg er den, som står på gulvet: Jeg kan ikke sende presset nogen steder hen, så jeg tænker hele tiden at jeg må kunne mere. [I am the one on the floor: I cannot escape the pressure and I keep thinking that I have to manage even more]. *Dansk pædagogisk tidsskrift*, 2012(4), 7-15.
- Steiner-Khamsi, G. (2017). Rankningstabellernas politik [The policy of the ranking charts]. In J. Landahl & C. Lundahl (Eds.), *Bortom PISA: Internationell och jämförande pedagogik* (p. 65-80). Stockholm: Natur & Kultur.
- Thingstrup, S. H., Schmidt, L. S. K., & Andersen, R. N. (2017). The purpose of education: Pedagogues' and teachers' negotiations in Danish primary school. *Educational Action Research*, 26(3), 354-364. <https://doi.org/10.1080/09650792.2017.1351385>
- UNESCO (United Nations Educational, Scientific and Cultural Organization Ministry of Education (UNESCO) & Ministry of Education and Science Spain) (1994). *The Salamanca statement and framework for action on special needs education*. Retrieved from <https://unesdoc.unesco.org/ark:/48223/pf0000098427>
- Ministry of Children and Education (2013a). Aftale mellem regeringen (Socialdemokraterne, Radikale Venstre og Socialistisk Folkeparti), Venstre og Dansk Folkeparti om et fagligt løft af folkeskolen [Agreement on the improvement of educational standards in folkeskolen]. Retrieved from [141010-enderlig-aftaletekst-7-6-2013.pdf](https://www.mec.dk/141010-enderlig-aftaletekst-7-6-2013.pdf)
- Ministry of Children and Education (2013b). Lov 1640 26/12: Lov om ændring af folkeskoleloven og forskellige andre love (indførelse af en længere og mere varieret

skoledag). [Act on the revision of the Act on folkeskolen and other laws. Retrieved from <https://www.retsinformation.dk/eli/ta/2013/1640>

Weber, M. (2003a). § 6. *Magtfordeling inden for fælleskabet: Klasser, stænder, partier*. [The Distribution of Power within the Community: Classes, Stände, Parties]. In H. Andersen, H. H. Bruun & L. B. Kaspersen (Eds.), *Max Weber: Udvalgte tekster (volum 2)*[*Max Weber: Selected Works (volume 2)*], (p. 29-43). Copenhagen: Hans Reitzels Forlag.

Weber, M. (2003b). § 10. *Åbne og lukkede relationer*. [Open and closed Relations]. In H. Andersen, H. H. Bruun & L. B. Kaspersen (Eds.), *Max Weber: Udvalgte tekster (volum 2)*[*Max Weber: Selected Works (volume 2)*], (p.226-229). Copenhagen: Hans Reitzels Forlag.

Whiting, M., May, S. A., & Saks, M. (2020). Social closure and veterinary professionalization in Britain: A self-interested or public interested endeavour? *Professions and Professionalism*, 10(1). <https://doi.org/10.7577/pp.3321>

## Strategic Compliance: A study of Professionals' Responses to Sales Management Control

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### Abstract

This study responds to the call for research on how different and often conflicting discourses co-exist in professionals' everyday work experiences. The paper explores how professionals respond to sales management in the context of two professional service firms (PSFs). Based on a qualitative study of employees' experiences of sales, our findings suggest that the professionals respond to sales management by engaging in *strategic compliance*, i.e., adhering to rules and expectations to achieve goals of professional advancement (financial, status, autonomy), which, in turn, reinforces their membership of the profession. We identified three modes of strategic compliance: career-, integration-, and survival-mode. This conceptual framework contributes with a deepened understanding of the complex relationship between professional work and sales management. Specifically, our study suggests that while strategic compliance may help professionals navigate the tensions between professional- and sales-ideals, it is also associated with struggle and normalizes sales as a part of professional work.

### Keywords

Professional service firms, sales, professional work, control, strategic compliance



Since the 1980s, the professions of law and accounting have experienced changes in institutional pressure from both the state and the market. Globalization, technical developments, and a significant shift toward a market orientation have impacted not only the landscape in which accountants and lawyers conduct their practice but also the professionals' everyday work and their sense of professional responsibility and focus (Brint, 1994; Cooper & Robson, 2006; Hanlon, 1997, 1999; Lander et al., 2012). In the wake of deregulative changes, the control of professionals has moved toward market-based controls. Traditionally, a key characteristic of the professions is their independence from the state and the market (Freidson, 2001), but as the market of the professional service firms (PSFs) has become increasingly competitive and open, there is an increasing tension between professionalism and "the increasing emphasis on commercialism and corporatism" (Cohen, 2015, p. 353).

One consequence of this is that sales and promotion enter the professionals' work, forcing professionals in PSFs to navigate a highly commercialized context with sales management efforts, including explicit sales goals, participation in sales courses, and increased focus on client relationships (Empson, Muzio, Broschak, Hinings, 2015). This development is not limited to firms and the business context. In the wake of the New Public Management, scholars have noted an increased focus on target setting and outputs in public service professions (e.g., Noordegraaf, 2015; Taylor & Kelly, 2006). Some have specifically observed a sales focus (see e.g., Ulfsdotter Eriksson et al., 2017), which points to a more general development toward a situation where clients or patients become customers and the professionals' work becomes more controlled by the organization employing them, and less by their profession (Evetts, 2011).

Despite indications that the practice and discourse of sales play a significant part in contemporary work in PSFs—and that, as firms, PSFs are more explicitly exposed to market mechanisms—there is a paucity of research on how professionals within PSFs experience and respond to sales management control. There are a few studies emphasizing that commercialization and sales permeate various aspects of professional work, and they indicate that resistance is common at the intersection between commercialization/sales and professionalism (Sommerlad, 2011; Darr, 2002; 2006; Lander et al., 2012). However, this research is still limited and mainly conceptualizes reactions to commercialism in terms of resistance and does not focus on how the professionals experience sales management control and struggle to *combine* pressure to sell with ideals of professionalism, which is the focus of this paper.

Through this focus, we respond to calls for research on how different and often conflicting discourses co-exist in professionals' everyday work experiences (Alvehus, 2018). More specifically, we address requests for studies examining what commercialization means for professionals and their work (Cooper & Robson, 2006), and the meaning of sales in work roles that are not normally associated with sales (Darr, 2006; Geiger & Kelly, 2014). This is

important because there are indications that commercialization produces tensions in professionals' work life (e.g., Cohen, 2015). In light of this, the purpose of this paper is to increase the understanding of the relationship between professional work and sales management. To do so, we draw on a qualitative study with empirical data from 28 professionals and pose the research question: *How do professionals respond to sales management in the context of professional service firms?* The professionals in our study are lawyers and accountants working at two different PSFs based in Sweden, where the initiation and use of sales management control are part of their everyday work.

Our study found that the professionals engage in what we call *strategic compliance* as a response to the sales management control. We identified three modes of strategic compliance: *career*, *integration*, and *survival*—which we will outline further below. Empirically, our analysis provides insight into what it means to be a member of a profession by showing how professionals navigate the conditions of contemporary professional work, where traditional ideals of the profession struggle with ideals of the market, sales and promotion. Conceptually, this paper contributes to the literature on professionals and control by introducing the concept of strategic compliance to understand how professionals navigate the sales discourse in their responses to sales management control attempts.

## **Professional work, control and sales**

The traditional view of the professions suggests that professionals, to a larger extent than other occupations, are in control of their own work (Abbott, 1988; Freidson, 2001). This implies that professionals develop and control work aspects, such as terms, conditions, content, and goals of their specific profession (Brante, 1988; Empson & Chapman, 2015; Freidson, 2001; Rennstam, 2007). For example, they determine the qualifications required to perform particular tasks and control the “criteria for licensing or credentialing procedures that are enforced by the state” (Freidson, 2001, p. 56).

This does not mean that professionals are not exposed to control, however. While studies have noted that traditional management control methods such as bureaucracy and direct control fit badly with the complexity of professional work (e.g., Abbott, 1988; Covaleski et al., 1998; Empson et al., 2015; Freidson, 2001), studies have shown how various types and combinations of control develop internally in PSFs. For instance, in a study of accounting firms, Covaleski et al. (1998) found that the professionals were controlled by a combination of management by objectives and mentoring, which aligned the professionals' identities, goals, and actions with the goals of the firm. Control in PSFs can also be more subtle. In a study of engineering and communications consultants, Robertson, and Swan (2003) observed how the organization combined a culture that acknowledged ambiguity and flexibility in terms of work roles and power relations with a culture of elitism. This appealed to the consultants because it instilled a sense of autonomy (being able to step into various roles), but it also disciplined them by producing commitment to organizational goals. A

similar example is found in Alvesson and Kärreman's (2007, p. 702) study of a management consultancy firm, where they found that the firm's intricate HRM-system produced what the authors call "aspirational control." By connecting the individual consultant to particular ideas of career and rewards, aspirational control works to align employee identity and compliance with the firm's goal of producing committed and hard-working employees. These studies share the insight that, when formalized controls such as bureaucracy constrain the flexibility required to perform professional work, normative forms of control tend to develop instead. However, they do not address the role of sales as a source of control, and how professionals experience, deal with, and respond to these control efforts.

The notion of sales brings attention to the traditional ideal that a defining characteristic of the professions is their independence from the market and the state (Freidson, 2001). However, research also highlights that there is reason to nuance this ideal of freedom from state and market control (Brante, 1988; Cooper & Robson, 2006; Hanlon, 1997, 1999; Robson et al., 1994). Since the 1980s, there have been increasing pressures on the professions, from both the state and the market. Amidst deregulation, globalization, increased competition, and requirements of growth and profit from within professional organizations, such as PSFs, professionals' responsibilities, and focus have changed (Cooper & Robson, 2006). On the one hand, professions should be independent from the state, but, on the other hand, they need the state to remain independent from the market (Freidson, 2001). When the state imposes deregulation, the dependence on the market increases, resulting in a growing mistrust in professionals who display too strong economic interests. Thus, professions need to navigate a fine balance between the state and the market.

Currently, this balance is leaning toward the market and managerialism. Studies point at increasingly competitive markets and a managerial focus on corporate and commercial values, which affect the goals, actions, and career developments of professionals (Cohen, 2015) and shifts "the control over professionals from the professionals to market competition and hierarchical control through management in organizations" (Lander et al., 2012, p. 133). Contemporary professional work is sometimes understood as "hybrid," having to deal with both professional and managerial principles (Noordegraaf, 2015), or, similarly, but with more focus on tension, it is stressed that there is, on the one hand, an occupational professionalism, guided by professional logic, and on the other hand, an organizational one, guided by corporate and market logic (Evetts, 2011).

Thus, while research has noted that market orientation increasingly constrains the autonomy of PSFs, studies specifically on sales management efforts in PSFs and how professionals navigate this are still limited. As noted, exceptions are Sommerlad (2011), Lander et al. (2012), and Darr's (2000, 2002, 2006) studies. Sommerlad (2011) highlights how commercialization influences recruitment practices in law firms. Her findings suggest that contemporary HRM practices focus on and value "legal entrepreneurs" (p. 73), that is, "the only characteristic of importance being the ability to generate business and meet

targets" (p. 95). However, Sommerlad's study does not analyze how the professionals experience and respond to these HRM practices. Similar to Sommerlad, Darr, in a study of engineers, highlights that sales-related control links the engineers' success to their social skills and their ability to account for the profitability of their projects (Darr, 2000). Nonetheless, Darr also focuses on the professionals' responses to sales management control. He found that the engineers resisted sales management efforts to increase documentation around sales, by only engaging in superficial documentation and arguing that management provided neither time nor resources for the documentation (Darr, 2002). In Lander et al.'s (2012) study, an accounting firm moved from a trustee logic to a commercial logic, which affected the role of the accountants as strategic decisions were increasingly based on commercial concerns, a change that the accountants sought to resist.

These studies show how commercialization and sales affect recruitment practices, documentation, and the value of social and communicative skills. They indicate that resistance among professionals is common at the intersection between commercialization/sales and professionalism. Thus, our study builds on these previous insights, but it explores in more depth how sales management control is experienced by professionals and how they struggle to combine it with ideals of professionalism.

## Method

This study is rooted in the qualitative interpretivist research tradition, informed by a concern to understand the world based on the point of view of the people who live in it (Prasad, 2015). Grounded in this approach, we strive to understand and conceptualize meanings and interpretations (Alvesson & Skoldberg, 2009; Charmaz, 2006) that the professionals, in the context of PSFs, hold about navigating sales management.

The empirical material used in this study is based on qualitative interviews gathered during a 3-month period spent at Blue Law and Blue Accounting. The interviews were conducted as part of a larger research project on sales in professional work that also consists of observations and document studies. The participants in this study comprise 28 full-time professionals—14 accountants and 14 lawyers, whereof 15 are women and 13 men—who had worked within their respective professions for between 6 months and 39 years. Professionals from all levels of the organization were interviewed, representing a mix of junior, mid-, and top-level professionals.

Access to this group of respondents was attained as the first author, in her role as a researcher with an interest in sales, was invited to join a business network consisting of professionals from various industries. Here, she met representatives from the two PSFs. Two main criteria guided the choice of PSFs: (1) the organization must employ professionals from law and/or accounting, as these two professions are well established in the literature (see, e.g., Abbott, 1988; Freidson, 2001), and (2) the professionals must engage in sales as part of their everyday work (because our study had set out to investigate sales). The respondents

were selected in cooperation with the office managers based on availability. We aimed to select a variety of professionals—differing in terms of gender, age, and position—to increase the likelihood that we would get a broad set of voices about the organizations.

The interviews were held one-on-one in a meeting room at the respondents' workplace. The interviews varied in length, from 21 to 82 minutes. The first author followed a semi-structured interview approach based on an interview guide with open-ended questions in order to focus the conversation while also giving the respondents the opportunity to talk freely and address areas that they felt were of relevance. The interview guide consisted of four sections, containing both general and more specific questions on the professionals' everyday work, a typical day, their road to becoming a professional, and their experiences with sales. In total, the data material consists of interview transcripts and field notes.

In order to meet the ethical requirements for this study, we collected informed consent from all professionals in terms of participation, being interviewed, and recorded. All data material were anonymized, which means names, departments, etc. were replaced by codes; finally, all recordings were saved on an external hard disk with coded access.

### ***Analysis of empirical material***

The analytical part of this study is inspired by grounded theory as developed by Charmaz (2006). This means that we do not subscribe to the notion of approaching our field of study as a blank canvas or being non-theoretical (e.g., Glaser & Strauss, 1967). Rather, the analysis emerged in an iterative process and dialogue between the empirical material and the authors' theoretical familiarity (e.g., Charmaz, 2006). Based on previous literature, it is, for example, known that professionals experience tensions related to the intersection between conflicting logics (Alvehus, 2018), such as between professional work and commercial market aspects (Darr, 2000, 2002, 2006)—and we worked with this knowledge as sensitizing concepts guiding the analysis (Blumer, 1969).

Reading the interviews, we saw that sales in PSFs are associated with control and compliance, and that the interviews provided insight into how the professionals responded to that control. From that broad theme, the first author started doing the initial categorization. The analysis showed that they engaged in sales activities, thought about sales on a daily basis, and that, to some extent, they felt forced to do so. It also indicated that the professionals responded to the request or expectation to sell in a strategic manner, by turning it into an element in their career advancement efforts. As such, the professionals' responses indicated an element of coping (Ulfsdotter Eriksson et al., 2017). However, coping did not quite capture what we saw in our data. We also observed a strategic element in their responses, which relates to but goes beyond the notion of coping. The analysis of how they talked showed that, when speaking about sales and describing their response to sales management, the professionals used words both to express rather negative feelings, such as

“force” and “demand” and also rather agentic words such as “strategy” and “generate.” This indicated to us that sales were both something problematic and something useful to them.

Grounded in these insights, we were able to identify themes that indicated variations in the ways that the professionals responded to sales pressure (Charmaz, 2006; Ryan & Bernard, 2003). We found three modes of being strategically compliant: career-, expert-, and survival-mode.

In the presentation of our data, we use both shorter examples and relatively long narratives. Upon analyzing our data, it became evident that we had several uninterrupted interview statements in which the professionals seemed to open up and speak relatively freely about their life as accountants and lawyers, telling their story about the experience of sales rather than simply answering a number of pre-set questions (Charmaz, 2006; Czarniawska, 1998). We wanted to capture this, striving to provide rich data that demonstrate some detail and complexity (Czarniawska, 1998), allowing for exploration of descriptions and word use (Riessmann, 2008).

We did not conduct a comparative analysis of the two PSFs because of the patterns of similarities between them, primarily in terms of sales management efforts (see below in the following section) and the ways in which the professionals responded to them. In the early phase of this study, we expected to see more differences. However, we found that despite the different contexts, the sales management efforts and how the professionals responded to them followed similar patterns.

## **Sales management control at Blue Law and Blue Accounting**

Within Blue Law (BL) and Blue Accounting (BA), there are signs of sales management control mechanisms, and both firms have structures in place that constitute sales as a central part of the professionals' work. Financial reward systems are one aspect of this, which means that the lawyers and accountants at the two PSFs are rewarded when they bring in new clients and business to their respective firms. Moreover, the professionals have reoccurring 1:1-meetings with peers where sales and client activities are discussed, and goals are set. Sales courses, information meetings, mentoring, network, and event participation are also part of the sales management setup at both PSFs and the career paths are directly linked to sales. Thus, in order to move to the next level of the organization and eventually become partner, an employee needs to build a client base large enough that the firm considers him or her as central for the firm.

The two PSFs, one a Swedish law firm and the other a local office of a global accounting firm in Southern Sweden, both operate in the same market and under Swedish law. The professionals at both firms are trained lawyers and accountants and are subject to the rules of conduct set up by the Swedish Bar Association and the Institute for the Accountancy Profession in Sweden, respectively. This includes rules of conduct for promotion and sales.

The PSFs offer a wide range of accounting and law services. The lawyers sell services in areas such as labour law, dispute settlement, contract-, property-, tax-law, public procurement, and company- and construction law to public and private organizations in Southern Sweden, and their client base includes small, medium-sized, and large organizations. The accountants sell services in areas of audit, assurance, financial accounting, and advisory and tax to organizations of all sizes—from entrepreneurs to international organizations. In both firms, the junior professionals are expected to work extensively with sales after around 3 years of employment.

### ***Tensions around sales***

Although normalized, we found that the professionals associated the practice of sales with tension and discomfort. On the one hand, the professionals accept sales in the sense of not suggesting that they should stop doing it. On the other hand, the professionals express that the sales role is “difficult,” “silly,” “hard,” “not my role,” and “uncomfortable.” For example, Bella, a lawyer, captures the discomfort surrounding sales in her account:

*I prefer sitting in my office writing. I like it much more than selling. I enjoy it more. But I do like client contact and negotiations. I think that is really fun, but sales as such, I find tough, but communication around the law and the case, I enjoy that.*

This example shows how Bella struggles with the sales-part of her work. She separates sales from her professional work, stating that she likes client contact, but only as long as the communication revolves around the law or the actual case in question. When sales become a part of the contact and communication with the client, the situation changes for Bella and becomes something she finds “tough.” Sales is, on the one hand, integrated into the client relationship and therefore part of the professional relationship, but, on the other hand, it is the “tough” part.

This tension around sales was evident in almost all interviews. Generally, talking about sales and the management control of sales invoked emotional reactions among the lawyers and accountants, and they did not hesitate to express their discomfort in that regard:

*I find it hard to promote myself and sell. There are so many others that do the same as us (...) We are not trained in sales; in law school, this is not something we talk about at all; so, it is hard. (Christopher, lawyer)*

*I've never been comfortable with selling. (Eva, accountant)*

*I think it's rather hard. It's easier if someone hears about me and contacts me. (Johan, accountant)*

Discomfort and tension between professional work and sales work permeate through these quotes. On the one hand, the interviewees are communicating that selling is a necessary part of the profession: “There are so many others that do the same as us” indicates the assumption that only waiting for clients to call does not work, which brings selling into the

profession. On the other hand, the statements above about the absence of selling in their professional education indicate that sales are not part of their professional knowledge, such as when Christopher says, "in law school, this is not something we talk about." In other words, their point seems to be that selling is part of the job, but it is not really part of their professional training and largely an unwelcome part of their daily work.

### ***Three modes of strategic compliance***

In light of the tension displayed above, the empirical material also shows that their struggle takes a certain shape as they navigate and try to find ways to approach and deal with the tension they experience. They are responding to the sales control through what we call *strategic compliance*, that is, they adhere to sales management control in order to achieve goals of professional advancement, which, in turn, reinforces their membership in the profession. The focus on long-term professional advancement and reinforcement of professional membership signifies the strategic aspect of the term, while the focus on adherence to rules, despite expressions of disapproval, signifies the compliance aspect.

The expressions of strategic compliance varied enough to merit separation into three modes, which we call the *career mode*, *integration mode*, and *survival mode*.

Table 1. *Three modes of strategic compliance*

<b>Mode</b>	<b>Key strategy</b>	<b>Example of how sales is constructed</b>
Career	Offensive	as a tool for career advancement
Integration	Integrative	as part of doing good professional work
Survival	Defensive	as an obstacle to well-being and ability to do professional work

All three modes imply that the professionals comply with the sales management control, but the way in which they do this, and the consequences for their work, differ. The career mode is characterized by individual instrumentality, a focus on turning sales to one's own advantage. The integration mode is characterized by translation of the market aspect and sales into the core of the professional work of providing help, service, and trust to clients—a way to blend the ideals and make it productive for themselves (Noordegraaf, 2015). The survival mode is most strongly characterized by the struggle to navigate sales as a part of their daily work. In this mode, the professional does not manage to translate sales management into a career tool or integrate it as a more natural part of the work. In other words, responding to sales management remains mostly a struggle. Hence, strategic compliance is a way for the professionals to approach and deal with the tension they experience when navigating sales as part of their professional work.

A last point regarding the modes is that they should be understood as ideal types in the Weberian sense (Weber, 1947, p. 110f.). That is, in practice, there may be some overlap between the responses. The point with the modes thus is to produce heuristic categories



that enable better understanding of the varieties of the professional response to sales management.

### ***Career mode***

In the career mode, strategic compliance refers to both taking specific actions when it comes to sales that are identifiable as something different from professional work, and a strategic awareness that these activities will benefit the professional's career directly. Anna, a lawyer at the beginning of her career, who has worked at BL since she finished her law degree, expresses this.

*Actually, I think that Sofia and I have been here the longest; therefore, we have been forced to sell a bit longer (than the others). And if you put billable hours into networks, for example, then you want that to generate something - to get something back. If I want to aim at becoming a partner one day, then I have to build a client base. So, it is in my own interest to have a sales strategy, even though it is very difficult, I have not studied this. We have studied law.*

This example shows how Anna approaches sales in a strategic manner. She utilizes sales, both in her short-term and long-term planning, as a tool to reach her professional goals, that is, to advance and build the career she plans for herself. She uses words such as "I have to," "generate," "get something back," "in my own interest," and "becoming partner" to explain why she not only engages in sales but complies with the system of sales control in her firm, even though it is something she feels forced to do.

Anna's excerpt also shows that when the professionals comply strategically in the career mode, sales are, on the one hand, "forced" on the professional but then turned into an instrument of advancement—indicating a more offensive sales strategy. Anna expresses motivation to comply because it serves her self-interest. Sabina, a lawyer, makes a similar point, when she explains that she measures her sales activities because she can benefit from engaging in them: *"I am often out doing network meetings and lunches, so I want to know myself, how much time I actually spend doing that (as) it takes up time from my other assignments."*

Another example of responding to sales management in the career mode is expressed by Kenneth, a senior accountant, with more than 25 years of experience. He is an executive director, one of the highest positions in the organization, which indicates that he has managed to successfully navigate various sales management efforts throughout his career. When asked about his experiences with sales, he told this story of both sales activities and his attitudes toward them:

*From the beginning, when I started (as an accountant), there was not a lot of focus on sales at all. And there was an ethical rule in places where you were not allowed to*

*advertise, etc. It was more like a lot of customers had to call you and ask if they could be your customer. It was like that many years back. Since then, the competition has increased, and the rules have changed. So, suddenly you had to do sales courses and make cold calls and try more. I remember my very first sales course, we got a practical assignment to book customer meetings with completely cold customers that you had no relation to at all. We got this list and then the assignment was to book customer meetings without having a relation to that person and make the sales talk work (...). That was a different experience, mostly when I went to the company and thought to myself: 'what the hell am I doing here? Imagine if someone was a fly on the wall, looking down on that silly conversation'.*

First, Kenneth's story points to the de-regulative changes related to marketing and sales efforts as experienced by the professions. Moreover, it underlines the tension in strategic compliance between sales and the profession. While complying with requirements to do sales courses, make cold calls, and set up sales meetings, Kenneth expresses feeling conflicted, using phrases such as, "what the hell am I doing here?" and "book customer meetings without having a relation." Second, Kenneth expresses how the career mode is a way to manage sales management. Despite the discomfort and conflict, he has actively decided to comply by "trying more" and, implicitly, he communicates that he has managed to comply well, career wise, because he has now reached the position of executive director. He has also, after sales was introduced as something that is part of the professional's work, taken specific offensive actions when it comes to sales, in order to build his client base and develop his career at the firm, such as "sales courses and things and make cold calls." Hence, engaging in strategic compliance in the career mode implies compliance, not only because of sales management control efforts, but also to comply strategically in order to build a career within the profession by turning sales into one's own advantage.

### ***Integration mode***

The integration mode indicates a different way of engaging in strategic compliance, where the professionals are less offensive, in the sense that the career goal is less pronounced. Rather than emphasizing sales as a career instrument, the key characteristic of the integration mode is that the lines between professional work and sales work are perceived to be blurred.

For example, Hans, a lawyer, expresses this when he says: *"I think [professional work and sales work] are floating more or less in and out of each other. I don't think now I'm doing sales. I'm thinking I'm doing my job."* Henrik, an accountant, also expresses the integration succinctly: *"I think [that I] need to do a good job because when we're doing a good job for our customers, we are also selling."* Thus, sales are not seen as a separate activity but rather integrated with the ideal of doing a "good job," to use Henrik's terms.

To elaborate on the type of activity associated with the integration mode, let us turn to Helen, a senior accountant employed at BA for 1 year. Throughout the interview, when Helen is asked to explain how she engages in sales, she keeps accounting for activities where sales is integrated and implicit, rather than separate and explicit. For example, when Helen is asked how she acquired her newest client, she starts off by saying *“that is a long story”* and continues to describe how her interest in teaching accounting, both internally in the PSF and externally at various institutions, led to her acquiring her newest client *“so, that’s how I got my newest client.”*

Helen’s answers express a response to sales management control that translates sales work and blends it as part of her professional work. Helen is using her interest and engagement in education and teaching of accounting to promote herself and expand her professional network. As such, it shows how side activities, based on professional knowledge, can generate new clients for professionals. Helen’s account is focused on her professional accounting skills, while the sales aspect is placed in the background and is not as such a central part of the accounts.

However, it is noteworthy that integration does not take place without struggle, which Helen also expresses: *“It’s very difficult, I think to work with sales, because that’s not the person I am. I am really a bookkeeping person (...).”* Through this dual account of sales—as something difficult and foreign to Helen’s self-identity, but also something that can be thought of as an activity that happens when she engages in everyday professional work such as teaching—Helen indicates that integration does not take place without effort. Rather, even though she finds sales “difficult,” her strategy is still to integrate sales with what she perceives as her professional work. Hence, there is an element of compliance—she would find it easier if the sales-pressure was not there—and strategy—she deals with the sales-pressure by constructing it as an integrated part of her teaching, which seems to help her cope in the long run. Thus, selling accounting services and helping people to organize teaching seem to become almost the same thing. In other words, although this mode is not without struggle, it largely presents sales as integrable with professional work.

### ***Survival mode***

Strategic compliance in the survival mode is characterized by a struggle to deal with pressure to sell and integrate sales in the professional work. Thus, the tension between sales and professional work is more pronounced here than in both the integration and career modes. In order to manage this tension, the professionals attempt to comply with the sales control, but largely fail in the sense that they neither manage to integrate sales into their professional work nor translate sales it into a career instrument.

The professionals express this struggle by accounting for feelings of uncertainty and frustration when confronted with sales. For instance, Brian, a lawyer, expresses this: *“it is difficult to know how to promote oneself [...] I was thrown into it [...] without much*

*guidance.*" Allison, an accountant, makes a similar reflection and says, "For me personally sales is kind of...I tend to go the other way." This expresses how, in the survival mode, the professionals struggle more and often choose a more defensive strategy for coping with sales, moving away from sales, rather than attacking or approaching it (which is the case in the career mode).

The struggle and the defensive strategy are exemplified in Charlotte's account below. Charlotte—a senior lawyer with 18 years of experience who has worked at BL for around one year—describes how she was moving from one firm to the next to minimize the sales aspect of her work, searching for the type of sales practices that fit her best, and how she experienced feelings of disillusionment when confronted with sales:

*[At my first job), someone else took care of the incoming assignments and clients. I worked on the complex issues since I am a process-law expert, but I didn't have to do anything else. No sales, no billing and no contact. So, I was in charge of the law, and I actually liked that because I had no experience or even an interest in doing the other things.*

*After that, I tried to run my own law firm [together with another lawyer] for around one year. During that time, I did everything from the beginning to the end, which was also ok. [...] So there, I started to think about the whole sales process, which also meant really taking on sales, from contact with clients and invoicing [...]. It was very good experience, but at the same time I realized, it is not really me.*

*Then I started at another law firm where I could contribute a lot with my specialist knowledge on their big accounts. But they had a system where you had to have your own inflow of clients, otherwise your pay would be very low [...]. The only thing they would pay for, in order for me to get a normal salary, was if I took in new clients and cases, which I was not equally qualified to do [...]. I just felt like this is a lose-lose for me, and I was very disillusioned.*

This example shows how Charlotte struggles to integrate sales practices and professional work. Her account points to a clash between being "on top of the law" and expectations to engage in sales. This, argues Charlotte, has affected both the practical aspects of her work—such as the type of work she is required to do and her salary—and emotional ones—she expresses feeling "disillusioned" and "unqualified." This underlines how complying with sales control is a struggle for Charlotte, which is further manifested by her moving from one firm to another in search of minimizing the sales dimension in her work. However, moving did not relieve the struggle because the new firm worked with incentive pay and sales management that Charlotte feels unqualified to live up to. Although Charlotte expresses dissatisfaction, both during her time at her own firm and the following employment at the

PSF, she nevertheless complies with the sales control and accepts the normalized nature of sales within the firms.

Seeking to minimize the struggle, Charlotte takes a defensive approach, which is exhibited by her move from one firm to the next. It is noteworthy that while exit may be one part of the survival mode—as in Charlotte's case—there may be other ways of pursuing a defensive strategy than moving from firm to firm. For Brian and Allison, for example, the struggle rather meant that they took a step back or went “the other way” and found projects where the struggle associated with sales is minimized. What they all have in common is the defensive strategy—moving away from sales, rather than approaching it.

## **Discussion and concluding remarks**

Our analysis shows that sales management control has a significant effect on professional work: it generates tensions between professional and market ideals that are dealt with through strategic compliance. Strategic compliance is a way of responding to sales management by adhering to rules and expectations in order to achieve goals of professional advancement, which, in turn, reinforces the professionals' membership in their profession. We found that strategic compliance can be undertaken in three modes: career-, integration-, and survival.

First, we respond to calls for more research on how different and often conflicting discourses co-exist in professionals' everyday work experiences (Alvehus, 2018). Our study contributes to this call empirically by providing an insight into the tension ridden conditions of being a member of a profession, with a particular focus on the tension with sales. Traditional understandings of professionalism and sales highlight the conflict between the two, which is supported by our empirical analysis. Nevertheless, our study, like Alvehus', also moves beyond the institutional level and provides an insight into the actor level, describing how the professionals experience and deal with this tension by analyzing their responses to the sales management control. The responses were characterized by a reluctant compliance with the requirement to sell, but also by turning sales control into an instrument for individual goals of professional advancement and reinforcement of professional membership. We thus found that the response was more characterized by compliance, an aspect that was less pronounced in Alvehus' study (2018).

Second, this relates our findings to previous research on control of professional work, particularly studies on how professionals are controlled by ideals to which they are expected to aspire (Alvesson & Kärreman, 2007). Our study shifts the focus to sales to highlight a similar phenomenon: professionals are faced with a system that suggests their aspirations will come true. However, we found a more tension-ridden engagement with the system. While the HRM-system—which was the focus in Alvesson and Kärreman's study—tended to “boost” the self-esteem of the professionals, presenting them as belonging to an elite

(Alvesson & Kärreman, 2007, p. 719), the sales control system rather seems to produce tension and discomfort, which, we suggest, are dealt with through strategic compliance.

Third, our findings indicate that, by complying with the sales management control to be legitimate participants of their profession, the professionals are reproducing the sales discourse. On the one hand, there is an element of autonomy in their appropriation of the sales discourse for their career interests, but, on the other hand, they are reproducing a dynamic that they perceive as potentially conflicted and connected with discomfort. This phenomenon shows a resemblance to Robertson and Swan's (2003) finding that professionals embraced a culture of ambiguity and flexibility, which both instilled a sense of autonomy and disciplined the employees to support organizational goals. However, our case is also different. While the culture of ambiguity observed by Robertson and Swan originated within the PSF as an initiative to improve the quality of their services, the sales control has a stronger connection to forces outside of the firm, being stimulated by a general market orientation among PSFs as well as legislative deregulation (Cooper & Robson, 2006). As a result, a greater extent of de-professionalization may be at stake in the case of sales because the professionals are disciplined by an external source from which they should traditionally be independent (Freidson, 2001).

Fourth, our study shows a resemblance with Darr's (2002; 2006), Sommerlad's (2011), and Lander et al.'s (2012) study pointing out that the market is a central control mechanism within PSFs, where the ability to generate business and meet targets is crucial for the professionals' career advancement. Like Darr (2002; 2006), we found that professionals can, to some extent, be understood as a highly skilled sales force, for whom the boundaries between professionalism and sales are increasingly blurred in their everyday work, influencing how they plan, conduct, and think about their work. Both the engineers in Darr's studies and the lawyers and accountants in our study show signs of resistance to sales management control. In Darr's studies, the resistance shows that the professionals tried to keep sales-related aspects away from their work. Our study suggests that the responses cannot be fully understood in terms of resistance, because the professionals tended to reluctantly accept sales and bring it *into* their work, using it as a tool for career advancement. Thus, when it comes to sales management control, our study indicates that the professionals appropriated sales in order to achieve goals of professional advancement, which, in turn, reinforced their membership in their profession but also the prevalence of sales in their work. This is why we suggest the concept of strategic compliance and its three modes as a way of understanding their responses to sales management control, as located somewhere between resistance and compliance.

Our findings are also relevant in relation to existing studies on hybridity and hybrid professionalism. Literature on hybridity points out that the discussion is increasingly moving away from a dualistic or opposing understanding of managerialism and professionalism toward an interlinked understanding where the two ideals come together and

accommodate each other in the professionals' daily practices (e.g., Kirkpatrick & Noordegraaf, 2015; Noordegraaf, 2015). Our study supports this view, to a certain extent. However, our study also highlights that when it comes to sales, the hybridity is tension-ridden rather than accommodating; struggle and tensions are pronounced and often understood by the professionals themselves as two opposing ideals.

In a broader scheme of things, we suggest that the relevance of strategic compliance might reach beyond the context of professional service firms. In particular, our findings might be relevant for the understanding of public service professionals, a context in which studies point to similar developments of commercialization and note that individual professionals need to navigate a general tension between organizational and occupational professionalism (Evetts, 2011; Noordegraaf, 2015; Taylor & Kelly, 2006; Ulfsdotter Eriksson et al., 2017). Strategic compliance offers a contribution to this literature by presenting a conceptualization of how professionals deal with this tension and how they navigate and respond to sales management in public organizations.

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## References

- Abbott, A. (1988). *The system of professions: An essay on the division of expert labor*. University of Chicago Press.  
<https://doi.org/10.7208/chicago/9780226189666.001.0001>
- Alvehus, J. (2018). Conflicting logics? The role of HRM in a professional service firm. *Human Resource Management Journal*, 28(1), 31-44. <https://doi.org/10.1111/1748-8583.12159>
- Alvesson, M., & Kärreman, D. (2007). Unraveling HRM: Identity, ceremony, and control in a management consulting firm. *Organization Science*, 18(4), 711-723.  
<https://doi.org/10.1287/orsc.1070.0267>
- Alvesson, M., & Skoldberg, K. (2009). *Reflexive Methodology: New Vistas for Qualitative Research*. London: SAGE.
- Barker, J. R. (1993). Tightening the iron cage: Concertive control in self-managing teams. *Administrative Science Quarterly*, 38 (3), 408-437.  
<https://doi.org/10.2307/2393374>
- Blumer, H. (1969). *Symbolic interactionism perspective and method*. Berkeley: University of California Press.
- Brante, T. (1988). Sociological approaches to the professions. *Acta Sociologica*, 31(2), 119-142. <https://doi.org/10.1177/000169938803100202>

- Brint, S. (1994). *In an age of experts: The changing role of professionals in politics and public life*. Princeton University Press. <https://doi.org/10.1515/9780691214535>
- Charmaz, K. (2006). *Constructing grounded theory a practical guide through qualitative analysis*. London: SAGE Publications.
- Cohen, L. (2015). Interplay of professional, bureaucratic, and entrepreneurial career forms in professional service firms. In L. Empson, D. Muzio, J. Broschak, & B. Hinings (Eds.), *The Oxford Handbook of Professional Service Firms* (p. 351-373). Oxford University Press. <https://doi.org/10.1093/oxfordhb/9780199682393.013.19>
- Cooper, D. J., & Robson, K. (2006). Accounting, professions and regulation: Locating the sites of professionalization. *Accounting, Organizations and Society*, 31(4-5), 415-444. <https://doi.org/10.1016/j.aos.2006.03.003>
- Covaleski, M. A., Dirsmith, M. W., Heian, J. B., & Samuel, S. (1998). The calculated and the avowed: Techniques of discipline and struggles over identity in Big Six public accounting firms. *Administrative Science Quarterly*, 43(2). <https://doi.org/10.2307/2393854>
- Czarniawska, B. (1998). *A narrative approach to organization studies*. London: Sage. <https://doi.org/10.4135/9781412983235>
- Darr, A. (2000). Technical labour in an engineering boutique: Interpretive frameworks of sales and R&D engineers. *Work Employment & Society*, 14(2), 205-222. <https://doi.org/10.1177/09500170022118374>
- Darr, A. (2002). Control and autonomy among knowledge workers in sales: An employee perspective. *Employee Relations*, 25(1), 31-41. <https://doi.org/10.1108/01425450310453508>
- Darr, A. (2006). *Selling technology: The changing shape of sales in an information economy*. New York: Cornell University Press.
- Empson, L., & Chapman, C. (2015). Partnership versus corporation: Implications of alternative forms of governance in professional service firms (p. 139-170). Emerald Insight. [https://doi.org/10.1016/S0733-558X\(06\)24006-0](https://doi.org/10.1016/S0733-558X(06)24006-0)
- Empson, L., Muzio, D., Broschak, J. P., & Hinings, B. (2015). *The Oxford handbook of professional service firms*. Oxford University Press. <https://doi.org/10.1093/oxfordhb/9780199682393.001.0001>
- Evetts, J. (2011). A new professionalism? Challenges and opportunities. *Current Sociology*, 59(4), 406-422. <https://doi.org/10.1177/0011392111402585>
- Freidson, E. (2001). *Professionalism: The third logic*. Cambridge: Polity Press.
- Geiger, S., & Kelly, S. (2014). Sales-as-practice: An introduction and methodological outline. *Journal of Personal Selling and Sales Management*, 34(3), 223-231. <https://doi.org/10.1080/08853134.2014.913972>
- Glaser, B. G., & Strauss, A. L. (1967). *The discovery of grounded theory: Strategies for qualitative research*. New York: Adline de Gruyter. <https://doi.org/10.1097/00006199-196807000-00014>



- Hanlon, G. (1997). A profession in transition? Lawyers, the market and significant others. *Modern Law Review*, 60(6), 798-822. <https://doi.org/10.1111/1468-2230.00117>
- Hanlon, G. (1999). The changing nature of professionalism and the fracturing of the service class. *International Review of Sociology*, 9(1), 87-99. <https://doi.org/10.1080/03906701.1999.9971299>
- Kirkpatrick, I., & Noordegraaf, M. (2015). Organizations and occupations: Towards hybrid professionalism in professional service firms? In *The Oxford handbook of the professional service firms*. (L. Empson, D. Muzio, J. P. Broschack, & B. Hinings (eds.)). Oxford University Press. <https://doi.org/10.1093/oxfordhb/9780199682393.013.6>
- Lander, M. W., Koene, B. A. S., & Linsen, S. N. (2012). Committed to professionalism: Organizational responses of mid-tier accounting firms to conflicting institutional logics. *Accounting, Organizations and Society*, 38(2), 130-148. <https://doi.org/10.1016/j.aos.2012.11.001>
- Noordegraaf, M. (2015). Hybrid professionalism and beyond: (New) Forms of public professionalism in changing organizational and societal contexts. *Journal of Professions and Organization*, 2(2), 187-206. <https://doi.org/10.1093/jpo/jov002>
- Prasad, P. (2015). *Crafting qualitative research: Working in the postpositivist traditions*. London: Routledge. <https://doi.org/10.4324/9781315705385>
- Rennstam, J. (2007). *Engineering work: On peer reviewing as a method of horizontal control*. Lund: Lund Business Press.
- Riessmann, C. K. (2008). *Narrative methods for the human sciences*. Los Angeles: Sage.
- Robertson, M., & Swan, J. (2003). "Control - What control?": Culture and ambiguity within a knowledge intensive firm. *Journal of Management Studies*, 40(4), 831-858. <https://doi.org/10.1111/1467-6486.00362>
- Robson, K., Willmott, H., Cooper, D., & Puxy, T. (1994). The ideology of professional regulation and the markets for accounting labour: Three episodes in the recent history of the UK accountancy profession. *Accounting, Organizations and Society*, 19(6), 527-553. [https://doi.org/10.1016/0361-3682\(94\)90022-1](https://doi.org/10.1016/0361-3682(94)90022-1)
- Ryan, G. W., & Bernard, H. R. (2003). Techniques to identify themes. *Field Methods*, 15(1), 85-109. <https://doi.org/10.1177/1525822X02239569>
- Sommerlad, H. (2011). The commercialisation of law and the enterprising legal practitioner: Continuity and change. *International Journal of the Legal Profession*, 18(1-2), 73-108. <https://doi.org/10.1080/09695958.2011.619852>
- Taylor, I., & Kelly, J. (2006). Professionals, discretion and public sector reform in the UK: Re-visiting Lipsky. *International Journal of Public Sector Management*, 19(7), 629-642. <https://doi.org/10.1108/09513550610704662>
- Ulfsdotter Eriksson, Y., Berg, K., Wilde Boman, U., & Hakeberg, M. (2017). Contract care in dentistry: sense-making of the concept and in practice when multiple institutional logics are at play. *Sociology of Health & Illness*, 39(7), 1035-1049. <https://doi.org/10.1111/1467-9566.12543>
- Weber, M. (1947). *The theory of social and economic organization*. New York: Free Press.

## Students' Interprofessional Collaboration in Clinical Practice: Ways of Organizing the Patient Encounter

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### Abstract

As health care increases its focus on collaborative practice, universities must provide students with opportunities to learn how to collaborate with different professions and translate this knowledge into practice, known as interprofessional education. Simultaneously, researchers struggle to understand the full complexity of interprofessional education and must therefore conduct multiple-site studies, employ observational work, and apply theory throughout the research process.

This paper draws on focused ethnographic fieldwork at two different sites focusing on how students organize collaboration during interprofessional clinical placements. Findings indicate that the way students organize their collaboration is intertwined with how patients were introduced during handovers and involved mobilizing knowledge as “betwixt and between” familiar student practices and unfamiliar clinical practices. Findings also show

how authentic situations, artifacts and spatial features supported students to mobilize collaboration.

## Keywords

Interprofessional education, focused ethnography, practice-theory, clinical placement

## Introduction

Increased demands for safety and quality, a need to balance limited resources, and making healthcare more effective all reinforce a call of change in health care, and interprofessional education (IPE) is considered as a part of the solution (Frenk et al., 2010; World Health Organization [WHO], 2010). The rationale is that learning together as health care students improves working together as health care professionals and increases their ability to *“effect change, enhance quality of care, ensure safety and optimize deployment of human resources”* (Interprofessional.Global, n.d.). Including interprofessional competence as part of professionalism in health care has therefore been stressed and several competency-frameworks for interprofessional collaboration in health care practice have been developed (Rogers et al., 2017). In general, interprofessional competence concern knowledge about roles, teamwork, ethics, and communication (Thistlethwaite et al., 2014).

Drawing on ideas by Reeves (2010), Xyrichis (2020) detect interprofessional research reaching maturity.

As a scientific field, interprofessional research has advanced and scientific knowledge is successively gained across several areas of interests. However, current knowledge on IPE shows a diverse picture. For instance, reviews by Abu-Rish et al. (2012) and Fox et al. (2018) conclude there is a heterogeneous range of IPE-activities included in interprofessional research. Combined with a lack of detail when describing IPE-activities, educational approaches and outcome measures, it is difficult to compare between programs and get an understanding of how to arrange IPE so students learn what they need.

Further, research focused specifically on IPE in clinical practice, such as interprofessional training wards (IPTW) (see Lindh Falk, Hult, Hammar, Hopwood, & Abrandt Dahlgren 2013; Wahlström, Sandén, & Hammar 1997) is dominated by student self-report studies. Results indicate increased abilities regarding teamwork, communication and understanding of client-centered care (Brewer & Stewart-Wynne, 2013; Morphet et al., 2014). Students also report a positive change in their knowledge of, trust in and attitudes towards each other (Hallin & Kiessling, 2016; Naumann et al., 2021). Thus, previous research has mostly focused on attitudes and perceptions, showing that students seem to appreciate opportunities for IPE in their programs. Research on how IPE is enacted in practice is, however, less common. One example is Bivall, Lindh Falk, & Gustavsson (2021) who examined interprofessional

learning in the workplace showing that boundary objects served as prerequisites for negotiating and coordinating collaborative work. Another is Gudmundsen, Norbye, Abrandt Dahlgren, & Obstfelder (2019) who showed that students took on collaboration when they were given the responsibility and opportunity to do so. They did so with focus on sharing professional perspectives, doing collective assessment, and making joint decisions. Still, more research needs to focus on practice through observational work, the translation of IPE-activities to collaborative behaviour, and broaden the empirical interpretations through multiple-site studies.

### ***Purpose and aim***

The overarching purpose of this study is to explore how interprofessional collaboration and learning practices emerge in health care settings designed to enable students' interprofessional learning during clinical placements. More specifically the research question is: How do students organize their collaborative work in interprofessional student teams, and how do emerging elements interact? To exemplify how collaboration is enacted we chose to analyze handover situations as these are arranged to trigger interprofessional collaboration.

## **Theoretical framework**

Designing and organizing IPE within health care is challenging in many ways. From an educational perspective, it is well known that *the intended curriculum*, i.e., what educational authorities formulate as learning objectives, will play out differently depending on how these objectives are embodied in teaching, *the implemented curriculum*. And subsequently what students learn, *the attained curriculum* (McKnight, 1979). Over the years there has also been a shift in considering learning as a process situated in practice rather than a process of mind (Lave, 2009). Which in turn relates to organization theory and how organizing is seen as an unfolding process where actors collectively do activities in a relatively ordered manner (Czarniawska, 2010; Hopwood & Jensen, 2019). Hence, there is a need to investigate how the processes of IPE are enacted and organized in practice to understand the impact of curricula and how it supports students to translate IPE into collaborative behavior.

Gherardi, Jensen, & Nerland (2017) suggest that the metaphor of "shadow organizing" can be used for exploring the dynamics of organizing as an ongoing process, i.e. the emerging "*effect of multiple elements that intra-act with each other, always affected or affecting each other in an interdependent relationship*" (p. 3). Drawing on Barad (2007), they define intra-activity as the relationship between elements, human and more-than-human, that do not have clear or distinctive boundaries. The "shadow" in shadow organizing refers to the symbolic meaning of taking place "betwixt and between" practices, i.e., beyond the surface of the organization (Gherardi et al., 2017). By using the metaphor of shadow organizing one can understand how parallel processes going on in the same practice are

intertwined, and how new arrangements or ways of working can be integrated without interfering what is valuable in already existing practices (Hopwood & Jensen, 2019).

When the concept of “shadow organizing” is applied in this study, it implies that objectives of a formal interprofessional curriculum should not be taken for granted. Students' collaborative learning processes will be enacted beyond the surface of the intended curriculum and will shape how IPE is enacted in practice. Hence, professional learning and knowing-in-practice are seen as embedded in practice. A practice-oriented perspective of health care views collaboration in practice as being embodied, relational and intertwined with ethical reasoning and materiality (Schatzki, 2012).

## Method

### *Study design*

A focused ethnographic approach inspired by Higginbottom, Pillay, & Boadu (2013) was applied. Ethnography has been suggested as being particularly suitable for studying and understanding the practices of interprofessional learning and collaboration (Reeves, Boet, Zierler, & Kitto 2015). The focused approach, commonly used within medical ethnography, enables strategic and pragmatic decisions regarding situations to observe as well as length of field work. The decisions are based on prior research results and knowledge, practicalities in the studied context, or theoretical framework (Higginbottom et al., 2013). This study is based on field studies comprising participant observation of, and informal interviews with, students in clinical placement practice specially organized to promote students' interprofessional collaboration and learning.

### *Settings*

The study involves two health care settings, *The Health Center (HC)* and *The Interprofessional Training Ward (IPTW)*, where students from different health care educations come together for IPE in form of interprofessional clinical placements. IPE from differently organized sites enable contrasting results, which may be helpful for understanding each site separately as well as identifying features that apply across sites.

At both sites, patients constitute authentic scenarios for students to learn with, from and about each other. After handovers, student teams are requested to plan and execute relevant examinations, suggest interventions, and support the patients in daily care. Throughout the interprofessional clinical placements students are encouraged to reflect on their actions and collaboration. These activities are displayed in a schedule provided to the students during the introduction.

In line with focused ethnography, the sites were pragmatically chosen based on established research collaboration between two Scandinavian universities. See table 1 for an overview of the sites.

Site	Health Center, Norway		Interprofessional Training Ward, Sweden	
<b>Students</b>	<i>n</i>		<i>n</i>	
Male	4		4	
Female	7		5	
<b>Programme</b>	<i>n</i>	<i>Semester (out of)</i>	<i>n</i>	<i>Semester (out of)</i>
Dentistry (Den)	2	9(10)	-	-
Medicine (Med)	3	11(12)	3	9(11)
Nursing (Nur)	3	5(6)	4	6(6)
Occupational therapy (OT)	1	5(6)	1	6(6)
Pharmacy (Pha)	2	9(10)	-	-
Physiotherapy (Phy)	-	-	1	6(6)
<b>Team 1</b>	1 Den, 2 Med, 1 Nur, 1 OT, 1 Pha		2 Med, 2 Nur, 1 Phy, 1 OT during morning shift	
<b>Team 2</b>	1 Den, 1 Med, 2 Nur, 1 Pha		1 Med, 2 Nur, 1 OT during morning shift	
<b>Patients</b>	2		6	
<b>Work hours</b>	8.00-15.00		Morning shift: 6.45-15.30 Afternoon shift: 13.00-21.30	
<b>Duration of IPE</b>	2 days		2 weeks	
<b>Supervisors</b>	2 team supervisors		2 team supervisors 4 profession specific supervisors	
<b>Field observers</b>	ALF, TT		PT	

Table 1. Site overview

**The Health Centre (HC)** is a recently started community-based and interprofessional health unit in Norway. It focuses on an advanced form of medical care and rehabilitation, such as geriatric, palliative, and psychiatric care, in between hospital-based and home-based care.

Students from different programs scheduled to do clinical placements at the HC come together during two days of IPE. This interprofessional clinical placement is not part of an IPE-curriculum, however, the students had prior experience of IPE as they began their first semester with an interprofessional course. Students were prepared through an introduction the first morning.

Students form teams responsible for one geriatric patient per team and work during the morning shift, while regular care staff take over during evenings and night shifts. Designated team rooms for the students are located outside the ward. These team rooms are equipped with a computer, a projector, and a table. Students also have access to the nursing station at the ward.

The interprofessional activities are planned in cooperation between university teachers and personnel at the HC. Specially assigned employees oversee student activities, including introducing assignments and supervising. The supervisors have training in interprofessional supervision.

**The Interprofessional Training Ward (IPTW)** is a hospital-based geriatric ward in Sweden. The concept of IPTWs was first established 25 years ago as part of an interprofessional and problem-based learning (PBL) curriculum (Wahlström et al., 1997). Students from different programs come together for two weeks of interprofessional clinical placement. All students had prior experience of IPE as the IPTW is the third and final module of their IPE-curriculum. Students were prepared through a full day introduction the first day.

Student teams alter between morning and evening shifts, taking care of six to eight patients. During nights and weekends regular staff take over. A wing of the geriatric ward is dedicated

to the *IPTW*, including a student team room. The room is equipped with workstations holding computers, a table, whiteboard, medical equipment, and routine documents.

Designated supervisors are present during the shifts, available for students when needed. The structure of the *IPTW* is planned in cooperation with university teachers and health care staff at the ward.

### ***Data collection***

#### ***Access to the field***

Access was gained through establishing contact with student coordinators at the clinics, then the Head of the care unit at both sites approved the study. Concerning the *HC*, *ALF*, *MAD*, and *TT* visited the site six months ahead of data collection to plan and organize observations. The *IPTW* is familiar to the researchers as part of the regular IPE-curriculum at their home university. *PT* and *TT* joined regular meetings with staff prior to the study to inform and discuss the research project. The student coordinators then supported communications between researchers, unit managers, students, supervisors, and patients.

#### ***Recruitment of participants***

Suitable time periods for the field work were chosen in agreement with each site. At the *HC*, the IPE was conducted for two days, recurring four times during the semester. At the *IPTW*, the two-week IPE-periods followed each other over 14 weeks consecutively. Students at both sites were first informed about the study via e-mail then verbally at the start of the observations.

For both sites, supervisors and other care staff were first informed about the study at the previously mentioned meetings, then at the start of the observations. Patients were informed by care staff, both by written information sheets and verbally. Each student, supervisor and patient signed an informed consent form and were told that they could withdraw their consent at any time without having to specify why or with any reprisals concerning their studies, work, or care. No one withdrew their consent.

#### ***Field work***

Field work at the *HC* was carried out by *ALF* and *TT* for two weeks. During the two-day long IPE, *ALF* and *TT* observed one team each, from morning to afternoon, generating approximately 22 hours of observations with the students. *PT* also joined for half a day to get acquainted with the site. At the end of the IPE informal group interviews were conducted with respective teams. In addition, time was spent at the site prior and after the IPE-days to understand the full arrangement of the *HC*. We joined different meetings, as well as conducted informal interviews with supervisors, student coordinators, and representatives from the university.

Field work at the *IPTW* was carried out by PT, observing two teams for nine days. Observations took place during both morning and evening shifts. Over the nine days, approximately 39 hours of observations were conducted. Informal interviews with students were conducted throughout the period when appropriate. Observations took place at different locations, in specially allocated team rooms, at the nursing station, in corridors, patient rooms, and the dining room at the ward.

Fieldnotes were taken by hand and transcribed adjacent to the observations. To support the fieldnotes, drawings and sketches of how students, supervisors and patients sat and moved around in the rooms were included. Verbal memos were recorded to support transcribing fieldnotes. Participants were treated confidentially and are referred to in the text, for example, as nursing student 1 or occupational therapy student 2.

### ***Data analysis***

The analysis is based on an iterative, cyclic, and self-reflective processes (Higginbottom et al., 2013), see figure 1 for the specific steps taken. As the field work was done by three researchers at two sites, we followed Clerke & Hopwood's (2014) suggestions for team ethnography. Data were anonymized, catalogued, coded systematically, and kept in a password protected data base.

The handover situations were chosen as they occurred multiple times throughout the two IPE clinical placements and gave us a rich set of data. They were also planned as IPE-activities to trigger interprofessional collaboration and was therefore of interest to our research question. Preliminary interpretation and theorization were initiated already during fieldwork and then during the process of transcribing and organizing data. Our iterative process meant working with data both individually and collaboratively. This way of working with data can be described as exploring immediate metaphorical thinking (Gherardi et al., 2017) which enabled us to delve deeper into the data, and from there also theorize observations (Hammersley & Atkinson, 2019; Swedberg, 2012). Fieldnotes together with informal interviews made up a rich and complex range of situations and activities possible as starting points for the analysis. When going through data we were looking for signs and expression of collaboration, e.g., how students were acknowledging each other's competence and making joint decisions.

In the following, we present the findings from each site separately using excerpts to showcase examples from our data, followed by a contrasting analysis to identify differences as well as common features across the two sites.



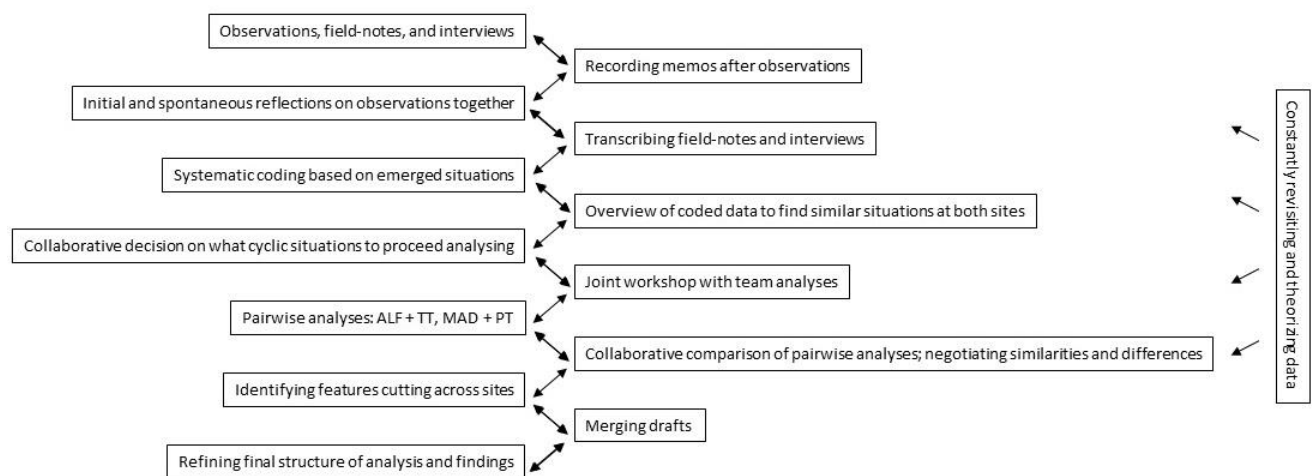


Figure 1. The iterative process of analysis applied in this study

### **Ethical considerations**

Ethical considerations have been given regarding both Swedish and Norwegian regulations (The Act on medical and health research, 2009; The Act concerning the Ethical Review of Research Involving Humans, 2004). In Sweden, the study has been approved by the Regional Ethics Committee in Linköping (2018/46-31). In Norway, the study did not need ethical approval according to results of a self-report to The Norwegian Centre for Research Data.

### **Findings**

Following different handovers, students at both sites started planning and preparing what to do during the shift, organizing their collaboration. However, contrasting the two sites showed that this was done differently and that students end up betwixt and between known practices from previous profession-specific clinical placement and the new and unknown interprofessional clinical placement. Contrasting also identified three features intertwined with the students' process of organizing collaboration when being betwixt and between practices: authenticity, artifacts, and spatiality.

In the following section we will present excerpts from situations at both sites exemplifying these findings. We will then elaborate on the features cutting across the sites.

### **Health Center**

At the HC, patients were handed over to the students differently throughout the two days. On the first day, when the patient was first introduced, students were given short information about the patient on a piece of paper. They then continued by preparing

collaboration in sequential turn-taking and inventorying each other's competences. The next day, when they began work the patient was handed over in a morning report at the ward. Then the students organized their work by ethically considering the patient's needs and adjusting the scheduled plan of what to do.

***Situation 1, Introducing the patient by handing over information on a piece of paper***

Following an introductory session in the morning, the student teams gathered after lunch to start planning their upcoming work with the assigned patient. In Team 2, they sat around a table in the allocated team room outside the ward

The supervisor started: "Now, have you seen patients together with some other professions before?". "I have", said the nursing student, "I have worked with a patient together with a physiotherapist once during a previous clinical placement." The medical students mention they have seen patients together with nursing students, which is quite common. The supervisor then picked up a small piece of paper from her pocket, "This is the patient you will work with during the next couple of days". The paper provided short information regarding sex, age, and reason for admission. One of the medical students immediately asked, "Was the patient referred from a general practitioner?". The supervisor had no answer to the question, and instead said "Now you must plan what to do when meeting the patient in about an hour. The nursing student has additional knowledge about the patient, so you have that resource". The nursing student nodded and confirmed that he had been partly responsible for the patient before. The occupational therapy student then asked the others "What information do we need about the patient? Should the medical students be responsible for the assessment?" The other students started mentioning what they found important from their respective perspectives. The pharmacy student mentioned she knew what pharmaceuticals the patients had, and the dentist student said: "I probably want to look at oral health and do "some" assessments".

Excerpt 1, from fieldnote HCT2d1:2

The fieldnote above shows how the students received very brief information about the patient. Through meetings and interviews with the supervisors, it was understood that the approach of having brief written information representing the patient was intended to stimulate collaborative work as the students must collect more information as a team. The students then started enacting collaboration by asking the question "*What do we need?*" and inventorying what each team member would like to focus on in the process of getting more information. However, as seen in the excerpt, both the pharmacy student and the dentistry student comment, "*I probably will do some assessments*". This gives the impression of a more general understanding of what their professions could do rather than

being tailored to the patient in focus. By expressing their general understanding of pharmacy and dentistry, the students appeared to adopt profession-specific perspectives by being “representatives” of their profession. Also, the excerpt shows how there was a presupposition that the medical students should take the lead during the patient encounter, even though it was indicated that the nursing student had prior knowledge about the patient.

In Team 1, a similar situation was displayed. After receiving the paper with short information about the patient, the medical student initiated preparations by raising general questions and mentioning examinations to do when seeing a new patient. Then the medical student turned to the nursing students, asking what they wanted to ask or examine, having the other students follow. After noting that there was no specific equipment available for oral examinations, the dentistry student concluded that she would have to settle with a simpler examination. The team continued by focusing on the order in which they would do things, deciding to ask all questions first starting with the medical student and then performing examinations. Preparing collaboration after having the patient handed over on a piece of paper can therefore be seen as a matter of taking turn in sequence, rather than intersecting different perspectives.

#### *Situation 2, Organizing the patient encounter*

Early morning of day 2, the students in Team 2 agreed to meet at the ward. Following their schedule, they joined the morning handover to get an update on “their patient” and how the evening/night had been. Their assignment was to help the patient with morning care and breakfast. Afterwards the students were supposed to return to their allocated team room to work on their written and oral reports.

The two medical students, the dentistry and nursing student participated in the short morning handover. A staff member said: “The patient had a good afternoon yesterday and was very pleased to meet you. However, the patient has not slept much overnight and is tired now in the morning”. The students then returned to the assigned team room where they started planning the day’s work. The occupational therapy and pharmacy student also joined, and everyone gathered.

One of the medical students informed the others what was said during the morning report and argued about how to proceed. “It is unethical for us to go and wake an old person when they have only slept for three hours.” The occupational therapy student added “Yes and we won’t get a correct image of what the patient can and cannot do if they are very tired”. They decided to postpone morning care and do this later when the patient had woken up.

After an hour, the nursing student asked: “Is it time to go back to the patient and see if he/she is awake?” The students went to the ward to discover the patient’s room

empty. The students gave the impression of being disappointed and frustrated, "What shall we do now?" They went to the dining room where they found the patient dressed and eating breakfast.

Excerpt 2, from fieldnote HCt2d2:1

In this situation, we can see how the information from the morning handover made the students deviate from what they originally were assigned to do (provide morning care). Instead, they made a judgement call based on the patient's needs and their professional knowledge. In contrast to Situation 1, the patient was presented to the students as a human being, rather than as a few lines on a piece of paper. The patient was no longer something vague and distant, but rather a person with individual needs to consider.

This was noticeable when one of the medical students adopted an ethical perspective arguing that they should not wake a patient up after having only slept for a few hours. The students' attention turned towards what could be described as collaborative, professional reasonings and decisions. This is also shown in the follow-up comment from the occupational therapy student when she added a remark about prerequisites for a good evaluation of a patient's capabilities, and the risks of collecting information on non-representative terms. Thus, the concrete reality of the morning report supported the concept of students being a collective decision-making unit, which can be referred to as a "we".

This situation illustrates how the students set aside the schedule provided by the supervisors and the educational practice. Instead, they stepped into the interprofessional practice, caring for the patient. However, they became disrupted by the ongoing regular ward routines that seemingly did not consider the students' work.

### ***The interprofessional training ward***

At the IPTW students were tossed into the reality of the ward from the beginning. At the start of every shift, they were given a handover from either the night staff or the other student team. The students had no specific instructions on what to do during the handover or after, other than to get working together. The following shows us how they started preparing for collaboration by drawing on traditional ways of organizing clinical placements.

#### ***Situation 1, Introducing patients by handing over responsibility as if colleagues***

It is early morning day 2, the students were about to take over from the night shift. Everyone was sitting in the allocated team room, waiting for the handover.

6:50 a.m. Everyone was sitting by a computer reading the medical records of the four patients included in today's work, except the physiotherapy student who arrived a little late and found no available computer. Two of the night

staff came into the room for the handover. They briefly told the team about the four patients currently on the IPTW. Two patients had slept well. The blood sugar values had been registered for one of the patients. Two patients had not slept so well. One of them was given a sleeping tablet. Team supervisor 2 turned to the night staff and asked if the patient had been worried. Nursing student 4 asked the night staff about the blood sugar values. The night staff responded. Medical student 2 discussed with the team supervisor: "What about the insulin units, has there been any change there?" The room turns silent for a while. The night staff left, and the students were required to take over the work. At first there was a moment of silence and stillness. When the dialogue started the following took place:

Nursing students 3 and 4 stated verbally that they had divided the patients between themselves, and they had done this yesterday. Then the medical students 2 and 3 said that they have done the same, they too have divided the patients between them. The occupational therapy and physiotherapy student were not included in this discussion.

Excerpt 3, from fieldnote IPTWt1d2:1

In the handover, one nursing and one medical student mobilized knowledge from previous clinical placements where each had been learning about their respective professional perspectives. They asked questions that were important for understanding the patients' condition and for future assessments and seemed to know what was professionally expected of them in the handover situation. The physiotherapy and occupational therapy student in the team were not active in the handover. In this case, neither one of them had previous experience of clinical practice at a hospital ward. Hence, while the nursing and medical students were enacting familiar professional practice from previous clinical placement experiences, the physiotherapist and occupational therapist students were in an unfamiliar practice situation.

Then, the students prepared to meet the patients by drawing on profession-specific conventions of organizing clinical work, such as dividing responsibility for the patients between the team members. The idea of dividing the responsibility between them can be seen as the 'usual' student practice in clinical placements: the students usually work individually with their patients at the ward, and there is no focus on sharing information or joint planning between professions. The occupational therapy and physiotherapy students were not included in this division of labor, which is also in line with what is "usual" as they most often appear at the ward when patients are in specific need of their competence.

In the following excerpt the students continue to draw on familiar ways of organizing clinical work following the tradition of a master–apprentice model.

Shortly after the handover various discussions broke out in small groups. Medical student 3 claimed to have a poor understanding of what fluid registration means. Nursing student 4 said: “We have to put our heads together”. Medical student 2 turned to the physiotherapy student and asked: “You’ve worked in health care before, haven’t you? Should we divide ourselves so that we follow those who are used to health care work?” The feeling was uneasy and there was a lot of chatting going on. Nursing student 4 and the physiotherapy student went to the whiteboard and looked at the displayed time schedule.

Excerpt 4, from fieldnote IPTWt1d2:1

In this situation, the first indication of collaboration emerged when students talked about themselves as “we”, implying “we as a team”. Previous experience of health care was acknowledged when medical student 2 suggested that the team should organize themselves so that those with previous experience took the lead, with the others following. This can be seen as a traditional way of organizing work. Medical students in particular follow their supervisors when on clinical placement, watching and learning as the supervisor sees patients.

### ***Situation 2, Organizing the patient encounter***

The scene below follows the night staff leaving but the team supervisor still in the team room.

After the night staff left, there was a moment of stillness in the room. Nobody did anything and everyone was silent. After a while, nurse supervisor 2 pointed to the whiteboard and said: “You’ve got the board for your planning where you can write what you want to do.” Then medical student 2 turned to the others in the team and asked if there were medications to be distributed that morning. Then the team supervisor 2 said, “I will do it now”.

Excerpt 5, from fieldnote IPTWt1d2:1

Once the team was left to take responsibility for the patients there was silence, no one initiated action. Interprofessional collaboration, at least in this way, was seemingly unfamiliar to the students and they had to enact a new practice. The supervisor intervened by pointing to tools that can be used in planning (whiteboard and schedule) and thereby engaged with the artifacts to mobilize students' collaboration. At first there was no reaction to the supervisor's intervention, then this followed.

Nursing student 4 and the physiotherapy student started writing down the plans for each patient on the whiteboard. The physiotherapy student wondered: "Should we plan for just now or for the whole day?" Nursing student 4 said: "We could do either way." Nursing student 3 turned to medical student 3 and wondered: "How should we go in when we're getting them out of bed?" More students rose from their chairs and joined the pair at the whiteboard, forming two sub-teams: Sub-team 1: Physiotherapy student, medical student 3 and nursing student 4. Sub-team 2: Occupational therapy student, nursing student 3 and medical student 2. After a moment the students looked at the watch on the wall. The physiotherapy student said: "OK, we still have some time, do you think we should start, or could we chill out for a while?" Several students were talking, medical student 2 asked straight into the air: "Who was it again that had slept poorly?" She got no response. Sub-team 1 stood by the whiteboard, planning. Sub-team 2 was spread out; the occupational therapy student and nursing student 3 sat together talking, while medical student 2 sat on her own, turned towards the room.

Excerpt 6, from fieldnote IPTWt1d2:1

Not all students participated in the sub-teams. However, the movement from the first positions (sitting by the table) to the second (standing by the whiteboard) seemed to enable some students to turn to each other and start negotiating what to do, initiating interprofessional collaboration. This made the notion of the team, "we", appear again. The schedule on the whiteboard specified time points throughout the day and the students used that as a foundation when planning and organizing their work. It seemed to give them awareness of time and a sense of control. When the students realized they had more time on hand than they first thought, a shift of focus occurred and mobilized other practices. The line "*Should we start, or could we chill for a while*" can be interpreted as temporarily moving from a clinical placement practice into a private practice. Meanwhile, the question "*Who was it again that had slept poorly?*" indicates that aspects of a professional practice still were considered.

## **Features identifiable across the two sites**

When revisiting and contrasting the findings, it appears as if students end up betwixt and between practices: the known practices from previous profession-specific clinical placement and the new and unknown interprofessional clinical placement. It is also possible to identify three features cutting across the two sites: authenticity, artifacts, and spatial features. As it turned out, these features seem to have an impact on how students organize interprofessional collaboration and coping with being betwixt and between practices. The features both mobilized and impaired organizing interprofessional collaboration.

The feature of *authenticity* involves presenting the patient, including the history and actual status, to the student team. As seen in excerpt 2 and 3, this was done 'as if' the students

were colleagues. Thus, authenticity seemed to mobilize interprofessional responsibility as well as ethical considerations among the students. While in excerpt 1, it was done on a piece of paper, resulting in students taking turn in sequence and putting on the role of representing their profession in general terms.

Recognizing and using artifacts from safe and well-known educational practices, such as the white board at the *IPTW* (see excerpt 4-6), and the schedule at the HC, seemed to have an impact on the students' collaborative work. The artifacts supported the students to structure their daily tasks and unite them as a "we" in ways both mobilizing and impairing collaboration.

The allocated team room is a *spatial feature* and seemed to act as a threshold between the educational practice and the health care practice. When the room was located outside the ward, as seen at the HC excerpt 2, students appeared to become distant from the health care practice that kept going on as usual not intertwined with the student work. At the same time the allocated rooms seemed to serve as a safe place to retreat and unite as a team. All three features hints toward students having to balance being betwixt and between practices.

## Discussion

We have been able to showcase how students interprofessional collaboration emerge in practice and how it is intertwined with features as authenticity, artifacts, and spatiality. The interprofessional clinical placement becomes a site for intersecting practices and the students were betwixt and between known practices from previous profession-specific clinical placement and the new and unknown interprofessional clinical placement. Also, the features gave the students directions on what to do and thereby enabled them to mobilize interprofessional collaboration.

The metaphor of shadow organizing (Gherardi et al., 2017) help us understand what is enacted in students' interprofessional clinical placement practices. According to Hopwood & Jensen, (2019) there are two approaches to the metaphor, the first focusing "*on parallel organizational arrangements, in which the metaphor of shadow emphasizes mimicry or copying.*", while the other focus on understanding shadow organizing as "*a device to understand overlooked features of organizing more generally, emphasizing metaphors of liminality, secrecy, and performativity.*" (p. 199). This study has mainly focused on liminality.

Liminality (Gherardi et al., 2017), or the uncertain position students take during IPE, locate them between their roles as students and as practitioners. This uncertainty between roles, both established and in the process of being developed, may be perceived to have a threshold which separates or unites familiar student practices and unfamiliar clinical practices. In turn, liminal activities refer to activities taking place at the threshold between canonical and non-canonical practices (Gherardi et al., 2017). Canonical practices refer to



professional work as following standardized care plans. Non-canonical practices refer to professional work becoming individualized, based on the unique needs and complexity of the person. Students at both sites seemed to take part in liminal activities when moving between familiar experiences of patient encounters from previous profession-specific clinical placements and encounters with a patient in an unfamiliar interprofessional clinical placement.

Another example of the threshold between profession-specific and interprofessional practice, is the situation where the physiotherapy student and the occupational therapy student moved “betwixt and between” practices during the morning report (see excerpt 3 *IPTW*). The canonical practice can be understood as the morning routine with a handover and participating in the morning routine was an unfamiliar practice for them. This situation is an example of authenticity supporting the students' engagement in interprofessional practice. The same was seen at the HC as described in excerpt 2. Prior to receiving information about the patient's status, students had planned to do other activities. Adjusting their plans to current circumstances enabled them to mobilize their collaborative work. Gherardi et al. (2017) described shadow organizing as similar to “*an activity taking place in a grey zone, in a space and time of ambiguous definition and of mutable relations, as in the tidemark between the sea and the sand, or in the liminal space of the threshold.*” (p. 8). At the HC, the situation with ethical discussions regarding how to handle the patient's need is an example of a situation when the students moved from “betwixt and between” different practices to being on “dry sand” (excerpt 2). These findings relate to what Gudmundsen et al. (2019) found on collective assessments and joint decisions leading to collaborative work and taking responsibility.

Artifacts seem to initiate students' interprofessional collaboration as they made the students mobilize previous experiences of practices. Artifacts serve as epistemic objects (Nerland & Jensen, 2012) supporting liminal activities between different practices. They usually involve multiple perspectives and are therefore flexible in their nature, enabling contextual adaption. As seen in excerpt 4-6 from the *IPTW*, the whiteboard served as an artifact initiating interprofessional practice. The whiteboard seemingly mobilized familiar experiences from the educational practice of PBL, i.e., to make use of a whiteboard for brainstorming about a patient. Similarly, at the HC the patient communicated on a piece of paper seemed to mobilize a familiar practice known from previous educational experiences. The students organized themselves and their collaborative work by sequential turn-taking, which is a common way to take on an assignment. As these factors interact with each other they enable shared use of objects as well as taking on tasks around which students can mobilize their collaboration. Similar results were found by Bivall et al. (2021) who could show that students negotiated and coordinated their collaboration around a boundary object. However, our findings show that this does not occur by itself as the students ended up “betwixt and between” practices.

Furthermore, our findings indicate that the allocated team rooms were important for the students, irrespective of where they were located, and that they were a safe place to which students retreated. Other studies have also highlighted that dedicated space for students is of great importance for building personal relationships as well as developing collaborative work (Brewer et al., 2017). Throughout the interprofessional activities, the students returned to the team rooms when they had to mobilize their collaborative work. In a sense, this indicates the room's function as "the dry sand" where the students can return from "the sea" (Gherardi et al., 2017). However, in the spatial arrangement where the room was physically separated from the ward, the students as a group moved 'betwixt and between' practices as they became distant from the ward. This resulted in them struggling to become incorporated in the daily care of patients and to know how to mobilize their collaborative work.

When considering the findings in light of interprofessional competencies (Thistlethwaite et al., 2014), arranging interprofessional clinical placement as an educational practice within health care practice is challenging. Despite a well-organized curriculum there are no guaranties that students enact what is intended, nor attain the intended knowledge (McKnight, 1979). Students struggle with mobilizing their interprofessional collaboration as they move "betwixt and between" different practices. Though they struggle, they clearly try to establish a team. It seems as if it is a process of going back and forth, returning to known practices when experiencing new ones.

## **Conclusion and further research**

In line with Reeves's (2010) ideas about research focusing on practice, the translation of IPE-activities to collaborative behavior, and multiple-site studies, we set out to explore how practices of interprofessional collaboration and learning emerge in health care settings designed to enable interprofessional learning. Through ethnographic observational work we have contrasted two clinical placement sites analyzing empirical findings with the concept of "shadow organizing" (Gherardi et al., 2017).

In conclusion, planning IPE requires considering different features as students end up betwixt and between practices. First, how different authentic situations allow students to make decisions based on professional assessments, as these decisions mobilize students' collaboration. There is also a need for artifacts to be considered carefully when planning IPE, as we have shown how students gather around them to mobilize their collaboration. Finally, considerations need to address where to place students physically to include them fully in the practice in which they will be working.

The knowledge we have been able to generate can also be used when preparing students for IPE as a way of exemplifying how interprofessional collaboration can be enacted. For an even richer understanding of students organizing interprofessional collaboration in practice, research should continue contrasting different IPE. We

focused on two sites equal in the sense of including final-year students. Further research should strive to do more longitudinal contrasts by studying students participating in an IPE-curriculum and explore how multiple IPE-modules has an impact on students' collaborative work.

### **Limitations**

In this study, the two sites enabled different opportunities considering length of field work due to their various ways of arranging the clinical practice, which can be seen as an asset as well as a limitation. In the case of the HC, we were not present at the field for a long period of time, as the students themselves were not. Instead, we chose the focused ethnographic approach to be able to study students interprofessional collaboration and still generate rich data.

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We report no conflict of interest.

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### **References**

- Abu-Rish, E., Kim, S., Choe, L., Varpio, L., Malik, E., White, A. A., (...) & Zierler, B. (2012). Current trends in interprofessional education of health sciences students: A literature review. *Journal of Interprofessional Care*, 26(6), 444–451.  
<https://doi.org/10.3109/13561820.2012.715604>
- Barad, K. M. (2007). *Meeting the universe halfway: Quantum physics and the entanglement of matter and meaning*. Durham, NC: Duke University Press.  
<https://doi.org/10.2307/j.ctv12101zq>
- Bivall, A.-C., Lindh Falk, A., & Gustavsson, M. (2021). Students' interprofessional workplace learning in clinical placement. *Professions and Professionalism*, 11(2), Article 2.  
<https://doi.org/10.7577/pp.4140>

- Brewer, M. L., Flavell, H. L., & Jordon, J. (2017). Interprofessional team-based placements: The importance of space, place, and facilitation. *Journal of Interprofessional Care*, 31(4), 429–437. <https://doi.org/10.1080/13561820.2017.1308318>
- Brewer, M. L., & Stewart-Wynne, E. G. (2013). An Australian hospital-based student training ward delivering safe, client-centred care while developing students' interprofessional practice capabilities. *Journal of Interprofessional Care*, 27(6), 482–488. <https://doi.org/10.3109/13561820.2013.811639>
- Clerke, T., & Hopwood, N. (2014). *Doing ethnography in teams: A case study of asymmetric in collaborative research*. New York: Springer. <https://doi.org/10.1007/978-3-319-05618-0>
- Czarniawska, B. (2010). Going back to go forward: On studying organizing in action nets. In T. Hernes & S. Maitlis (Eds.), *Process, sensemaking, and organizing* (p. 140–160). Oxford University Press. <https://doi.org/10.1093/acprof:oso/9780199594566.003.0008>
- Fox, L., Onders, R., Hermansen-Kobulnicky, C. J., Nguyen, T.-N., Myran, L., Linn, B., & Hornecker, J. (2018). Teaching interprofessional teamwork skills to health professional students: A scoping review. *Journal of Interprofessional Care*, 32(2), 127–135. <https://doi.org/10.1080/13561820.2017.1399868>
- Frenk, J., Chen, L., Bhutta, Z. A., Cohen, J., Crisp, N., Evans, T., ... Zurayk, H. (2010). Health professionals for a new century: Transforming education to strengthen health systems in an interdependent world. *The Lancet*, 376(9756), 1923–1958. [https://doi.org/10.1016/S0140-6736\(10\)61854-5](https://doi.org/10.1016/S0140-6736(10)61854-5)
- Gherardi, S., Jensen, K., & Nerland, M. (2017). Shadow organizing: A metaphor to explore organizing as intra-relating. *Qualitative Research in Organizations and Management: An International Journal*, 12(1), 2–17. <https://doi.org/10.1108/QROM-06-2016-1385>
- Gudmundsen, A. C., Norbye, B., Abrandt Dahlgren, M., & Obstfelder, A. (2019). Interprofessional education: Students' learning of joint patient care. *Professions and Professionalism*, 9(1). <https://doi.org/10.7577/pp.3126>
- Hallin, K., & Kiessling, A. (2016). A safe place with space for learning: Experiences from an interprofessional training ward. *Journal of Interprofessional Care*, 30(2), 141–148. <https://doi.org/10.3109/13561820.2015.1113164>
- Hammersley, M., & Atkinson, P. (2019). *Ethnography: Principles in practice (Fourth edition)*. London: Routledge. <https://doi.org/10.4324/9781315146027>
- Higginbottom, G., Pillay, J., & Boadu, N. (2013). Guidance on performing focused ethnographies with an emphasis on healthcare research. *The Qualitative Report*, 18(9), 1–6. <https://doi.org/10.46743/2160-3715/2013.1550>

- Hopwood, N., & Jensen, K. (2019). Shadow organizing and imitation: New foci for research. *Qualitative Research in Organizations and Management: An International Journal*, 15(3), 197–214. <https://doi.org/10.1108/QR0M-04-2019-1743>
- Interprofessional.Global. (2020). *The confederation*. Retrieved June 1, 2020, from <https://interprofessional.global/the-confederation/>
- Lave, J. (2009). The practice of learning. In K. Illeris (Ed.), *Contemporary theories of learning* (p. 200–208). London: Routledge.
- Lindh Falk, A., Hult, H., Hammar, M., Hopwood, N., & Abrandt Dahlgren, M. (2013). One site fits all? A student ward as a learning practice for interprofessional development. *Journal of Interprofessional Care*, 27(6), 476–481. <https://doi.org/10.3109/13561820.2013.807224>
- Lov om medisinsk og helsefaglig forskning (LOV-2008-06-20-44), [The Act on medical and health research] Norsk Lovtidend (2009). <https://lovdata.no/dokument/NL/lov/2008-06-20-44>
- McKnight, C. (1979). *Second study of mathematics. Bulletin No. 4 (Bulletin no. 4; p. 147)*. Washington, DC.: International Association for the Evaluation of Educational Achievement. <https://files.eric.ed.gov/fulltext/ED244822.pdf>
- Morphet, J., Hood, K., Cant, R., Baulch, J., Gilbee, A., & Sandry, K. (2014). Teaching teamwork: An evaluation of an interprofessional training ward placement for health care students. *Advances in Medical Education and Practice*, 2014(5), 197–204. <https://doi.org/10.2147/AMEP.S61189>
- Naumann, F., Schumacher, U., Stuckey, A., Love, A., Thompson, C., Tunny, R., & Nash, R. (2021). Developing the next generation of healthcare professionals: The impact of an interprofessional education placement model. *Journal of Interprofessional Care*, 35(6), 1–4. <https://doi.org/10.1080/13561820.2021.1879749>
- Nerland, M., & Jensen, K. (2012). Epistemic practices and object relations in professional work. *Journal of Education and Work*, 25(1), 101–120. <https://doi.org/10.1080/13639080.2012.644909>
- Reeves, S. (2010). Ideas for the development of the interprofessional field. *Journal of Interprofessional Care*, 24(3), 217–219. <https://doi.org/10.3109/13561821003788930>
- Reeves, S., Boet, S., Zierler, B., & Kitto, S. (2015). Interprofessional education and practice guide no. 3: Evaluating interprofessional education. *Journal of Interprofessional Care*, 29(4), 305–312. <https://doi.org/10.3109/13561820.2014.1003637>
- Rogers, G. D., Thistlethwaite, J. E., Anderson, E. S., Abrandt Dahlgren, M., Grymonpre, R. E., Moran, M., & Samarasekera, D. D. (2017). International consensus statement on the

- assessment of interprofessional learning outcomes. *Medical Teacher*, 39(4), 347–359. <https://doi.org/10.1080/0142159X.2017.1270441>
- Schatzki, T. R. (2012). A primer on practices: Theory and research. In J. Higgs, R. Barnett, S. Billett, M. Hutchings, & F. Trede (Eds.), *Practice-based education: Perspectives and strategies* (p. 13–26). Sense Publishers. [https://doi.org/10.1007/978-94-6209-128-3\\_2](https://doi.org/10.1007/978-94-6209-128-3_2)
- Swedberg, R. (2012). Theorizing in sociology and social science: Turning to the context of discovery. *Theory and Society*, 41(1), 1–40. <https://doi.org/10.1007/s11186-011-9161-5>
- Thistlethwaite, J. E., Forman, D., Matthews, L. R., Rogers, G. D., Steketee, C., & Yassine, T. (2014). Competencies and frameworks in interprofessional education: A comparative analysis. *Academic Medicine*, 89(6), 869–875. <https://doi.org/10.1097/ACM.0000000000000249>
- Lag om etikprövning av forskning som avser människor (SFS 2003:460) [The Act concerning the Ethical Review of Research Involving Humans]. Svensk författningssamling SFS (2004). [https://www.riksdagen.se/sv/dokument-lagar/dokument/svensk-forfattningssamling/lag-2003460-om-etikprovning-av-forskning-som\\_sfs-2003-460](https://www.riksdagen.se/sv/dokument-lagar/dokument/svensk-forfattningssamling/lag-2003460-om-etikprovning-av-forskning-som_sfs-2003-460)
- Wahlström, O., Sandén, I., & Hammar, M. (1997). Multiprofessional education in the medical curriculum. *Medical Education*, 31, 425–429. <https://doi.org/10.1046/j.1365-2923.1997.00669.x>
- World Health Organization (WHO). (2010). *Framework for action on Interprofessional education & collaborative practice*. Retrieved from [http://www.who.int/hrh/resources/framework\\_action/en/](http://www.who.int/hrh/resources/framework_action/en/)
- Xyrichis, A. (2020). Interprofessional science: An international field of study reaching maturity. *Journal of Interprofessional Care*, 34(1), 1–3. <https://doi.org/10.1080/13561820.2020.1707954>

## Social-Health Operators as Mediators in E-Health System

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### Abstract

The E-health scenario within health systems has been modifying the relationship between curing and caring, and affecting the professional health landscape. This study has investigated changes in the e-health professional sector by focusing on the lowest healthcare occupation in Italy, that of social-health operators. The relationship between social-health operators and older adults has been analysed through a micro-sociological approach. The hypothesis leading the research have been the following: 1) the lowest occupation would assume a key role in dealing with the process of guaranteeing digital literacy in the e-health system, becoming digital mediators within the e-health system; 2) social-health operators would play a new role in their relationship with patients. Findings have confirmed both hypotheses, suggesting further development in the e-health professional sector and outlining a possible path for social-health operators towards an upgrading process as pre-professionals, fully legitimised by their hybrid status as both social and health care professionals.

### Keywords

Health care professions, e-health, older adults, digital mediators, pre-professions, semi-professions.

The EU digital strategy states that technology improves the daily lives of citizens by promoting digital competences for all Europeans. Its policy aims are to expand Europe's super-computing capacity to develop innovative solutions for medicine; create a European health data space to foster targeted research, diagnosis and treatment (European Commission, 2020); and support "e-health" (Black et al., 2011; Oh, Rizo, Enkin, & Jadad, 2005).

The increasing role that digital technology is acquiring in health systems raises potential issues of inequities. Those without access to the Internet or digital skills increasingly face potential barriers within an e-health care system. The proportion of individuals between the ages of 65 and 74 who have never used the Internet is falling rapidly across the EU: in 2010 it stood at 71% in the EU (EU 28) and in 2019 36% (Eurostat, 2020). Nevertheless, comparing data on all the population (98% of all Europeans used the Internet in the last 3 months), the digital gap among older adults is still critical. In the updated e-health scenario, lack of access to digital health, as well as poor engagement with digital health and barriers to digital health literacy, will affect health outcomes (Crawford & Serhal, 2020). Digital health equity is going to play a key role in public policy agenda (Crawford & Serhal, 2020).

The introduction and increasing use of ICT is strongly influencing the health professional landscape (Brante, 2013), both in terms of the health professional-patient relationship and the identity of health professionals. The impact of ICT on the health professional-patient relationship has been analysed according to two different interpretative approaches. The first one is techno-optimistic, which sees ICT as reducing the professional-patient cognitive asymmetry and increasing patient participation and mutual collaboration (Eysenbach, 2008; Timmermans & Berg, 2003; Topol, 2015). The second is techno-pessimistic, which sees ICT as preserving asymmetric power dynamics (Lupton, 2014). The relationship between patients and medical professions has been challenged by consumerism, the increasing attention for complementary medicine and Internet access to information (Bury, 2004). Nonetheless, research findings highlighted that Internet informed patients do not lead toward de-professionalization (as does the demystification of medical expertise), and a decrease in trust (Trachtenberg, Dugan & Hall 2005), but call for a strategic response by medical professions, through a medical profession enlisting process which considers Internet as an inevitable part of the medical practices (Broom, 2005). In an e-health system, the relationship between health professions and patients is changing as is the space of their interaction, as they no longer need to be physically close to each other. E-health is affecting "all the gestures by which, in a given society, a disease is circumscribed, medically invested, isolated, divided up into closed, privileged regions, or distributed throughout cure centres, arranged in the most favorable way" (Foucault, 2003 p.16).

So far, studies on the consequences of ICT on healthcare work have focused on the higher-level occupations, mainly physicians and nurses (Bagot, Cadilhac, Vu, Moss, & Bladin, 2015; Hallqvist, 2019; Nickelsen, 2019; Vicarelli & Bronzin 2018; Viitanen et al., 2011), while lower-



level occupations have received less attention. There is a lack of study on the role of lower occupations in the transition towards an e-health system. This study intends to overcome this gap by focusing on the role of the lowest health care occupation in the transitions towards the e-health system.

Professions are considered as occupational groups characterised by autonomy and discretion (Abbott, 1988; Freidson, 2001). This autonomy is legitimated by strong formal knowledge and higher education (Freidson, 1986). Other features have been added to these main elements, such as codes of ethics, altruism, rationality, and educational credentials (Wilensky, 1964), outlining a taxonomic approach (Saks, 2012). In addition, professions have been characterised by three further minor principles: the referral (if necessary, professionals should refer clients to a colleague with different specialty), “sloughing off” (less rewarding parts of professional jobs are delegated to lesser paid assistants), and impersonal service delivery (clients are treated equally) (Wilensky, 1964). This theoretical framework raises the first research question leading this study: in the e-health system, could the social-health operators, as the lowest health system occupation, be considered as badly paid assistants doing the less rewarding parts of the professional jobs guaranteeing the patients technological access to e-health?

The professional minor principle of referral, “sloughing off”, and impersonal service delivery (Wilensky, 1964) have been questioned from the perspective of human relationships (Harrits, 2016). The structural asymmetric position in the relationship between professionals and clients is a key point in studies of professions (Freidson 2001; Parsons, 1954). This position is based on specialised formal knowledge and the expertise of professionals in dealing with the problems of clients. Within this theoretical context, knowledge has to be balanced by “service ethics” and “professional morality” (Abbott, 1983; Evans, 2014), as well as adapted to the specific life experiences, current circumstances, and needs of each client (Lipsky, 2010). Nevertheless, such an “asymmetric power relationship is structurally and institutionally linked to the specific formal-scientific knowledge of the professional, and it is thus only legitimate as long as it is confined to this specific knowledge” (p.2).

Curing and caring professionals are mostly characterised by frequent and long periods of interaction with clients, thereby creating more articulated relationships (Hargreaves, 1998; Manning-Morton, 2006; O’Connor, 2008). Harrits (2016) investigated what close relations with clients mean for professionalism, arguing, from the perspective of a sociology of the professions, that elements of personal, relational, and emotion-based logic have not been discussed in depth. He suggested “[conceptualising] professionalism broadly as based not only on formal and practical knowledge (in the broadest possible meaning of this concept) but also on personal qualities such as the ability to engage in personal and emotion-based relations to citizen clients” (Harrits, 2016, p.13). He therefore outlines a concept of professionalism built “not only on science and professional experiences but also on shared (institutionalized) societal values” (Harrits, 2016, p. 13) with the challenges that this might

imply for the professional–client relationship and for the professionalism model from theoretical, empirical, and normative points of view, in terms of fair and equal treatment. This theoretical background raises the second research question. In an e-health scenario, social-health operators being alongside the bed of patient, more than other health care professions, are engaged in a relationship with patients based on personal, relational, and emotion-based logic, through his/her personal qualities, more than other health care professions doing their impersonal job who are not necessarily physically close to the patients. How is this process affecting the relationship between social health operators and patients?

Moreover, as argued by Trappenburg & Noordegraaf (2018) “diminishing the impact of referral, sloughing off and objective, impersonal care is necessary to address the medical needs of an elderly population and the needs of vulnerable people living in a difficult modern world” (Trappenburg & Noordegraaf, 2018, p. 11). Therefore, the issue is getting even more crucial in the care relationship between social-health operators and older patients, as older adults face higher barriers in accessing e-health.

This study investigates the social-health operator role in the e-health scenario through a micro sociological research approach, focused on the relationship between social-health operators and older adults. These qualitative data were collected in 2018 within a broader EU funded project, in an Italian case study. Within this project the lowest level occupation, the socio-health operators, have been given the chance to teach older people how to access computers and use Internet technology. Digital literacy which enables access to computer and internet technology, has to be considered a preliminary skill in order to access the e-health system. This is a crucial aspect in the e-health scenario, as digital skills are one of the key aspects to counter health inequity in an e-health context. Economic resources as well centre-periphery and Internet access are other crucial aspects. Nevertheless, in this study we focus on the role of social health operators as digital skills teachers.

The main research hypotheses are: 1) the lowest occupation would assume a key role in dealing with the process of guaranteeing digital literacy in the e-health system, becoming digital mediators in the e-health system. 2) social-health operators would play a new role in their relationship with patients. Based on data concerning the point of view of socio-health operators and patients, in an Italian case study, this research intends to contribute to the debate on changes in health professions in the e-health system.

## **Professions, semi-professions, and pre-professions in the Italian healthcare arena: The research background**

All professions are constantly changing (Abbott, 1988); the introduction of ICT represents a potential revolution for healthcare professions within the managerial reforms to healthcare systems in the neoliberal era (Gabe, Cardano & Genova, 2021). Taking into account Saks' statement on the complexity of defining professions (Saks, 2012), in this study we consider the comprehensive approach suggested by Brante (2013), who stresses the importance of going beyond the analysis of a single occupation: "The history of individual professions is dominated by [a] broader ecological history of the system of professions. We should be writing histories of arenas or zones in that ecology, not of individual professions and occupations. The latter are not where causality lives" (Abbott, 2010, p. 176). Therefore, social-health operators have to be considered as part of a broader professional arena. In order to describe this arena, we rely on Brante's (2013) typology: classic professions, semi-professions and pre-professions. Classic professions have their organisational origins in the 19th century; they result from occupations based on long university training and are characterised by high status, such as physicians. Semi-professions (Etzioni, 1969) are related to the development of welfare systems after the Second World War and are characterised by higher educational paths, integrated into universities, nurses being the typical example. Pre-professions represent a third generation of occupational groups emerging in the last decades and are still in the process of obtaining professional status; in "many cases there is no ambition to construct more abstract systems of knowledge ... the term pre-professions refer to the heterogeneous spectrum of novel occupations and expert groups presently expanding into a neo-liberal market" (Brante, 2013, p. 7). Professions are involved in a struggle for symbolic and material assets in the professional arena, where some occupations are subordinated to other occupations.

In Italy, as in other countries in the final decades of the last century, traditional relationships between the healthcare occupations, established during the "golden age" of the medical profession, were increasingly called into question. Medical dominance was challenged by a number of changes in the health system, including the spread of managerialism, the growth of consumerism, and the striving for autonomy of many subordinate health occupations (Tousijn, 2002). Nurses benefitted from a number of reforms aimed at upgrading, at least in the juridical arena, a profession which for a long time had been very much subordinate to the medical profession. Nevertheless, in the workplace (Abbott, 1988) medical dominance has proved to be more difficult to overcome. Thus, nursing professionalisation is still a work in progress, and nurses' autonomy continues to be constrained by medical dominance (Sena, 2017). The third layer of healthcare hierarchy has for a long time been a number of variously trained workers grouped under the generic label of "auxiliary personnel" and since 2001 "social-health operator".

The data on the main health care professions and semi-professions in Italy are presented in table 1.

**Table 1. Health care professional in Italy (last available data).**

	National Health Service Personnel (1)	Personal in residential health care service, 2018 (2)	Total health care and residential health care service personnel
Doctors and dentists	101,876	9,881	111,757
Nursing staff	255,819	38,966	294,785
Social-health operators	51,684	165,329	217,013

(1) Source: Ministero della Salute. (2018). *Personale delle ASL e degli Istituti di ricovero pubblici ed equiparati. Anno 2018. A cura di Ministero della Salute: Direzione generale della digitalizzazione, del Sistema informativo sanitario e delle statistica: Ufficio di Statistica. [Health Ministry, Staff of the ASLs and public and equivalent hospitalization institutes. Year 2018].* By the Ministry of Health: Directorate General for Digitalization, Health Information System and Statistics - Statistics Office). Retrieved from [https://www.salute.gov.it/portale/documentazione/p6\\_2\\_2\\_1.jsp?lingua=italiano&id=3012](https://www.salute.gov.it/portale/documentazione/p6_2_2_1.jsp?lingua=italiano&id=3012)

(2) Source: Istat. (2020). *Addetti all'assistenza alla persona, 2017 (variable: 7126) [Health for all database, Personal in residential health care].* Retrieved from <https://www.istat.it/it/archivio/14562>

## The role of social health operators in the Italian regulative background

In 2001 the Italian regulative system instituted the *Operatore Socio-Sanitario* (Social-Health Operator) qualification based on a professional training involving social and health care knowledge and competences (Gazzetta Ufficiale, 2002; Moretti, Spina & Ciaschini, 2012). The main aims of social-health operator activities are: a) to satisfy the primary needs of the individual, within their areas of competence, in both a social and health context; b) to promote the wellbeing and autonomy of the user. In terms of education, the medical and nursing professions are based on national academic educational programmes, whereas social-health operator training is managed at a regional level through a one-year course of not fewer than 1,000 hours for the basic qualification. Specialisations can be achieved through supplementary training courses of no more than 300 hours (of which 150 for training/work experience) for specific caring needs or the organisation of care for older

patients, psychiatric patients, hospital, and residential care. Social-health operator activities are centred on the individual and their living environment. Responsibilities include: a) direct assistance and domestic care help; b) sanitation and social intervention; c) management, organisational and training support. With respect to social activities, the social and health worker “recognises and uses appropriate communication languages and communication systems in relation to operating conditions; implements relationships-communications of help with the user and the family, for social integration and the maintenance and recovery of personal identity” (Gazzetta Ufficiale (2003) - Attachment A). Therefore, in the ICT health reform process, social-health operators also acquire a potentially important role as communication mediators between patients and other health care professions.

Furthermore, social-health operators are responsible for “performing simple diagnostic and therapeutic support activities”. Therefore, they might be considered as having a key role in telemedicine and e-health practices, for example, in the collection of health data and their analysis by professionals not physically close to the patient. Through additional training (Gazzetta Ufficiale, 2003), social-health operators can acquire responsibility for the following further activities: administration of prescribed therapy, in accordance with or under the supervision of the nursing manager; intramuscular and subcutaneous therapy on specific nursing planning, under the direction or supervision of the nursing care manager; detection and annotation of vital parameters (heart rate, respiratory rate and temperature) of the patient; the collection of excretions and secretions for diagnostic purposes; simple dressings and bandages; artificial respiration, and external cardiac massage. The list of social-health operator responsibilities illustrates a complex profile of knowledge and competences operating between social and healthcare professionalism.

## **Research design**

The research design presents and discusses the following aspects: the study research context, the case study, the main topics investigated, the data collection procedure and the data analysis process.

### ***The study research context***

Teaching activities on PC use for older patients were among social-health operators’ tasks in the European funded Ages 2.0. project. Social-health operators were engaged in teaching PC and Internet access to older people for a period of four months. Social-health operators responsible for the teaching activities, had previously taken part in a training course organised within the Ages 2.0 project which concerned the teaching processes.

The 16-week training course for older people included multiple face-to-face sessions, telephone, and e-mail support. Moreover, a user-friendly guideline was developed to supplement training to ensure participants have access to tangible materials which they can use as reminders. Social-health operators met the older people for two hours twice in the first four weeks, then the training time was reduced to one hour twice a week for the

following four weeks. In the last four weeks the face-to-face interaction was reduced to one hour a week, while email and telephone support was supplied.

### ***Ethical procedures***

The study protocol concerning all the ethical aspects was approved by the ethical committee of the University, as for example the sensitive aspects concerning the access for older people to the web and social media (Mordini et al., 2009), as well as the consent to collect data on their participation in the project. Regarding the data presented in this study, the purpose of the study was explained at the beginning of the data collection process and interview, and researchers declared that responses to questions were regarded as informed consent. Moreover, all the participants in the research project, signed an informed consent and the data privacy protection declaration in order to be part of the research.

### ***The case study***

The research focused on an Italian case study. The Italian context merits special attention because of the low numbers of older adults using the Internet in a universal healthcare system. In 2010, those aged between the ages of 65 and 74 who had never used the Internet in Italy numbered 83% and in 2019 they were 49% (Eurostat, 2020). Also considering people over 74, this percentage increases. Moreover, Italy has a universal healthcare system fostering health equity by reducing inequality in providing access to health services based on age (Pavolini & Vicarelli, 2013; Vicarelli & Pavolini 2015). Therefore, considering the low percentage of people using Internet and the universal health care framework, Italy could be considered a privileged case study in investigating changes in health professions in the e-health context.

### ***The research perspectives***

In the e-health scenario, this study investigated the role of social-health operators and their relationship with patients. To investigate the role of social-health operators in the transition towards e-health system, this study focused on the analysis of the Italian regulative framework (macro level) and on investigating the relationship between social-health operators and older patients in the teaching / learning task (micro level). To capture the objective reality in investigating the relationship aspects is outside our sociological analysis. We therefore assume that we can only know this relationship through its representation (Denzin, 2012) and hence the participants' discourses (Fairclough, 2013). The relational aspect has been investigated through two complementary points of view: 1) the patients' perception of the relationship with social-health operators. 2) the social-health operators' perception of the relationship with patients.

### ***The data collection design and procedure***

This research applied multiple methods to collect data on the role and the relationship between patients and social-health operators in the teaching /learning PC and Internet

access. The use of multi-methods is called convergent validation or triangulation (Jick, 1979; Webb, Campbell, Schwartz, & Sechrest, 1966). This methodological perspective adopts the complementary of different methods and is the so-called mixed methods approach, aiming at an in-depth understanding of the phenomenon in question (Denzin, 2012; Olsen, 2004 ). The starting point of the mixed-methods approach is the idea that different research methodologies have specific weaknesses but also specific strengths that should be overcome combining the two approaches. Mixed methods research has raised several criticisms concerning the different paradigm assumptions, the philosophical and epistemological debate, as well as the subordination of qualitative to quantitative methods (Howe,1988; Maxcy, 2003). Nonetheless, the use of multiple methods, and therefore collection and analysis of different empirical data, adds rigor, breadth complexity, richness, and depth to any inquiry (Flick, 2007). Therefore, this study collected qualitative data and quantitative data, combining an interpretative approach with basic statistical analysis (Erzberger & Prein, 1997). Moreover, in this research the mixed methods approach does not only apply to the complementary of quantitative and qualitative data, but also refers to the complementary role of different qualitative data collection techniques.

Data on social-health operators' perceptions on the relationships with older people in teaching them computer and Internet access in residential care and in home care services, were collected through:

1. Telephone interviews with eight social-health operators at the end of the training process. Eight is the total number of socio-health operators involved in the teaching process. Social-health operators were all women, between 29 and 48 years old, and all of them were already known by the patients. The interviews followed a semi-structured list of questions.
2. Teaching diary: documentation compiled by social-health operators during the implementation of the project, called "training logs", collecting all the data on the training process in terms of objectives for each training meeting, criticalities, and potentialities during the meeting, together with notes on the interests and mood of participants. "Training logs" represented a crucial element of analysis regarding the implementation of the training process for older people by social-health operators, highlighting all the criticalities, challenges and successes reached by each social-health operator in their teaching activities. "Training logs" shed light on behaviours, practices as well as comments that would be not accessible to researchers, even during participant observation. Training logs are a sort of diary and therefore have all the potentialities, as well as limits, of this methodological research tool, both as record of and reflection on the experience (Alaszewski, 2006; Corti,1993; Cucu-Oancea 2013; Elliot, 1997).

Data on older patients' perceptions on their relationships with social-health operator teaching them PC and Internet access were collected through:

1. Face to face structured interviews with the 60 older people who had taken part in the training process to access computer and internet. Half of the older people were in domestic settings (the older people's own homes), while the rest were in residential care homes. The structured interview mainly consisted of closed questions. Most of them used Likert-type scale for collect responses. The interviews were conducted just a few days after the end of the PC and Internet training process.
2. Facebook posts written by older patients during PC and Internet access training were also analysed. Facebook has become a wide source of data in sociological research (Giglietto et al 2012; Hookway, 2008) with all the ethical issues concerning social media research (Moreno et al., 2013). The Facebook posts written by older people involved in the computer and Internet learning process have been examined during the time of the learning process and in the three weeks after the training was concluded.

### ***The data analysis process***

The analysis was carried out on different sources of data considering the point of view of socio-health operators as well as the point of view of older people involved in the computer and Internet technology learning process. Quantitative data from the structured interview to older patients were analysed through basic statistical approach. Nevertheless, most of the data collected were qualitative data and they were processed through Content Analysis (Patton, 2002; Ritchie, 1994) to describe and interpret the perceptions of older patients and of social-health operators regarding their relationship in the teaching / learning process. Open ended questions avoiding restricting the respondents' choice of answers, allowed the collection of rich data in the social-health operators interviews (Gubrium & Holstein 2002). The main steps of the qualitative research process were followed in data processing:

- 1) Familiarization with the verbal transcription of all the interviews and of all the Facebook posts by older patients and all the social-health operators' training logs. In this phase we obtained an overview of the collected data and started to make the first notes on recurring themes
- 2) According to the research questions, the thematic framework was set out.
- 3) In the indexing phase, the thematic framework was developed according to the focus of the analysis.
- 4) All the data were analysed in depth and each specific piece of the data was charted according to the research themes.



- 5) The charted data were examined by their main aspects and in relation to the thematic framework of the study. They were mapped and interpreted (Ritchie & Spencer, 1994).

The epistemological framework to analysing qualitative data, from interviews as well from training logs and Facebook posts, has been critical discourse analysis (Fairclough, 2013). This focuses on language through a critical sociological analysis to highlight power relationships, ideologies, institutions, and social identities perspective. Therefore, critical discourse analysis has been applied in its explanatory capacity because it does not simply describe existing realities but seeks to explain them showing the power dynamic as well as the mechanism and forces in the context of health professions arena.

Research questions	Point of view	Data sources
Are social health operators going to assume the role of digital mediators in the e-health system?	Perceptions of social-health operators	8 Interviews (each interview counts about 6 written pages of interview transcriptions)
How is the role of digital mediators going to change the relationship with older patients?		60 Social health operators' teaching log (each diary count about 10 pages of notes)
	Perceptions of older patients	60 Structured interviews with closed questions
		87 Facebook posts by the participants in the project

**Table 2.** Research questions, point of view and data sources

## Results: The relationship between social-health operators and patients in the teaching / learning task

### *Social-health operators' perception of the relationship with patients*

Teaching PC and Internet use means dedicating time to allow older people to become familiar with the technology. Time given over to teaching and learning is a crucial new aspect in the relationship between social-health operators and patients, turning caring time into teaching time. As noted in a teaching diary: "The lady has difficulties writing with a keyboard. Therefore, we spend time doing writing exercises" (TL\_63). As another social and health worker wrote in the training log: "The lady has never used a computer in her life. So, I had to teach her to write with the keyboard and to know the use of the keys on it. The lady was very much engaged during the computer course. Her initial difficulties related to never

having used a computer and not being able to write with the keyboard or touch screen, were overcome. The lady was always very motivated in using the computer and made good progress. It wasn't always possible to meet the lesson targets because some topics required a longer time to understand and test than those indicated by the technician's manual" that was developed for the Ages 2.0 project (TL\_17). In another training log we read: "There are still difficulties writing with the keyboard. The gentleman worked hard to complete the training. His initial difficulties related to never having used a computer and not knowing how to write with a keyboard, physical or touch screen, were overcome as well. It was almost never possible to keep the pace of the lessons, since all the topics covered required a longer time to comprehend and test than those indicated by the technician's manual" (TL\_46). The need for time to consolidate the concepts learned and to cope with limitations of memory is stressed in this training log: "She asked several times to look back on previous lessons, fearing she would not remember all the steps involved in the applications. Hence we often "summarized" the content and took notes to add to the manual" (TL\_13). As noted in another training log: "It has often been necessary to repeat some of the topics the lady had the most difficulty learning, especially Facebook and Skype" (TL\_22).

PC training generally had a very positive impact on patients. As claimed by one social and health worker: "as reported in the literature as well, most of the patients in residential care are completely unmotivated: a few weeks after they get in the residential care programme, they lose their interests, and it seems like they are simply there awaiting death. For us, we saw it in this way: PC training for most of them was a great opportunity to be revived, to gain a new approach to life" (OSS\_8).

As described by one social-health operator: "The participant tended to depreciate and devalue her capabilities even though she has actually been able to achieve a good level of competence in the use of computers." The social-health worker reported that "she also discovered personal skills she didn't think she had" (OSS\_4). Social-health operators highlighted that "At the end of the training process they were very happy because they achieved an unexpected result" (OSS\_3). Moreover, PC training has increased and improved communications between older patients and social-health operators: "Getting familiar with a new tool that was considered too far ... greatly improved their self-esteem, ... some of them communicate with their family every day and with the residential staff" (OSS\_6). For most of them, the relationship with the social-health operators was crucial, and Facebook was used to keep in touch with the social-health operator carers even when they were not working, as well as to share with them web links, photos, experiences and feelings: "Internet use made it possible for the elderly to keep in contact with relatives and friends, increasing their wellbeing; they have been happier and calmer, and they often share with us their feelings" (OSS\_2).

*Patients' perception of the relationship with social-health operators*

Data from the closed questions structured interviews to patients show that 52 out of 60 patients stated that interaction with the social-health operators involved in the teaching activities was very positive, while for 5 it was positive, and for 3 neutral. 42 patients involved in the project said that they had developed a new and strong relationship with the social-health operators during the training programme, while for 18 this was not the case. Moreover, 49 stated that during the training programme, the social-health operators involved in the teaching activities came to understand the older people / patient better as a person (while for 10 it was neutral). Nonetheless, 41 perceived the relationship with social-health operators to be as a single team working together rather than separate individuals.

Facebook posts confirm the positive effect of social-health operators as digital mediators: "I am very happy to have participated in this initiative; I discovered that at my age you can still learn. I didn't think it would have been so easy and interesting". (MS\_79F). "I started this programme with some scepticism; today I completed it and feel extremely satisfied because it gave me confidence in myself. Being of a certain age, I thought I couldn't do it and instead I re-discovered in myself a lot of capabilities—Thank you". (ET\_85F). "I am very happy I had the opportunity to take part in such a project; at my age you can still learn. It was so easy and interesting." (MP\_75F).

Older people involved in PC and Internet training not only become familiar with social media, but also with discussion forums about politics and news. As posted on Facebook: "The computer class of the Ages project is going well. I like using Google Maps to search for places (I looked for a place in G. where I worked and other things). I like reading the newspaper online, especially the news. I did some research on Google, looking for astronomy websites. I listened to music on YouTube". (MM\_82M). From another post on a participant's Ages Facebook page: "I am super happy I learned how to use the computer. It gives me a lot of company: I read newspapers, play solitaire, etc." (LG\_81F). Other participants added: "I like to find places on google maps, places where I worked, and reading newspapers, listening to music" (AD\_73M). "The PC helps me a lot; I love to play cards, when I cannot sleep at night" (PC\_78M). "Thanks to YouTube I watched my grand-son playing with his group. It was great!" (MA\_81F).

Older people positively considered the social-health operator teaching role as digital teacher: "I am very happy that there are these courses. They make us feel less old than we are, and we learn communication techniques that we never thought we had given our advanced age. And if the teacher is like V. everything becomes almost fun. Many heartfelt thanks to all!!!!!!". (AG\_78 M). "To say I'm an enthusiast about the computer is an understatement of the truth; much of the credit must go to Mrs. V., who has been able to unravel usually inaccessible technical mysteries even to a partially senile old man who I have the undeniable impression of being. As irrefutable proof I must tell you that I'm ninety-two years old". (GM\_92M).

As emphasised by a Facebook post of one participant: “Shut between four walls, a new horizon opens up which lets my mind breathe and I feel more engaged and thus more joyful”. (GG\_83M). This Facebook post by a participant in the training sums up most of the qualitative feedback collected during the course and serves as an overall observation on the Ages project: “I must thank the Ages project team and everyone who collaborated. I participated in this computer study “not without concern”, because the less than tender age of 80 certainly does not help, what with memory being depleted and the ailments of time. I wanted to try it out and I must say I am satisfied because now I feel less lonely. When I think of a poem, a piece of history and I do not remember who wrote it, I can just write a sentence and the die is cast. Likewise, I can also communicate with family and friends, read the news in the papers, see city maps, etc. On ... the course I took has come to an end, and I can say straightaway that I’ll miss it because I did learn something, but so much is still left and unfortunately time is running out. Let’s make do! A heartfelt thank you to all of you and especially to my precious teacher. Sincerely,” (NV\_79F).

## Discussion

The E-health scenario within health systems is modifying the relationship of curing and caring, affecting the professional health landscape which had been relatively stable for many decades. This study has investigated the role of the lower health care occupation—social-health operators—in the transition towards an e-health system. The study main hypotheses were: 1) the lowest occupation would assume a key role in dealing with the process of guaranteeing digital literacy in the e-health system, becoming digital mediators in an e-health system; 2) social-health operators would play a new role in their relationship with patients, being alongside the bed of the patients.

The transition to e-health systems is affecting the health care professions landscape (Brante, 2013), and there are signs that the Covid-19 pandemic is accelerating it. Yet, this transition has been under-investigated. While doctors and nurses have more easily been switched to at distance care, the lowest health carers were not (Bashshur et al., 2020). In the lack of studies on the role of lower occupations in the transition to an e-health system, data from this study, run before the pandemic about the role of social- health operators in teaching digital skills to older people, shed light on this.

Concerning the role of the lowest health system occupation, findings confirm:

1. the lowest occupation might assume a key role teaching PC and internet access as a key aspect in guaranteeing digital literacy in the e-health system-
2. social-health operators caring about the communication between patients and other health care professions would be a task coherent with the Italian case study national regulative framework.

The first hypothesis of the study—digital mediators as e-health mediators—has been therefore confirmed.

Regarding the relationship between social-health operators and patients, the study might suggest that social-health operators would play a new role in their relationship with patients, being alongside the bed of the patients (second hypothesis). Findings show that e-health mediators have been positively considered for both the older patients and social-health operators. Regarding the new role of social-health operator as e-health mediator, micro sociological analysis findings show new characteristics in the relationship between social-health operator and patients: moving the caring relationship to become one of teaching. If professionalism can be conceptualised “broadly as based not only on formal and practical knowledge (in the broadest possible meaning of this concept) but also on personal qualities such as the ability to engage in personal and emotion-based relations to citizen clients” (Harrits, 2016, p. 13), then social-health operators correspond well to this definition.

Findings suggest further development in the e-health professional arena concerning social-health operators. Within the highly hierarchical division of labour in the health systems, in the e-health scenario, part of the medical consolidated profession as well as the semi-profession of nurses are partially going to be at distance, while the social-health operators are going to keep their position alongside the bed of the patient. Moreover, there are signs that where nursing tasks are upgraded, the human relationship with the patients might increasingly be left in the hands of social-health operators. In the Italian regulative framework, the social-health operators’ tasks already include administration of prescribed therapy, intramuscular and subcutaneous therapy on specific nursing planning, detection, and annotation of vital parameters (heart rate, respiratory rate, and temperature) of the patient, the collection of excretions and secretions for diagnostic purposes, simple dressings and bandages, artificial respiration, and external cardiac massage. All of these tasks are supposed to be played under the direction or supervision of the nursing care manager. Therefore, being alongside the bed of the patient, social-health operators are potentially going to be not only digital mediators, but also the leading character in a special personal relationship with patients in an e-health system and technological society (Ihde, 2002). The new role of e-health mediators for social-health operators seems to outline a possible path for social-health operators towards an upgrading process as pre-professionals. The interesting point is that they derive it more from their relational than from technical skills. Studies on the professionalisation process have so far focused on the growth of knowledge and of technical skills. This study suggests that in the new e-health system, social-health operators might assume the pre-professional role of mediators between patients on the one hand, and nurses and doctors on the other, fully legitimised by their hybrid status between social and health care professionals.

This study contributes to the debate on changes in the healthcare professions in the e-health system by investigating the lowest level of healthcare professionals, social-health

operators in Italy. Nevertheless, its main limitation is that it is a single national case study. Further analysis on the lowest potential pre-professionals in e-healthcare would be necessary to confirm these preliminary results concerning social health operators as digital as well as potential caring and curing mediators between the patient body and the technological tools connecting patients to other health care professions (doctors) and semi-professions (nurses)<sup>i</sup>.

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## References

- Abbott, A. (1983). Professional Ethics. *American Journal of Sociology*, 88(5), 855-885.  
<http://dx.doi.org/10.1086/227762>
- Abbott, A. (1988). *The system of professions*. Chicago: University of Chicago Press
- Abbott, A. (2010). Varieties of ignorance. *The American Sociologist*, 41, 174-189.  
<http://dx.doi.org/10.1007/s12108-010-9094-x>
- Alaszewski, A. (2006). *Using diaries for social research*. London, UK: Sage.  
<https://doi.org/10.4135/9780857020215>
- Bagot K.L., Cadilhac D.A., Vu M., Moss K., Bladin C.F. (2015). Telemedicine in the acute health setting: A disruptive innovation for specialists (an example from stroke). *Journal of Telemedicine and Telecare*, 21(8), 443–448.  
<https://doi.org/10.1177/1357633X15610722>
- Bashshur, R., Doarn, C. R., Frenk, J. M., Kvedar, J. C., & Woolliscroft, J. O. (2020). Telemedicine and the COVID-19 pandemic, lessons for the future. *Telemedicine and e-Health*, 26(5).  
<https://doi.org/10.1089/tmj.2020.29040.rb>
- Black, A. D., Car, J., Pagliari, C., Anandan, C., Cresswell, K., Bokun, T., & Sheikh, A. (2011). The impact of eHealth on the quality and safety of health care: A systematic overview. *PLoS medicine*, 8(1), e1000387.  
<https://doi.org/10.1371/journal.pmed.1000387>
- Brante, T. (2013). The professional landscape: The historical development of professions in Sweden. *Professions and professionalism*, 3(2), 119-142.  
<https://doi.org/10.7577/pp.558>
- Broom, A. (2005), Medical specialists accounts of the impact of the Internet on the doctor/patient relationship. *Health*, 9(3), 319-338.  
<https://doi.org/10.1177/1363459305052903>
- Bury, M. (2004). Researching patient-professional interactions. *Journal of Health Service Research and Policy*, 9(1), 48-54.  
<https://doi.org/10.1258/135581904322724130>

- Corti, L. (1993). Using diaries in social research. *Social research update*, 1993(2).  
<http://repository.essex.ac.uk/24606/1/Social%20Research%20Update%2020%20Using%20diaries%20in%20social%20research.pdf>
- Crawford, A., & Serhal Serhal, E. (2020). Digital health equity and COVID-19: the innovation curve cannot reinforce the social gradient of health. *Journal of medical Internet research*, 22(6), e19361. <https://doi.org/10.2196/19361>
- Cucu-Oancea, O. (2013). Using diaries—a real challenge for the social scientist. *Procedia-Social and Behavioral Sciences*, 92(10), 231-238.  
<https://doi.org/10.1016/j.sbspro.2013.08.665>
- Denzin, N. K. (2012). Triangulation 2.0. *Journal of mixed methods research*, 6(2), 80-88.  
<https://doi.org/10.1177/1558689812437186>
- Elliott, H. (1997). The use of diaries in sociological research on health experience. *Sociological Research Online*, 2(2), 38-48. <https://doi.org/10.5153/sro.38>
- Erzberger, C., & Prein, G. (1997). Triangulation: Validity and empirically-based hypothesis construction. *Quality and quantity*, 31(2), 141-154.  
<https://doi.org/10.1023/A:1004249313062>
- Etzioni, A. (Ed.). (1969). *The semi-professions and their organization: Teachers, nurses, social workers*. New York: The Free Press.
- European Commission (2020). *Shaping Europe's digital future: Factsheet*. Available from:  
[https://ec.europa.eu/commission/presscorner/detail/en/fs\\_20\\_278](https://ec.europa.eu/commission/presscorner/detail/en/fs_20_278)
- Eurostat (2020). *Digital inclusion: Individuals*. Available from:  
<https://ec.europa.eu/eurostat/web/digital-economy-and-society/data/database>
- Evans, T. (2014). The moral economy of street-level policy work. *Croatian and Comparative Public Administration*, 14(2), 381-399.
- Eysenbach, G. (2008). Medicine 2.0: Social networking, collaboration, participation, apomediation, and openness. *Journal of Medical Internet Research*, 10(3), 1-9. <https://doi.org/10.2196/jmir.1030>
- Fairclough, N. (2013). *Critical discourse analysis: The critical study of language*. London: Routledge. <https://doi.org/10.4324/9781315834368>
- Flick, U. (2007). *Designing qualitative research*. London: Sage. <https://doi.org/10.4135/9781849208826>
- Foucault, M. (2003). *The birth of the clinic (3rd ed.)*. London: Routledge.
- Freidson, E. (1986). *Professional powers: A study of the institutionalization of formal knowledge*. Chicago: Chicago University Press.

- Freidson, E. (2001). *Professionalism: The third logic*. Cambridge: Polity Press.
- Gabe J., Cardano M., Genova A. (Eds.). (2021). *Health and illness in the neoliberal era in Europe*. Bingley: Emerald. <https://doi.org/10.1108/9781839091193>
- Gazzetta Ufficiale (2002). Legge 8 gennaio 2002 n. 1: Conversione in legge, con modificazioni, del decreto legge 12 novembre 2001, n. 402, recante disposizioni urgenti in materia di personale sanitario [Law 8 January 2002 n. 1: Conversion into law, with modifications, of the decree law 12 November 2001, n. 402, containing urgent provisions on health personnel]
- Gazzetta Ufficiale (2003). Accordo tra il Ministero della Salute, il Ministero del lavoro e delle politiche sociali, le Regioni e le province autonome di Trento e di Bolzano per la disciplina della formazione complementare in assistenza sanitaria della figura professionale dell'operatore socio-sanitario di cui all'articolo 1, comma 8, del DI 12 novembre 2001, n. 402, convertito, con modificazioni, dalla legge 8 gennaio 2001, n1. [Agreement between the Ministry of Health, the Ministry of Labour and Social Policies, the Regions and the Autonomous Provinces of Trento and Bolzano for the discipline of complementary training in health care of the professional figure of the socio-health operator referred to in article 1, paragraph 8, of the DI 12 November 2001, n. 402, converted, with modifications, by law 8 January 2001, n1]
- Giglietto, F., Rossi, L., & Bennato, D. (2012). The open laboratory: Limits and possibilities of using Facebook, Twitter, and YouTube as a research data source. *Journal of technology in human services*, 30(3-4), 145-159. <https://doi.org/10.1080/15228835.2012.743797>
- Gubrium, J. F. & Holstein, J. A. (2002). From the individual interview to the interview society, in J. F. Gubrium & J. A. Holstein (Eds.), *Handbook of Interview Research*, Thousand Oaks, CA: Sage Publications. <https://doi.org/10.4135/9781412973588>
- Hallqvist, J. (2019). Digital health and the embodying of professionalism: Avatars as health professionals in Sweden. *Professions and Professionalism*, 9(2), e2847. <https://doi.org/10.7577/pp.2847>
- Hargreaves, A. (1998). The emotional politics of teaching and teacher development: With implications for educational leadership. *International journal of leadership in education*, 1(4), 315-336. <https://doi.org/10.1080/1360312980010401>
- Harrits, G. S. (2016). Being professional and being human. Professional's sensemaking in the context of close and frequent interactions with citizens. *Professions and Professionalism*, 6(2), e1522. <https://doi.org/10.7577/pp.1522>
- Hookway, N. (2008). "Entering the blogosphere": Some strategies for using blogs in social research. *Qualitative research*, 8(1), 91-113. <https://doi.org/10.1177/1468794107085298>



- Howe, K. R. (1988). Against the quantitative-qualitative incompatibility thesis or dogmas die hard. *Educational Researcher*, 17(8), 10-16. <https://doi.org/10.3102/0013189X017008010>
- Ihde, D. (2002). *Bodies in technology (Vol. 5)*. Minneapolis, MN: University of Minnesota Press.
- Istat (2020), Health For All database. Retrieved from <https://www.istat.it/it/archivio/14562>
- Jick, T. D. (1979). Mixing qualitative and quantitative methods: Triangulation in action. *Administrative science quarterly*, 24(4), 602-611. <https://doi.org/10.2307/2392366>
- Lipsky, M. (2010). *Street-level bureaucracy: Dilemmas of the individual in public services (2nd ed.)*. New York: Publications of Russell Sage Foundation.
- Lupton, D. (2014). Critical perspectives on digital health technologies. *Sociology Compass*, 8(12), 1344-1359. <https://doi.org/10.1111/soc4.12226>
- Manning-Morton, J. (2006). The personal is professional: Professionalism and the birth to threes practitioner. *Contemporary Issues in Early Childhood*, 7(1), 42-52. <https://doi.org/10.2304/ciec.2006.7.1.42>
- Maxcy, S. J. (2003). Pragmatic threads in mixed methods research in the social science: The search for multiple models of inquiry and the end of the philosophy of formalism. In A. Tashakkori & C. Teddlie Denzin (Eds.), *Handbook of mixed methods in social & behavioral research* (p. 51-90). Thousand Oaks, CA: SAGE.
- Mordini, E., Wright, D., Wadhwa, K., De Hert, P., Mantovani, E., Thestrup, J., ... & Vater, I. (2009). Senior citizens and the ethics of e-inclusion. *Ethics and Information Technology*, 11(3), 203-220. <https://doi.org/10.1007/s10676-009-9189-7>
- Moreno, M. A., Goniu, N., Moreno, P. S., & Diekema, D. (2013). Ethics of social media research: common concerns and practical considerations. *Cyberpsychology, behavior, and social networking*, 16(9), 708-713. <https://doi.org/10.1089/cyber.2012.0334>
- Moretti, C., Spina E., Ciaschini, U. (2012). Formazione e operatività nel sociale: l'assistente sociale, l'educatore e l'operatore socio-sanitario. [Social training and operations: The social worker, the educator and the socio-health worker]. *Rivista di Scienza dell'Amministrazione*, 3,53-72. <https://doi.org/10.3280/SA2012-003004>
- Nickelsen, N. C. M. (2019). The infrastructure of telecare: Implications for nursing tasks and the nurse-doctor relationship. *Sociology of health & illness*, 41(1), 67-80. <https://doi.org/10.1111/1467-9566.12781>
- O'Connor, K. E. (2008). "You choose to care": Teachers, emotions, and professional identity. *Teaching and Teacher Education*, 24(1), 117-126. <http://dx.doi.org/10.1016/j.tate.2006.11.008>

- Oh, H., Rizo, C., Enkin, M., & Jadad, A. (2005). What is eHealth? A systematic review of published definitions. *World Hospitals and Health Services*, 41(1), 32-40. <https://doi.org/10.2196/jmir.7.1.e1>
- Olsen, W. (2004). Triangulation in Social Research: Qualitative and quantitative methods can really be mixed. In: M. Holborn, Ed., *Development in Sociology*, Ormskirk UK: Causeway Press (p. 1-30).
- Parsons, T. (1954). A sociologist looks at the legal profession. In T. Parsons (Ed.), *Essays in sociological theory* (p. 310-385). Glencoe, Illinois: The Free Press.
- Patton, M. Q. (2002). *Qualitative research & evaluation methods (3rd ed)*. Thousand Oaks, CA: Sage Publications.
- Pavolini, E., & Vicarelli, G. (2013). Italy: A strange NHS with its paradoxes. In Emmanuele Pavolini, Ana M. Guillén (Eds), *Health Care Systems in Europe under Austerity* (p. 81-101). London: Palgrave Macmillan. [https://doi.org/10.1057/9780230369627\\_5](https://doi.org/10.1057/9780230369627_5)
- Ritchie, J. & Spencer, L. (1994). Qualitative data analysis for applied policy research. In A. Bryman and R. G. Burgess (Eds.), *Analyzing qualitative data*, (p.173-194). London: Routledge [https://doi.org/10.4324/9780203413081\\_chapter\\_9](https://doi.org/10.4324/9780203413081_chapter_9)
- Saks, M. (2012). Defining a profession: The role of knowledge and expertise. *Professions and Professionalism*, 2(1), 1-10. <https://doi.org/10.7577/pp.v2i1.151>
- Sena, B. (2017). Professionalization without autonomy: The Italian case of building the nursing profession. *Professions and Professionalism*, 7(3), e1900. <https://doi.org/10.7577/pp.1900>
- Timmermans, S., & Berg, M. (2003). The practice of medical technology. *Sociology of Health & Illness*, 25(3), 97-114. <https://doi.org/10.1111/1467-9566.00342>
- Topol, E. (2015). *The patient will see you now*. New York: Basic Books.
- Tousijn, W. (2002). Medical dominance in Italy: A partial decline. *Social Science & Medicine*, 55(5), 733-741. [https://doi.org/10.1016/S0277-9536\(01\)00199-X](https://doi.org/10.1016/S0277-9536(01)00199-X)
- Trachtenberg, F., Dugan, E., & Hall, M. A. (2005). How patients' trust relates to their involvement in medical care. *Journal of Family Practice*, 54(4), 344-354.
- Trappenburg, M., & Noordegraaf, M. (2018). Fighting the enemy within? Challenging minor principles of professionalism in care and welfare. *Professions and Professionalism*, 8(2), e2265. <https://doi.org/10.7577/pp.2265>
- Vicarelli, G., & Bronzini, M. (2018). La sanità digitale: dimensioni di analisi e prospettive di ricerca. [Digital health: Dimensions of analysis and research perspectives]. *Social Policies*, 2, 147-162.
- Vicarelli, G., & Pavolini, E. (2015). Health workforce governance in Italy. *Health Policy*, 119(12), 1606-1612. <https://doi.org/10.1016/j.healthpol.2015.09.004>

- Viitanen, J., Hyppönen, H., Lääveri, T., Vänskä, J., Reponen, J., & Winblad, I. (2011). National questionnaire study on clinical ICT systems proofs: Physicians suffer from poor usability. *International journal of medical informatics*, 80(10), 708-725. <https://doi.org/10.1016/j.ijmedinf.2011.06.010>
- Webb, E. J., Campbell, D. T., Schwartz, R. D., & Sechrest, L. (1966). *Unobtrusive measures: Nonreactive research in the social sciences*. Chicago: Rand McNally.
- Wilensky, H. (1964). The professionalization of everyone? *American Journal of Sociology*, 70(3), 137-58. <https://doi.org/10.1086/223790>

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