

Chapter # 37

"MY DANCE AREA - YOUR DANCE AREA": Metaphors of Nursing Trainee Identity in the Context of Virtual Communities of Practice

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ABSTRACT

Virtual Communities of Practice (vCOP) in the context of nursing education evolve their significance in the case of professional identity development. "What does it mean to be a nursing student?" is a central question in the nursing education context, in which the foundation for a professional identity is laid. Since communication in virtual communities of practice is predominantly text-based, there are often rich descriptions of one's own view as well as reflections on what has been experienced. Studies indicate, that linguistic peculiarities are evident in the expression of nurses in the form of frequent metaphorizations. Against this background, this research addresses the question of what metaphors nursing trainees use in the context of virtual communities of practice to describe their perceptions of being a nursing trainee. The goal of the study is to describe the core characteristics of nursing scholar identity and derive curricular consequences. Within the framework of a netnographic research design, data collection is done through field observations. In the context of data evaluation, Schmitt's metaphor analysis is used. Preliminary results show, that nursing trainees describe their identity in terms of metaphorical expressions, which manifest themselves in *Being a Nursing Trainee* and *Being a Prospective Nurse*.

Keywords: virtual communities of practice, nursing education, professional identity, metaphors in nursing.

1. INTRODUCTION

In the context of nursing education, various learning sites exist, that influence the development of a professional identity. Against the backdrop of increasing digitization, the importance of learning venues that manifest themselves in the digital space and offer a supplement to nursing learning in school, practice, and the skills lab is growing. Virtual communities of practice represent such a learning opportunity, as they enable the exchange of professional knowledge and professional experience already in the context of nursing education (Rolls, Hansen, Jackson, & Elliott, 2019, p. 1382). The establishment of these communities in the healthcare sector has national and international significance, as evidenced by the initiation of various research projects (Bermejo-Caja et al., 2019; Struminger, Arora, Zalud-Cerrato, Lowrance, & Ellerbrock, 2017). Participation in these communities can provide manifold benefits such as working together on professional problems to find alternative solutions as well as interpretative perspectives. Furthermore, researching professionally relevant information, supporting theory-practice transfer through the exchange of evidence-based knowledge, conducting collegial consultations and promoting interprofessional work are important (Bermejo-Caja et al., 2019, p. 403; Rolls et al., 2019, p. 1393; Struminger et al., 2017, p. 633; Terry, Nguyen, Peck, Smith, & Phan, 2019, pp. 372-375). The aforementioned aspects also refer to processes of nursing professional identity development (North, Franz, & Lembke, 2004, p. 9; Terry et al., 2019, p. 372).

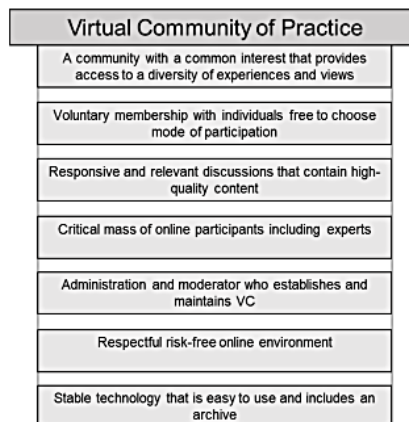
Since communication in virtual communities of practice is predominantly text-based, there are often rich descriptions of one's own view as well as reflections on what has been experienced. Studies indicate, that linguistic peculiarities are evident in the expression of nurses in the form of frequent metaphorizations (Luft, 2022; Rolfe, 2019; Rolfe, 2018; Watson, 1987; Winslow, 1984; Wurzbach, 1999). In the nursing context, metaphors can help to reflect on nursing practice, gain new perspectives, and identify oneself as a nurse (Sharoff, 2009, p. 312). Currently, it is not clear, how the identity of nursing students unfolds in the context of virtual communities of practice and in what way previously existing identity concepts can be extended against this background.

2. BACKGROUND

2.1. The Virtual Community of Practice as a Professional Learning Place

The term "community of practice" was coined in 1991 by Lave and Wenger in their monograph "Situated learning. Legitimate peripheral participation." Communities of practice are groups of people who have existed over a long period, have an interest in a common topic, and want to build and share knowledge together (North et al., 2004, p. 8). Learning in said communities is understood as a social, participatory process that is closely interwoven with the identity formation of the community members (Lave & Wenger, 2008, p. 4). Communities of Practice in general are self-organized, dynamic systems that can be located both within and outside of organizations and have an informal character (Wenger, 1998, p. 2). According to Wenger (2011, p. 1-2), they are also characterized by the fact that their members share a common area of interest ("domain"), exchange information about it ("community"), and thus build up a common culture of practice ("practice"). The implementation and design of communities of practice are not tied to a certain format, which means, there is no definition of a fixed number of members and contacts within the community do not necessarily have to be face-to-face. According to an assessment by North et al. (2004, p. 91), most communities of practice exist virtually. Meanwhile, virtual communities of practice can be found in a variety of professional sectors, such as health care. There, they are referred to as "common online platform[s] to provide healthcare professionals with the opportunity to access highly specialized knowledge, build a professional support network, and promote the translation of research evidence into practice." (Shaw, Jazayeri, Kiegaldie, & Morris, 2021, p. 1) *Figure 1* summarizes central characteristics of these communities:

Figure 1.
Key characteristics of vCOP (in accordance to Rolls et al., 2019, p. 1385).



The interaction of the community members usually takes place independently of time and space via internet forums or mailing lists, which means communication is primarily text-based (Winkler & Mandl, 2005, p. 4).

As part of a research project, Zinke and Fogolin (2004, p. 1-2) investigate virtual communities as a place of learning in vocational education. They address the question, how informal professional learning can be supported with new media and what role participation in virtual communities plays in this context. The active users of communities state that they are strongly motivated to learn and identify to a high degree with their profession (Zinke & Fogolin, 2004, p. 9-10). Similar findings can also be found in Wenger (1998, p. 1), who describes professional work in this context as follows: "learn the intricacies of your job, explore the meaning of your work [...], and develop a sense of yourself as a worker." This is expressed, among other things, through the discussion of practical problems as well as processes of finding and representing one's own points of view, for example, in the context of professional innovations. In the case of training-oriented communities, the focus is also on questions of efficient exam preparation (Zinke & Fogolin, 2004, p. 6). Participation in such communities loses significance if opportunities for collegial exchange are available and organized within the workplace. At the same time, the acceptance and recommendation of a particular community within the company is conducive to its use (Zinke & Fogolin, 2004, p. 5-6).

2.2. Nursing Professional Identity in Virtual Communities of Practice

To date, few studies can be found in the literature that examine the topic of nursing identity in the context of virtual communities of practice, but rather primarily illuminate identity development in connection with nursing school and nursing practice (Altmeyden, 2022; Bohrer & Walter, 2015; Fischer, 2013).

Sibbald, Burnet, Callery, and Mitchell (2022) analyze a virtual community of practice ("Policy Circle") (Sibbald et al., 2022, p. 4), which connects mid-career professionals from health policy and practice, including nurses, across Canada. Using a mixed methods design, the researchers explore the question of what value the aforementioned community holds from the members' perspective (Sibbald et al., 2022, p. 4). The results of the study show, that in addition to the exchange of knowledge, the members' sense of belonging to the community and the associated development of a support network are perceived as particularly enriching (Sibbald et al., 2022, p. 5-9). Feelings of belonging and being connected point to identity-building potential.

Terry et al. (2019) use a systematic review to demonstrate the informal use of online communities by nursing students, as well as the benefits and drawbacks of participation in such communities. Based on the results of the studies included in the systematic review, it can be concluded that nursing students consider virtual communities of practice as places for the exchange of experiences as well as generators of job-related knowledge, and that especially the mutual support in the community is conducive to building a professional identity (Terry et al., 2019, pp. 372-375).

Rolls et al. (2019) examine knowledge sharing practices in virtual communities using the public forum "ICUConnect", which anyone working in an ICU can join. The researchers formed the key category "Virtual Community Work" (Rolls et al., 2019, p. 1393), which includes the main activities of members. Interaction knowledge was related to the exchange of technical information and best practice examples. In addition, community members discussed the implementation or omission of certain nursing measures and demanded appropriate justifications for them (Rolls et al., 2019, pp. 1393-1395). The professional exchange and finding and defending one's own points of view refer to professionally relevant processes of identity formation. In this context, professional identity development thus takes place as a gradual integration into the respective professional community of practice.

2.3. Metaphorical Expressions of Nursing Professional Identity

Since communication in virtual communities of practice is predominantly text-based, there are often rich descriptions of one's own view as well as reflections on what has been experienced (Ullrich & Schiek, 2014, p. 466). Studies indicate that linguistic peculiarities are evident in the expression of nurses in the form of frequent metaphorizations (Luft, 2022; Rolfe, 2019; Rolfe, 2018; Watson, 1987; Winslow, 1984; Wurzbach, 1999). Based on Lakoff and Johnson's (1980) Cognitive Metaphor Theory, metaphors are understood as transfers of meaning from one domain to another.

In a research study, Yesilbalkan, Cinar, and Karadakovan (2021) examine metaphors to describe, understand, and explore the nursing profession. In their mixed-method study, the researchers involved 85 postgraduate nursing students who answered the statement "A nurse is like ... because ..." (Yesilbalkan et al., 2021, p. 423-424). Because of their analyses, 50 metaphors emerged, which were clustered within 13 categories. The metaphorical phrases expressed by the postgraduate nurses had mostly positive connotations, for example, "mother" or "angel" (Yesilbalkan et al., 2021, p. 426). However, the associations also include expressions such as "computer" or "robot" (Yesilbalkan et al., 2021, p. 426), which tend to be associated with negative emotions in the nursing profession.

While Yesilbalkan et al. (2021) focus on postgraduate nurses, Kokturk Dalcali and Kaya (2020) turn to nursing students and set the goal of describing their perceptions of the nursing profession using a metaphor analysis (Kokturk Dalcali & Kaya, 2020, p. 1621). The data collection included 239 nursing students who were asked to complete the statement, "Nursing is like... because ..." (Kokturk Dalcali & Kaya, 2020, p. 1622). Using a combination of descriptive and content analysis, the researchers formed six main categories: "human," "non-living thing," "hero-abstract one," "illuminating-guide," "living creature," "connects to life" (Kokturk Dalcali & Kaya, 2020, p. 1624). Similar to Yesilbalkan et al.'s (2021) study, most of the students used positive connotative metaphors to describe the nursing profession, such as "mother," "friend," or "heart" (Kokturk Dalcali & Kaya, 2020, p. 1624). Nevertheless, negatively associated metaphors like "robot" or "machine" were also shown (Kokturk Dalcali & Kaya, 2020, p. 1624).

McAllister and McLaughlin's (1996) phenomenological study examines nursing students' metaphors, but from the perspective of what their previous experiences have been with their teachers. The researchers address the following question: "What are the metaphors students use to describe teaching?" (McAllister & McLaughlin, 1996, p. 1110). Data collection was based on interviews and participant observations that were contextually analyzed. As a result, 52 metaphors were extracted, which were then grouped into larger categories, for example, "Teaching as sensing", "Teacher as guide", "Teacher gives direction," or "Teaching the big picture" (McAllister & McLaughlin, 1996, p. 1112).

In the aforementioned research studies, statements can be found that establish a connection between students' identification with the nursing profession and the metaphors used in this process. However, the studies to date primarily refer to nursing students' perceptions of the profession they aspire to or their perceptions of other actors involved in the study, such as teachers, and less to their identity as students in the field of nursing. Virtual communities of practice represent places of written exchange and reflection and thus greatly facilitate the explication and analysis of metaphors used.

3. OBJECTIVES

In the context of nursing education, learners are particularly challenged to initiate the development of a professional identity. Current changes, such as the introduction of a new nursing law in Germany (Bundesministerium der Justiz und für Verbraucherschutz, 2017) with modifications to the job title and the focus of activity, as well as the increasing digitalization of nursing learning, are leading to the establishment of new learning venues. One such place of learning in nursing is the virtual community of practice, which has an influence on the trainees' identity in the nursing profession and should therefore be examined in more detail under this focus. In virtual communities of practice nursing trainees talk about their experiences and explicate their thoughts in written form. As shown in the theoretical background of the research work, metaphors play a special role in the expression of identity. As a result, a link can be assumed between the language used about the training and the actual actions taken during the training (Lakoff & Johnson, 2021, p. 9). Because of that, it is necessary to analyze the contributions of the nursing trainees, which they write in virtual communities of practice with regard to their linguistic characteristics. Therefore, this research explores the question of *what metaphors nursing trainees use in the context of virtual communities of practice to describe their perceptions of being a nursing trainee*. The aim is to find out, how nursing trainees talk about nursing and their training in order to make statements about their professional identity. Through the formation of metaphorical concepts, pre-existing characteristics of nursing professionals' identities characteristics can be expanded. These findings can give those involved in vocational nursing training an insight into the experiences and perceptions of nursing trainees. Curricular consequences can be derived from this, and it is possible to plan learning scenarios with the help of the identified metaphors and to stimulate a reflection with the trainees about their current nursing professional identity.

4. DESIGN AND METHODS

4.1. Research Design

Since the focus of this research is on identity-forming moments that affect the group of nursing students on the one hand and each individual nursing student on the other hand, a research approach that meets these requirements is needed. Therefore, an ethnographic approach is suitable, which enables an explorative and interpretative description of ways and means of human interactions (Hitzler & Eisewicht, 2016, p. 63). With the increasing emergence of virtual worlds, approaches to ethnographic research have also evolved. In 1997, the Canadian cultural anthropologist Kozinets founded a format of ethnographic fieldwork that is particularly suited to the study of online communities. "Netnography" (Kozinets, 2019) enables the analysis of computer-mediated interactions within virtual communities. Netnography is primarily understood as a qualitative research approach, as the discovery of human behaviors and interactions within virtual worlds is at the center of the research's interest.

4.2. Data Collection

In the present study, data are collected in the context of the virtual community "krankenschwester.de." The Community is aimed at nurses from Germany, Austria, and Switzerland and was founded in 2004. Currently, about 50,000 members are registered, and about 400,000 contributions are archived. The community sees itself as an open social medium, i.e., contributions can also be read without prior registration. However, registration

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is mandatory for writing your own entries. The community is organized based on various forum lists, which are clustered thematically. For example, there are forums aimed specifically at (prospective) trainees, as well as forums for the professional exchange of information between examined nurses. Based on the research question, observation was limited to the subforums “Training in Nursing” and “Pediatric Nursing” with a focus on “Training Requirements,” “Training Content”, “All around the final exam (examination)” and “Other.”

The data collection is carried out by observing the community activities, which are particularly evident in the context of forum communication. An unstructured, open approach is recommended initially in the research project, which becomes increasingly focused in the course of the research process. The first observations were unstructured and non-participatory, using the archive function and the rubric “latest posts.” In the further course of the research, thematically structured observation units followed with focal points, that, on the one hand, resulted from previous observations and, on the other hand, came from literature-based findings on professional identity. The duration of the observations varied between two and six hours. The time of day and the days of the week on which the observations took place also varied in order to capture a wide range of community activities. To date, 20 observations have been conducted in this manner. As the research continues, the level of participation by the researcher will change, i.e., participant observations, field interviews, and focused individual interviews with community members are planned.

4.3. Data Evaluation

The current data corpus consists of the “Immersion Journal” (Kozinets, 2019, p. 135) with field notes, observation logs, and memos. During the first observations, it became apparent that nursing students frequently use metaphors to describe their experience as trainees. Based on this, Schmitt's (2017) Systematic Metaphor Analysis was chosen as the data analysis method. Within the framework of a multistage procedure, that also takes into account the researchers' own perspectives, metaphorical expressions are systematically recorded and arranged thematically. The MAXQDA software (VERBI Software - Consult - Sozialforschung GmbH, 2022) is used to organize this process.

4.4. Research Ethics

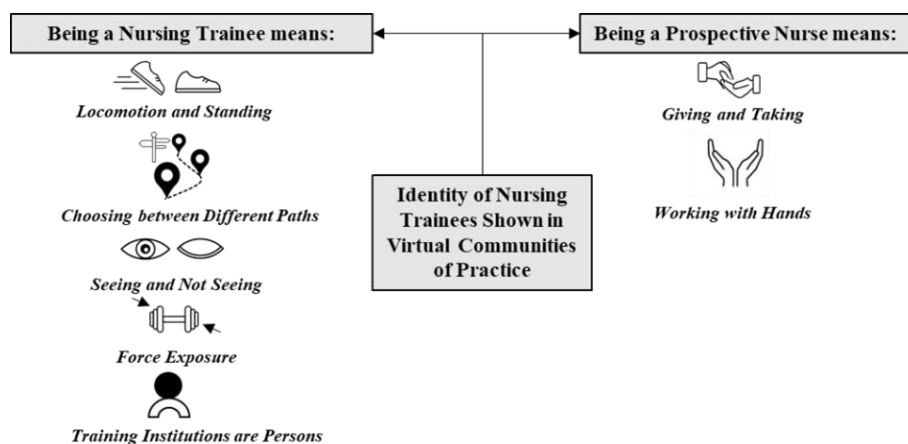
Adherence to ethical principles such as informed consent or unrestricted voluntaries of participation is a particular challenge of internet-based research. Therefore, the research project has been reviewed by the Ethics Committee of the Deutsche Gesellschaft für Pflegewissenschaft e. V. and has received an ethical clearing.

5. FIRST RESULTS

Based on the metaphor analysis, seven metaphorical descriptions have been identified so far, which allow first insights in experiences and events of nursing trainees in relation to their professional identity. During the data analysis, a dual role of nursing trainees emerges, identifying themselves as trainees on the one hand and as future nurses on the other. *Figure 2* summarizes the interim results of this research study:

"My dance area - your dance area" - Metaphors of nursing trainee identity in the context of virtual communities of practice

Figure. 2:
Metaphorical Descriptions of Professional Identity of Nursing Students (own illustration).



5.1. Metaphors Related to the Role of Trainee Nurses

5.1.1. Being a Nursing Trainee means Locomotion and Standing

Nursing trainees describe their experience in terms of various movements, which have different dynamics and range from “walking well” to “walking safely” to “progressing” or to “final sprint.” The expressions of movement come into play above all in narratives about school-based and practical nursing training: Students move from a starting area, often referred to as the “starting point” or “zero point,” which illustrates the beginning of training, to a defined goal, which is shown in formulations of “arriving” or “crossing the finish line.” During this time, safety aspects (“taking a safe route”, “going on the safe side”) play a significant role and refer to the need for orientation and stability. As the duration of the training progresses, the above-mentioned qualities of movement change. Trainees speak, for example of “striding to the goal,” which indicates an upright, self-confident gait. The movement metaphors mentioned above mostly refer to the students themselves and are rarely used in the context of other people. Only the description “trailing behind the examinees” relates the trainees’ own activity to the group of examined nurses. This implies taking a position behind the qualified personnel and being obedient to them.

At the same time, there are also moments in which no movement seems possible, which manifests itself in expressions such as “I can’t get any further” or “there is a boundary for me that I cannot cross.” Moments of waiting and pausing occur for example, when trainees are unable to act independently, for example, when they are unsure of what to do. This leads to a standstill in a certain situation and the continuation of the action is interrupted. This also happens, when learners identify gaps in their knowledge or are uncertain about exam results. Furthermore, this state is significant in the context of reflections, as trainees interrupt or slow down their course of action, which becomes clear in statements such as “I stop mentally.”

5.1.2. Being a Nursing Trainee means Choosing between Different Paths

In reference to the metaphorical concept of locomotion, it becomes clear that the trainees metaphorize their training as a path where they can choose between different directions: “so towards geriatric care” or “I’m going towards pediatrics.” However, uncertainties about the “right way” are also found, which become clear in questions about the “recommended route” or the “right turn.” Teachers have a kind of navigation function

here that becomes apparent, for example, in formulations such as “I’ll ask my teacher for the correct route” or “My instructors know which way to go.” Furthermore, the route is metaphorized in terms of its length, which allows conclusions to be drawn about the current position of the learner: “I’m about to pass my exam” or “I still have a long way to go” are examples of corresponding metaphors. Deviations from the path of education marked out by curricular regulations can also be found within this concept: “I need longer” or “My education must be extended” are metaphors that make this clear. Occasionally, expressions can be found in this context that phrase the training as a connecting path. For example, learners might write: “I have to work my way through” or “I have to get through the training.”

5.1.3. Being a Nursing Trainee means Seeing and Not Seeing

In the descriptions of the nursing students, numerous expressions of visual perception can be found, such as “I have to look at technical language,” “I see a problem,” or “I foresee the error.” These perceptions are predominantly made in school contexts of nursing education, for example, when it comes to the acquisition of technical knowledge. Experienced discrepancies are also visualized metaphorically. These can refer to the trainees themselves but also address their relationship to the nursing team, for example, “I see a conflict there.” Patients also come into focus within this concept, but mainly when it comes to deviations from the norm and less in the context of relationship building, which becomes clear in sentences such as “The blood sugar does not look good.” In the context of practical examinations, a patient reference to this concept can be equally recognized, for example by talking about patients who are “foreseen” for the examination or by asking about their suitability in the context of the examination: “Would you consider such a patient as suitable for my examination?”

At the same time, negations of seeing also occur, which on the one hand demarcate themselves from perfect perception, such as “being blind to the impressions of others.” On the other hand, trainees also take up the probability of seeing errors in their statements, which becomes clear, for example, in formulations such as “That was an oversight” or “I overlooked the mistake.”

5.1.4. Being a Nursing Trainee means Force Exposure

In their reports, trainees state “being under pressure” or “feeling under pressure.” The expression, reminiscent of a container, indicates that forces are acting on the students, due to which they feel constricted and under duress. These expressions are often used in connection with school and practical nursing training, for example, when it is a matter of coping with upcoming performance examinations: “I am under pressure due to learning” or “The teachers are putting pressure on me.” Such states also arise when learners feel they cannot meet expectations. Examples of this are the statements: “I only have pressure because my instructor demands too much,” “My mentor is putting pressure on me because of an upcoming exam.” Phrases such as “putting myself under pressure” or “being put under pressure” make it clear that the force that generates the pressure can come from within, that is, from the student himself, or from outside, like from instructors or registered nursing staff. Patients do not appear in the context of previous descriptions within the current data evaluation status.

5.1.5. Being a Nursing Trainee means Training Institutions are Persons

In the context of the descriptions of the experiences of nursing trainees, it is noticeable that they often personify the institutions involved in the training. Both, the nursing school and the practical institutions are mentioned. For example, the following is said about the newly established training in Germany: “The training is still in its infancy” or “The training

still has to grow." These places the training in the context of a child, which develops over time and matures to a certain extent. At the same time, the childlike visualization suggests an understanding of any difficulties and problems with the new nursing education. The nursing school is also affected by personification, which becomes clear in expressions such as "The grade says"; "The school called"; or "Practice supervision went to the top." While personification in the context of the nursing school mainly concerns performance characteristics, such as grades or interim reports on practice assessments, the personifications of nursing practice often include references to the organizational-institutional level, for example: "The probationary period is running."

5.2. Metaphors Related to the Role of Prospective Nurses

5.2.1. Being a Prospective Nurse means Giving and Taking

Nursing trainees also describe their actions in terms of things they personally give and contribute that are connoted as positive, for example, "Giving them my best." Within this concept, the patients are the central reference points for action. The trainees turn to them and either give something of themselves personally, like "I give them my smile." Something external, which is not connected to their own body, is also expressed in the form of giving: "Then I give her time." However, gifts also occur within the nursing team - for example, patients are "given" to nurses on the next shift or "information is given." Within this concept, the nursing trainees also use phrases such as "I have to admit that" to talk about things that, in their opinion, require a confession. This expression occurs on the one hand with mistakes, concerns and, on the other hand in addition, emotional concern. For example, one trainee writes about a situation she experienced: "I admit that I cried."

On the other hand, the students also take things in the course of their nursing work, which becomes visible through formulations such as "taking time" or in the verbalization of activities. Patients are also "taken" and reified in this way, which is frequently evident in the context of exam preparation: "Taking patients for the exam" is an exemplary expression for this.

5.2.2. Being a Prospective Nurse means Working with Hands

Nursing trainees use terms in their language that refer to working with their hands. The movement of the hands has different qualities and varies according to the amount of force required. For example, there are expressions in the context of social interaction with patients like "I want to hold contact" or "I hold them mentally." Hand metaphors are also used to express the learner's position in the nursing team. For example, learners might write, "They are my hold" or "I prefer to hold back in the team". The hands are also metaphorized in the context of activities that are perceived as unpleasant and require more effort: "I'm pulling this off now" or "I need to shake myself awake" are exemplary formulations in this context.

It is striking that the aforementioned verbalization occurs less in the context of sensing and perceiving but is rather focused on the mechanical movement of the hands.

6. DISCUSSION

The initial results of this research indicate that nursing trainees communicate in the context of virtual communities of practice by using metaphorical expressions, which give a first insight into the identification of nursing trainees.

It should be emphasized that the concepts found in this study are related to existing studies, which mainly focus on metaphorical expressions of already-graduated nurses. In addition to parallels, there are also differences, which should be reflected.

In this context, especially the research work of Luft (2022), McAllister and McLaughlin (1996), as well as Fagin and Diers (1983), should be emphasized.

Contrary to the nursing trainees in this study, the descriptions of nursing activities on the part of registered nurses have different accents. For example, there is a stronger reference to the patients, which becomes clear in the context of metaphorical expressions by registered nurses (Luft, 2022). Nursing students make this connection as well, but their metaphorical expressions are often more strongly rooted in their own person and less related to other people. It can be concluded from this that the shift in perspective from the trainee's own person to other groups of nursing relevant persons occurs only during training and cannot be assumed at the outset. For this purpose, didactic offers must be designed, that gradually stimulate a change of perspectives and points of view.

Furthermore, it becomes clear that trainees, especially at the beginning of the training - need orientation and guidance in order to gain increasing security (McAllister & McLaughlin, 1996, p. 1112). This is also confirmed by the findings within the present study. Teachers should be sensitized to this situation and provide orientation and support, especially at the beginning of the training.

In contrast to registered nurses (Luft, 2022, p. 123-124), it is evident, that the professional identity of trainees is also characterized by the state of waiting and pausing. In this context, enduring the pausing requires "practice," so that this attitude can be viewed as a necessary component of any growing into a profession rather than a disruptive factor. Parallely, the potential of "standing still" should be explored, for example, with regard to opening up opportunities for reflection.

The concept of giving and taking originates from the "helper" metaphor and is not only found within the nursing professions (Schmitt, 1995, p. 54). It is noticeable that trainees contribute with their whole person within this description, which means they also refer to gifts that are related to their physicality. Although patients are a central point of reference within this concept, their objectification in the context of examinations is particularly striking. Patients are thus made the "object" of practical examinations. There is an urgent need for a curricular discourse on how to talk about patients and what effects certain formulations have on our actions. Furthermore, the role of patients should be discussed with the trainees in the context of the final examination so that objectification can be avoided in the future.

While aspects of relationship building and bodily elements of sensing are central to the work on nursing professional identity (Fagermoen, 1997; Fagin & Diers, 1983), the trainees tend to show more craft-oriented formulations that are oriented toward procedures, norms, and rules. Here, following the expert-novice discourse (Benner, 2012), it can be assumed that trainees first have to learn the "handles" of certain activities, and thus the focus is on mechanics. Only with increasing confidence are tactile perceptual moments recognized as part of nursing professional identity. The curriculum should consider this development in its structure and weave in a gradual "feeling" of atmospheres and emotions in the later course of training.

The aspect of the influence of an external force on the trainees, which drives them into a corner and puts them under pressure, is problematic. Although metaphors of force and war are already an empirical finding in the context of nursing interaction (Weaver, 2013; Wurzbach, 1999), this should be questioned with regard to the particular vulnerability of the group of trainees. In this context, curricular protection and coping concepts should be integrated, which can strengthen the position of nursing trainees and promote their self-confidence.

7. CONCLUSION AND FUTURE RESEARCH DIRECTIONS

All metaphorical expressions were identified through contributions made in the context of virtual communities of practice. The virtual community can thus be characterized as a place where nursing trainees comprehensively describe their experiences during training. Special potential is shown not only by reflections, which are stimulated by the feedback and questions of other members, but also by the assessment of one's own professional being. Characteristics of trainees' professional nursing identities are made visible through their descriptions and expressions and can thus be questioned and analyzed. It is advisable to establish a virtual community of practice at the beginning of training in order to promote the possibility of growing into the nursing profession. Furthermore, the potential of metaphor analysis should be explored not only as a research method, but also (in a modified form) as a method for teaching. This opens up the possibility of finding approaches for counseling interviews and talking about what it means to be a nursing trainee.

In the future, these initial findings will be further differentiated and expanded. On the one hand, it would be relevant to extend the metaphorical concepts found so far and to draw a comparison with concepts used in the context of other learning sites. On the other hand, the development of a didactically reflected concept is still pending, which enables teachers to enter into a conversation with their learners via metaphors and thus stimulate reflections on their identification with the nursing profession.

REFERENCES

- Altmeppen, S. (2022). *Identität – Beruf – Bildung. Wie Auszubildende den Pflegeberuf biografisch einbetten und berufliche Identitätsarbeit leisten. Eine qualitative Studie* [Identity - Profession - Education. How trainees biographically embed the nursing profession and perform professional identity work. A qualitative study]. Weinheim; Basel, Germany: Beltz Juventa.
- Benner, P. (2012). *Stufen zur Pflegekompetenz: From Novice to Expert* [Steps to nursing competence]. (2nd ed.). Bern, Germany: Huber.
- Bermejo-Caja, C. J., Koatz, D., Orrego, C., Perestelo-Pérez, L., González-González, A. I., Ballester, M., ... & Martínez-Marcos, M. (2019). Acceptability and feasibility of a virtual community of practice to primary care professionals regarding patient empowerment: A qualitative pilot study. *BMC Health Services Research*, 19(1), Article 403. <https://doi.org/10.1186/s12913-019-4185-z>
- Bohrer, A., & Walter, A. (2015). Entwicklung beruflicher Identität. Empirische Erkenntnisse zum Lernen in der Berufspraxis [Professional identity development. Empirical findings on learning in professional practice]. *Pädagogik der Gesundheitsberufe*, 2(3)2, 23-31.
- Bundesministerium der Justiz und für Verbraucherschutz, No. 49, July 17, 2017 (Germany). Gesetz zur Reform der Pflegeberufe: Pflegeberufereformgesetz (PflBRefG) [Act to Reform the Nursing Professions: Nursing Professions Reform Act]. Retrieved from https://www.bgbl.de/xaver/bgbl/start.xav?start=%2F%2F*%5B%40attr_id%3D%27bgbl117s2581.pdf%27%5D
- Fagermoen, M. S. (1997). Professional identity. Values embedded in meaningful nursing practice. *Journal of Advanced Nursing*, 25(3), 434-441. <https://doi.org/10.1046/j.1365-2648.1997.1997025434.x>
- Fagin, C., & Diers, D. (1983). Nursing as metaphor. *The New England Journal of Medicine*, 309, 116-7. <https://doi.org/10.1056/NEJM198307143090220>
- Fischer, R. (2013). *Berufliche Identität als Dimension beruflicher Kompetenz. Entwicklungsverlauf und Einflussfaktoren in der Gesundheits- und Krankenpflege* [Professional identity as a dimension of professional competence. Developmental course and influencing factors in health care and nursing]. Bielefeld, Germany: W. Bertelsmann Verlag.

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- Hitzler, R., & Eisewicht, P. (2016). *Lebensweltanalytische Ethnographie: Im Anschluss an Anne Honer* [Lifeworld Analytic Ethnography. Following Anne Honer]. Weinheim; Basel, Germany: Beltz Juventa.
- Kokturk Dalcali, B., & Kaya, H. (2020). Mental Images of Nursing Students Regarding Nursing Profession: A Metaphoric Study. *International Journal of Caring Sciences*, 13(3), 1621-1628.
- Kozinets, R. V. (1997). "I Want to Believe": A Netnography of the X-Philes' Subculture of Consumption". *Advances in Consumer Research*, 24(1), 470-475.
- Kozinets, R. V. (2019). *Netnography. The Essential Guide to Qualitative Social Media Research* (3rd ed.). London: SAGE Publications.
- Lakoff, G., & Johnson, M. (2021): *Leben in Metaphern. Konstruktion und Gebrauch von Sprachbildern. Aus dem Amerikanischen übersetzt von Astrid Hildenbrand* [Living in Metaphors. The construction and use of language images. Translated from the American by Astrid Hildenbrand]. (10th ed.). Heidelberg, Germany: Carl-Auer.
- Lakoff, G., & Johnson, M. (1980). *Metaphors we live by*. Chicago: The University of Chicago Press.
- Lave, J., & Wenger, E. (1991). *Situated learning. Legitimate peripheral participation*. Cambridge: Cambridge University Press.
- Lave, J., & Wenger, E. (2008). *Situated learning. Legitimate peripheral participation* (18th ed.). Cambridge: Cambridge University Press.
- Luft, L. (2022). *Von "fleißigen Arbeitsbienen", "Seelenrösterinnen", "Ersatz-Mamas" und Revoluzzer/-innen* [Of "busy worker bees", "soul comforters", "substitute moms" and "revolvers"]. Wiesbaden, Germany: Springer VS.
- McAllister, M., & McLaughlin, D. (1996). Teaching metaphors of student nurses. *Journal of Advanced Nursing*, 23(6), 1110-1120. <https://doi.org/10.1046/j.1365-2648.1996.01416.x>
- North, K., Franz, M., & Lembke, G. (2004). *Wissenserzeugung und -austausch in Wissensgemeinschaften. Communities of practice* [Knowledge creation and sharing in knowledge communities. Communities of practice]. Arbeitsgemeinschaft Betriebliche Weiterbildungsforschung (ABWF), Berlin. Retrieved February 1, 2021, from <https://www.econstor.eu/handle/10419/105480>
- Rolfe, G. (2019). Big Ideas: New metaphors for nursing (3): The nurse as gardener. *Nurse Education Today*, 73, 102-104. <https://doi.org/10.1016/j.nedt.2018.10.015>
- Rolfe, G. (2018). Editorial. Big Ideas: New metaphors for nursing (1): The nurse as musician. *Nurse Education Today*, 72, 97-99. <https://doi.org/10.1016/j.nedt.2018.10.016>
- Rolls, K. D., Hansen, M. M. Jackson, D., & Elliott, D. (2019). Intensive care nurses on social media: An exploration of knowledge exchange on an intensive care virtual community of practice. *Journal of Clinical Nursing*, 29, 1381-1397. <https://doi.org/10.1111/jocn.15143>
- Schmitt, R. (1995). Metaphernanalyse und die Repräsentation biographischer Konstrukte [Metaphor analysis and the representation of biographical constructs]. *Journal für Psychologie*, 1995(4), 47-61.
- Schmitt, R. (2017). *Systematische Metaphernanalyse als Methode der qualitativen Sozialforschung* [Systematic metaphor analysis as a method of qualitative social research]. Wiesbaden, Germany: Springer VS.
- Sharoff, L. (2009). The power of metaphors: images of holistic nurses. *Holistic Nursing Practice*, 23(5), 267-75. <https://doi.org/10.1097/HNP.0b013e3181b66c97>
- Shaw, L., Jazayeri, D., Kiegaldie, D., & Morris, M. (2021). Virtual communities of practice to improve clinical outcomes in healthcare: protocol for a 10-year scoping review. *BMJ Open*, 11, 1-6. <https://doi.org/10.1136/bmjopen-2020-046998>
- Sibbald, L. S., Burnet, M. L., Callery, B., & Mitchell, J. I. (2022). Building a virtual community of practice: experience from the Canadian foundation for healthcare improvement's policy circle. *Health Research Policy and Systems*, 20(1), Article 25. <https://doi.org/10.1186/s12961-022-00897-0>
- Struminger, B., Arora, S., Zalud-Cerrato, S., Lowrance, D., & Ellerbrock, T. (2017). Building virtual communities of practice for health. *The Lancet*, 390(10095), 632-634. [https://doi.org/10.1016/S0140-6736\(17\)31666-5](https://doi.org/10.1016/S0140-6736(17)31666-5)

- Terry, D. R., Nguyen, H., Peck, B., Smith, A., & Phan, H. (2019). Communities of practice: A systematic review and meta-synthesis of what it means and how it really works among nursing students and novices. *Journal of Clinical Nursing*, 29(3-4), 370-380. <https://doi.org/10.1111/jocn.15100>
- Ullrich, C. G., & Schiek, D. (2014). Gruppendiskussionen in Internetforen [Group discussions in internet forums]. *Kölner Zeitschrift für Soziologie und Sozialpsychologie*, 66(3), 459-474. <https://doi.org/10.1007/s11577-014-0279-0>
- VERBI Software - Consult - Sozialforschung GmbH. (2022). *MAXQDA* (standard version) [Software]. <https://www.maxqda.com/de>
- Watson, J. (1987). Nursing on the caring edge: metaphorical vignettes. *Advances in Nursing Science*, 10(1), 10-18. <https://doi.org/10.1097/00012272-198710000-00006>
- Weaver, R. (2013). Games, civil war and mutiny: metaphors of conflict for the nurse-doctor relationship in medical television programmes. *Nursing Inquiry*, 20(4), 280-292. <https://doi.org/10.1111/nin.12023>
- Wenger, E. (1998). *Communities of Practice: Learning, meaning, and identity*. Cambridge: Cambridge University Press.
- Wenger, E. (2011). *Communities of practice. A brief introduction*. Retrieved February, 12, 2021, from <https://scholarsbank.uoregon.edu/xmlui/handle/1794/11736>
- Winkler, K., & Mandl, H. (2005). Virtuelle Communities. Kennzeichen, Gestaltungsprinzipien und Wissensmanagement-Prozesse [Virtual Communities. Characteristics, design principles and knowledge management processes]. *Medienpädagogik: Zeitschrift für Theorie und Praxis der Medienbildung, Occasional Papers*, 1-27. <https://doi.org/10.21240/mpaed/00/2005.08.11.X>
- Winslow, G. R. (1984). From loyalty to advocacy: A new metaphor for nursing. *The Hastings Center Report*, 14(3), 32-40. <https://doi.org/10.2307/3561187>
- Wurzbach, M. E. (1999). The moral metaphors of nursing. *Journal of Advanced Nursing*, 30(1), 94-99. <https://doi.org/10.1046/j.1365-2648.1999.01053.x>
- Yesilbalkan, O. U. & Cinar, D., & Karadakovan, A. (2021): A Metaphorical Analysis of Postgraduate Nursing Students' Perceptions of the Nursing Profession. *International Journal of Caring Sciences*, 14(1), 422-432.
- Zinke, G. & Fogolin, A. (2004). *Abschlussbericht zum Forschungsprojekt 3.4.102: Nutzung von Online-Communities für arbeitsplatznahes, informelles Lernen* (Final report on research project 3.4.102: Use of online communities for informal learning close to the workplace). Retrieved May 1, 2021, from https://www2.bibb.de/bibbtools/tools/dapro/data/documents/pdf/eb_34102.pdf

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