

“Growing through relationship” - the Engagement of the Health Professional Students in the Internship Experience: a Grounded Theory Research

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Abstract. *Background and aim:* Little is known about the students’ engagement in the training experience and how it is lived by the health professional students. We aim at building a theoretical model of the engagement process starting from their lived experiences with Grounded Theory approach. *Methods:* In-depth qualitative interviews are conducted with 12 students from the Master Degree Courses in Nursing, Physiotherapy and Prevention Techniques in the environment and in the workplace, who had carried out and/or were doing internships in the same territory (2nd and 3rd year). *Results* The health professions’ student engagement in the training program is developed in three main phases: initial phase, central phase and final phase, where emotions, behaviours, awareness contribute to the development of the entire engagement process with different relevance. The intertwining of these different components that develop along the stages of the experience gives life to the core category: *growing through relationship*, which expressed the crucial role of the relational network built during the internship experience in shaping students’ engagement. *Conclusions:* The results of this study underline the crucial role of students’ engagement in the internship experience in favouring both better learning outcomes and perspective professional success and wellbeing. (www.actabiomedica.it)

Key words: Clinical Practice, Grounded Theory, Health Professional, Learning, Student Engagement

Background and aim

Recent developments in higher education have emphasized new and more learner-centered ways of teaching, in particular for the healthcare professions (1–3). Specifically, the health educators have the goal of transforming students into health professionals, allowing them to develop professional identity (4,5),

in line with the contextual features that are changeable (6). Healthcare institutions are seeking to achieve the Quadruple Aim of enhancing patients’ experiences of care, improving population health, lowering cost, and improving the work–life balance of clinicians (7,8). For these reasons, the involvement of the student along the learning process, and in particular in during the internship, is desirable to educate future healthcare

professionals to achieve these goals (9,10). Student engagement has acquired a lot of attention as a strategy to guarantee both an effective and satisfying learning process and professional success (11). According to some authors, the main motivations lie in the correlations between student engagement and positive outcomes, including satisfaction, persistence, academic outcomes, and social commitment to become successful professionals (12).

Scholars in the field seem to agree on its important role in higher education, in spite of its complex and multi-faceted meaning (13). The National Survey of Student Engagement (2014) defines engagement as “the level of participation in a variety of activities that have been shown to relate to academic and personal development.”(14) Coates (2005) outlined the student engagement in terms of effort and commitment that students put in their learning process (15). The literature, in fact, shows that students develop professional identity through a new social language, that is, the commitment sustained in the academic world during their course of study (16). In addition, 21st century’s students who have diverse backgrounds, personalities and learning styles (17) which pose a challenge for educators, who must ensure that everyone is effectively engaged within the learning path. In fact, engaged students show more appropriate behaviours, enthusiasm, self-efficacy, perfectionist tendencies, propensity to study, optimism and an orientation to reflective learning. All of this leads to positive academic results (18–20) and possibly better work outcomes, thus preventing negative psychological fallouts, such as burnout (21,22). Research also shown that engaged students are better able to cope with the stress of the academic world, resulting more satisfied with the possibility of being engaged professionals involved in future work (23,24).

Engagement is also defined as a construct that includes two fundamental aspects in the student: a personal one (active and collaborative learning, participation and commitment to academic activities, interpersonal skills, enrichment with educational experiences) (15,25,26) and the other of an organizational-academic type (degree of voluntary compliance of students with the organization and rules, values and processes, recognition and support from university staff).

Despite the increasing attention on this topic, the majority of the research focused on the student engagement during the learning process. However, to the best of our knowledge, very little attention has been given to the student engagement during the internship period, which is instead recognized as particularly crucial in terms of improvements and professional growth (27), in particular for the healthcare professionals (28,29). In addition, most of the studies examining students’ internship focused the objective on the didactic-organizational dimension (30–32) and little on their lived personal and professional experience about what facilitates or hampers their engagement. For these reasons, we propose a study investigating the process of engagement of the health professional students during the internship from their lived perspective. Moreover, as student engagement is not only multifaceted, but also dynamic, fluctuating, context-dependent and interactive (33), we opted for a qualitative approach, in particular a Grounded Theory method, able to grasp the meaning of student engagement during the professional internship and to delineate a theory grounded within the context. The Grounded Theory (GT) approach is also sufficiently rigorous to allow an inter-subjective control of the collected data and their interpretation (34). Ultimately, the aim of the study is to describe the psychosocial process of engagement of the health professional students during the internship, starting from the following research question: “*What happens to the personal and professional dimension of the health professions’ students during the internship experience?*”.

Methods

Study design and setting

The research was conducted with the Grounded Theory (GT) qualitative method, according to the “interpretative paradigm”(34). The GT method is inductive and developed through the application of a series of coded procedures that alternate data collection and analysis to build a theory anchored to the data (35). The consolidated criteria for reporting qualitative studies (COREQ) 32-item checklist (36) was followed for reporting results (See Appendix 1).

Study population and sampling

Consistently with the GT method, the sampling took place according to a theoretical sampling logic (37,38). At first, therefore, students from the health professions of the University of Parma were selected for the Master Degree Courses in Nursing, Physiotherapy and Prevention Techniques, who had carried out and/or were doing internships in the Territory Health Service of Northern Italy (Piacenza). Students who attended different course years (2nd and 3rd year) were then identified, to collect experiences at different stages and times. According to the theoretical logic we explored elements that characterize the experience, enhancing its temporal development. Students were selected according to a purposive sampling strategy, by choosing those who met the criteria defined above.

Data collection

The data were collected through a semi-structured interview, defined on the basis of GT principles (39). A draft of the guide was piloted and refined with a first sample of participants. The interviews were conducted by the authors, supervised by expert qualitative researchers involved in the project, and discussed in team meetings aimed at mitigating possible biasing effects. They lasted on average 1 hour. The authors did not have any previous relationship with the participants selected for the study. Only the interviewer and the participant were present during each interview.

Data analysis

After being transcribed, the interviews were analyzed. Seven among the authors coded the data, supervised by qualitative methodologists. Data analysis was conducted through three progressively abstractive coding phases (35,40). In this way we proceeded to an increasing conceptualization of the data to achieve the integration of all these elements in an articulated theoretical model.

In the first phase (initial coding) a line - by - line coding was performed. Portions of the text considered significant were coded, through initial in vivo coding (34). In the subsequent phase (focused coding)

broader categories were constructed, identifying the most frequent and significant concepts capable of understanding a greater variability of emerging experiences. First specific hypotheses were formulated, using the paradigm scheme of Strauss and Corbin (35). Consequently, further round of data collection was implemented to verify preliminary insights and gain conceptual clarity.

In the third phase (selective coding) connections between conceptual categories were identified, through a process of progressive refinement of the data-driven theory, thus leading to a greater abstraction of empirical data and to the identification of the core category.

Rigour and Trustworthiness

We ensured rigour to the data collection by documenting all the process (e.g. writing memos, meeting reports and field notes) and using probing strategies (e.g. through summarising the participant's major responses), to check interviewee's immediate reactions and encourage them to provide critical feedback on their interpretation. We implemented a continuous comparison between data collection and analysis, following the principles of GT (39), until saturation for the core findings was reached. Three formal debriefing sessions were organized with a panel of experts in health professions students' management, psychology and qualitative research, to discuss preliminary findings.

Ethical approval

The study was approved by the Ethical Committee of Area Vasta Emilia Nord (AVEN), protocol 2019/0094399 dated 30/09/2019, number 789/2019/OSS/AUSL PC. Researchers provided the participating subjects with complete information on the study and had their consent signed after accurate information. Students were assured that participation was entirely voluntary and they had the right to withdraw at any time and at any stage of the research. Written permission to conduct and audio-record the interviews was obtained from each participant. The confidentiality of the data collected was emphasized. The interviews were conducted at the Degree Course in

Nursing, Training Center of Piacenza, in an office in respect of the privacy of the interviewees.

Results

Participants' characteristics

12 interviews were conducted with students of the Health Professions Degree Programs who had completed at least one internship experience. The details of the sample are reported in Table 1.

Table 1. Sample Characteristics

	N
Gender	
Male	1
Female	11
Age mean	22,33
University Study Course	
Nursing	8
Physiotherapist	2
Prevention technician	2
Year of Study	
1	0
2	5
3	7

The core category: growing through relationship

Our results showed that health professions' student engagement in the training program developed in three main phases: initial, central and final phase. Each phase was characterized by three main components of the experience: emotions, behaviours, awareness, which contribute to the development of the entire engagement process with different relevance. The intertwining of the different components gives life to the core category: *growing through relationship*. The theoretical model is proposed in Figure 1.

The core category develops in a complex context in which all the relationships (with the tutor, with colleagues, with other professionals, with other students, with patients, with family members) that the students experience contribute to their growth. This growth process is dynamic and liquid, it *"envelops and involves"* them. The relationship is experienced as *"nourishment and fertilizer"* that allows them to grow *"in knowledge"* and also *"in experience"*. Furthermore, the growth in the relationship occurs for everyone as the roles are diversified and overturned. The internship takes the form of an *"exercise ground"* where - even making a mistake - professional identity is created starting from the relation with the others.

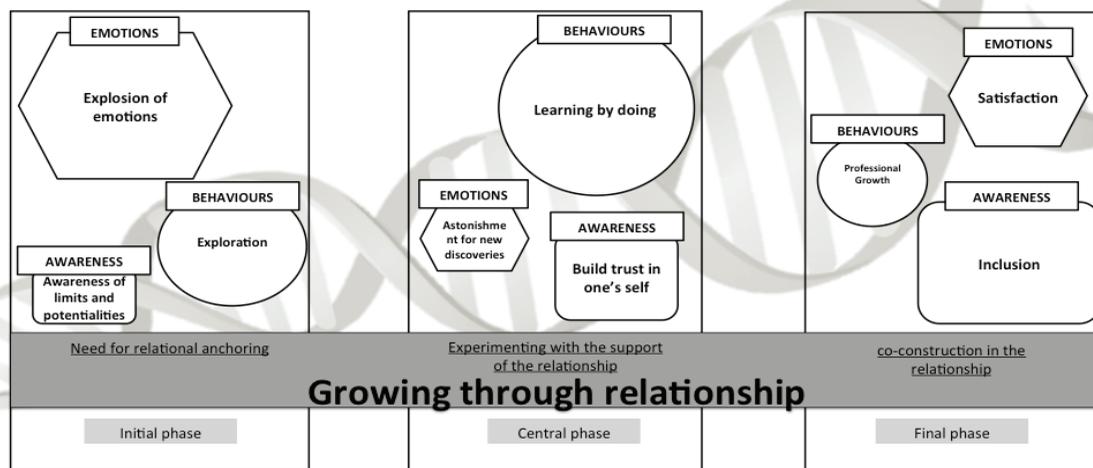


Figure 1. The GT model of health professions' student engagement in the training program

A description of categories and relative verbatim is reported in Table 2.

Initial phase of the experience: relational anchoring

In the initial phase, the core category is called “*relational anchoring*”. This phase consists of 3 sub-categories: 1) Explosion of emotions; 2) Exploration; 3) Awareness of one’s own limits and potentialities.

Explosion of emotions.

The strongest emotion felt in this first phase is anxiety, as an emotional reaction towards something unknown, which is perceived above all in the “*first entry*” into the “*professional world*”. Participants fear “*how others might react*”, or worry because “*they don’t know what it means to manage the disease*” or because

they have heard negative stories “*from senior students*”. Anxiety is more evident for those who are at the first experiences; it is instead gradually mitigated in those who have carried out various internships. It can be triggered by the first contact with the patient, who in some way is perceived as an “*evaluator*” of the work. One participant states:

“[The patient] looked at me a little angry because I look younger than my age” (Int. 8)

Even in the relationship with the tutor, the student experiences strong emotions, such as frustration, when they limit their practice. Positive emotions are also expressed during the first phase, regarding the “*intimate*” relationship established between the nurses and the patients. This relationship is unique and appears not to be present between the patient and other professionals.

“I liked it a lot and was very impressed by how the nurse approaches the patient, in short, in a more intimate

Table 2. Categories, subcategories and verbatim

Category	Subcategory	Verbatim
Relational anchoring	Explosion of emotions	<i>... So entering places that I am not familiar with together with new people ... I felt slightly uncomfortable ... (Int. 4)</i>
	Exploration	<i>... I saw a bit where all the devices were placed and I tried to inform myself and hook me up with someone since my tutor was not present that day ... (Int. 3)</i>
	Awareness of one’s own limits and potentialities	<i>... I understood that I could help, in the future ... , that I could help these people ... (Int. 2)</i>
Experiment with the support of the relationship	Learning by doing	<i>... Even when we were doing dressings we discussed them together and he asked me what kind of dressing I would put on ... then maybe I would come home and go to reread my notes ... (Int. 4)</i>
	Build trust in one’s self	<i>... This relationship above all of trust and which is giving me so much satisfaction ... is making me grow a lot .. (...) seeing that people of a certain calibre respect you, give you important tasks is very satisfying ... (Int. 7)</i>
	Astonishment for new discoveries	<i>... I saw the nurse really act in an emergency, see the autonomy of the nurse who is totally focused on the moment and acts like this in a moment, I hadn’t seen him yet and so I was petrified ... (Int 1)</i>
Co-Construction through relationship	Inclusion	<i>... I liked it a lot, I felt involved and integrated, that is, I felt useful ... here is a nice educational model ... despite my tutor being hired recently and very young, it is the best educational model that has been proposed to me so far ... (Int 3)</i>
	Professional Growth	<i>... Of course, the most common pathologies recur, so having seen many of them I developed a critical spirit and the ability to manage them myself without needing special supervision ... (Int. 8)</i>
	Satisfaction	<i>... Yes, in fact I was sorry when I finished because it was the last day and I did the tour with him ... (Int. 2)</i>

way than the other figures. Maybe because she sees him more often, she knows him more, but there was a sort of intimacy, a bond and a relationship that I really liked" (Int. 11)

Exploration.

The student implements also exploratory behaviours, such as orientation in the context and observation of the organizational dynamics. Students stated:

"The first day was for observation, more than anything else it was about helping to report the data of the various patients" (Int. 2)

"They showed me a bit of the whole reality as it was organized, especially the organization of activities" (Int. 3)

The exploration is also carried out through the request for explanations.

Awareness of one's own limits and potentialities.

Our participants also developed awareness of their own limits and potentialities and they begin to identify themselves with a professional model. One respondent stated:

"I have, on the one hand, understood what I would not like to be and would not like to do and really understood what I would like to be and would like to do" (Int. 1).

Central phase of the experience: Experimenting with the support of the relationship

In the second phase, the experimentation – as expression of the core category – takes on a broader meaning as it is strongly connected to the relational nature of the experience. The phase consists of 3 sub-categories, which are characterized as follows: 1) Learning by doing; 2) Building self-confidence; 3) Amazement at the new discoveries.

Learning by doing.

Learning by doing is understood by our students as the opportunity to experiment "in real contexts". Experimentation takes concrete form as an initiation to decision-making behaviours. What the students learn is inspired by other senior professionals "in the way of speaking, of expressing oneself correctly, of

explaining things in an adequate way (...)" (Int. 7). This growth also leads them to be more autonomous and to propose spontaneously.

"During the internship we found it very simple because framing the situation in reality is much easier. (...)" (Int. 9)

The relationships, which constantly accompany the experience in the field, also strengthen the student's perception of "feeling involved and stimulated" (Int. 7) to act more actively and responsibly.

Our participants recognized the "real context" simplifies the learning that in the classroom – or even in the laboratory – seemed so complicated:

"In the classroom we had the opportunity to fill in the minutes, but we found this task a bit difficult because we had not framed the situation and context well ... instead

Building self-confidence.

The construction of self-confidence is described through experiences such as: "I still felt important" (Int. 4) or "Confidence in me has grown and therefore also my desire to demonstrate more and more" (Int 6). These perceptions express "sense of fulfillment, gratification, satisfaction, perception of usefulness" and self-esteem. A student stated that:

"There was an interest [on the part of the tutor] in my learning and my improvement, obviously also on my part there was a desire to show her that I was able to do more and more" (Int 5).

Amazement at the new discoveries.

Students are sensitive to situations that are still unknown, capable of generating amazement and curiosity, but also of raising questions and uncertainties of being still vulnerable to the experiences. One participant stated:

"This is something I said: Wow I would like to be like this!! This is one thing that I have left and that I will probably always carry with me, this yes" (Int 1).

Final phase of the experience: Co-Construction in the relationship

In the final phase, the co-construction in the relationship occurs, understood as a process of building reciprocal trust between the student and the

professional/patient/caregiver. It is realized when the students completely commit themselves to the internship. The component largely represented is that of awareness, called Inclusion (1), the behavioral part is the Professional growth (2), and emotions are essentially linked to Satisfaction and gratification (3).

Inclusion.

The category of inclusion is configured in feeling involved in the care process and in feeling part of a team, understood as a dynamic set of professionals, students and caregivers. One participant stated:

“However, I also felt like part of them ... I think it is very important to make people feel, let's say the latest arrival, important for the patient care project” (Int. 3).

The relationship of trust is a fundamental element, which is defined by the participants as the ability to have demonstrated that they know how to be into relationship with other people. An interviewee confirms:

“Slowly, however, he began to trust a lot more ... initially he showed me things and was a bit hesitant in making me do them, then given my good will and the fact that I had just returned from other internships, and therefore not at the first experience, he almost completely trusted me” (Int 4)

At this stage there is a confirmation of the tutor's role as a reinforcement that allows the students to feel included. A student declared:

“(...) he is making me learn ... above all thanks to the availability of the clinical tutor and in any case the fact that he trusts me ... that is, he tries to make me do things whenever there is the possibility ...” (Int 7)

Professional growth.

Parallel to the awareness of being an integral part of an “extended” group, students perceive the achievement of professional growth, to the point of recognizing themselves with a professionalism attitude. One participant stated:

“(...) So, for the nurse, doing the electrocardiogram and analyzing it before taking it to the doctor is very positive ... it is important to know how to read it well as well as do it” (Int. 5).

Students, while maintaining awareness of their position as trainees, experience professional growth

through the ability to make decisions more independently, stating:

“In any case, by now I am treating patients and caregivers alone without being offered the help of my tutor” (Int. 7).

Satisfaction.

Satisfaction represented a very significant result of the relationships built along the way. It is manifested mainly through a strong regret at the end of both the internship experience and the interactions with all the people involved. It is declared:

“So “see you tomorrow too” and having to tell him “no, tomorrow I am gone [because the internship ends]” I was almost sorry because the relationship that was created here is really beautiful” (Int. 1).

Conclusion

In this study, we defined, through GT interviews with a sample of health professions students, the conceptual framework that lies behind their engagement in the internship process. Students involved in this research perceived the internship experience as a crucial moment of their learning path, from being “students” to becoming “professionals”, as also past research highlighted (27,29,41). This transition transpires from the interviews as a dynamic process, where emotions, behaviours and the increasing acquisition of awareness allow the students to change their attitude on their role and identity. At the beginning of the experience, our students recount a sense of confusion; they feel lost because their learning hold, which was reassuring during the lectures, seems now not enough to support them in the first approach to the “real context”. Their focus is still on being student, thus enhancing a mood of anxiety and a sense of discouragement and passivity. This aspect could have a negative impact on the overall experience (42,43). The students increasingly convey their disorientation into the practice, as a concrete and reassuring hold, to build confidence on their professional identity. As other authors have underlined, this practical moment is crucial for the development of a professional identity, because it allows the students to experiment directly and to build confidence about their work (41,44,45).

From this study emerged also that the quality of the relations that the students experienced during this period contributed to positive outcomes, by favouring the engagement in the internship experience as “*growing through relationship*”. It is known that the relational component of the learning process is a fundamental facilitator in determining positive and satisfying learning outcomes (46,47). The results from this study add some elements, for the peculiar context we have analysed. The relationships the students describe – indeed – take place during the internship practice at the clinical centre, where the students encounter different people: peers, colleagues, healthcare professionals, tutors, patients and caregivers. This is an element of difference from the majority of the studies highlighted the relationship with the tutor as the most meaningful to facilitate the engagement (47,48). In this study, the quality of all the relationships determines the tension towards change, thus contributing to the construction of awareness and to a greater commitment of the student in achieving learning outcomes and in building a system of mutual respect and trust. In accordance with the literature (17,49), the growth of skills, autonomy and trust, accompanied by feelings and emotions, increases the “vigor”, “dedication” and “absorption”, fundamental characteristics of engagement. Positive or negative internship experiences contribute to personal and professional growth and validate the emerging insights with respect to the theory learned in academic contexts (17,18,21,22).

Our results also underline a twofold role of the positive student engagement during the internship experience. One is about the protective action that student engagement could have in guaranteeing, together with better quality of learning experience (50,51), also better students’ psychological wellbeing, thus preventing students’ dissatisfaction, exhaustion, depression (17,52,53). The second regards the potential role of student engagement in the internship as a precursor of work engagement as healthcare professional, which is considered a fundamental element for their professionals psychological wellbeing (54–57) and ultimately for patient’s quality of care (58,59).

The present study has investigated the health professionals’ student engagement in the internship experience, on a sample of health professionals belonging

to clinical centre in Italy. The GT approach allowed us to trace the contextual conceptual model explaining students’ engagement and the variables facilitating/impeding it, from their direct experiences. The core category emerged from the interviews has been named the ability to *grow through relationships*. The ability for students here interviewed to engage in their internship experience is largely determined by the relational network they encounter and build during this experience. All the relations (with the tutor, with the peer colleagues, with the other professionals), both negative and positive, contribute in some ways to the outcomes, as they facilitate students’ acquisition of an increasingly more active and professional role. Our results could be of interest for both orienting educational programs and connecting better theory and practice, and for identifying protective factors to prevent future negative work attitude. Students’ engagement in the internship program, indeed, emerged from our study as a possible precursor of work engagement, in the way it represents the first contact of the students with the real clinical context and contribute to their identity building.

From the educational perspective, these results underline the critical role of the internship experience in the learning process. The educational bodies dedicate a lot of effort to create educational programs able to mix theory and practice during the lectures and laboratories; however, from our interviews, it emerged that only the internship is perceived as a really practical activity. These results enhance indeed a reflection about what is considered “practical” from students’ experiences and they are useful to weight the presence of the internship in the educational program. From the clinical perspective, again the pivotal role of the internship in determining both better learning and professional outcomes, underline the necessity to create a network of support for the students during this experience, which can favour those outcomes.

Although its promising implications, the study has some limitations. The participants involved in the study were all health professionals (Nursing, Physiotherapy and Prevention Techniques); we did not have the opportunity to listen to students of other health professions. Future research should consider involving other health professionals to be more comprehensive. We also suggest including tutors, senior professionals

and patients/caregiver in order to grant a data triangulation, as they have been identified as crucial in determining the outcomes of the internship experience. Our sample was mostly composed of female students consequently there could be gender biases. Students with only one experience of internship were less than the others, and this could be a limitation considering that the trainees' seniority has been found to have a role in changing their experiences on the entire process. Future research should address this limitation.

Conflict of Interest: all the authors declare no commercial associations that might pose a conflict of interest in connection with the submitted article

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Received: 1 June 2021

Accepted: 24 June 2021

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