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International journal of higher education pedagogies 5 (2024) 3, S. 1-20



Quellenangabe/ Reference:

Bittner, Janine; Kempchen, Janina: Exploring students' feelings in the initial phase of a community-based research service-learning course. A qualitative approach using content analysis - In: International journal of higher education pedagogies 5 (2024) 3, S. 1-20 - URN: urn:nbn:de:0111-pedocs-326895 - DOI: 10.25656/01:32689; 10.33422/ijhep.v5i3.749

<https://nbn-resolving.org/urn:nbn:de:0111-pedocs-326895>

<https://doi.org/10.25656/01:32689>

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Exploring Students' Feelings in the Initial Phase of a Community-Based Research Service-Learning Course: A Qualitative Approach Using Content Analysis

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ABSTRACT

The emotional experience of situations and interactions with other people plays an important role in teaching and learning processes and interacts with cognitive as well as motivational and intentional factors in the acquisition of knowledge. In our qualitative investigation, we explored participants' experiences in the initial phase of a community-based research service-learning project that dealt with issues of social inequality, poverty and homelessness. We were particularly interested in the affective processes in the project's planning phase and during the first meetings between community partners, homeless people and the participating students. After completing the course, we conducted guided qualitative online interviews with the course participants. The interviews were fully transcribed verbatim. We then coded and analysed the data using qualitative content analysis approach. It became apparent that the students were particularly anxious and apprehensive about working with vulnerable groups of people. This manifested itself in uncertainty, nervousness, fears and negative feelings. Regarding the collaboration with the community partners, the emotional situation varied among the students in the initial phase. We conclude that students' fears, anxieties, and uncertainties in the planning phase of a service-learning or community-based research project should be taken seriously. A relaxed and positive atmosphere at the first meetings can be viewed as particularly important for project progression and the students' future learning success.

Keywords: community-based research, emotion, service-learning, sentiment, student

Cite this article as: Bittner, J., & Kempchen, J. (2024). Exploring Students' Feelings in the Initial Phase of a Community-Based Research Service-Learning Course: A Qualitative Approach Using Content Analysis. *International Journal of Higher Education Pedagogies*, 5(3), 1-20. <https://doi.org/10.33422/ijhep.v5i3.749>

1. Introduction

In classical research on learning and instruction, the focus in the investigation of learning processes has long been on the consideration of cognitive factors (Gläser-Zikuda & Mayring, 2003, for the German-speaking context, Hascher, 2010), but the examination of motivational-emotional aspects that play a role in learning within the framework of empirical research studies has become of increasing interest and importance (Gläser-Zikuda & Mayring, 2003; Hatcher, 2010; Mayring, 2003; Gläser Zikuda et al., 2021). Mayring (2003, p. 45), for example, stated that "without taking these motivational-emotional factors into account (...) the analysis of learning processes no longer seems meaningful".

What importance do emotions or emotional experiences have for the process of learning, constructing knowledge, absorbing information from the environment, in dialogue with others, interpreting it, reflecting on it and adapting behavior? Overall, as Eliot & Hirumi (2019) stated, there is not yet sufficient evidence in the literature on the effects of emotions on learning processes. The problem is also addressed that studies on the impact on learning processes sometimes fail to make a precise distinction between different emotional states that can be

assessed as positive or negative (Gläser-Zikuda & Mayring, 2003) and in general often the imprecise definitional delimitation and insufficient consideration of the fact that emotions have several dimensions (Hascher & Edlinger, 2009). Nevertheless, fundamental knowledge of the current state of research will be presented shortly. This leads to the conclusion that it is important to address the influence of emotions on learning processes and academic performance in further studies and that lecturers and teachers should keep an eye on the influence of emotions in university courses as well as in school lessons (Pekrun, 2006; Pekrun 2014).

It is widely accepted in the literature that a simple conclusion in the form that negative emotions generally have a negative effect on learning and positive emotions have a positive effect is not possible (Bless & Fiedler, 1999; Hascher & Edlinger, 2009; Götz et al, 2003). It was pointed out by Hembree (1988, as cited in Gläser-Zikuda & Mayring, 2003), that anxiety and worries usually have a negative impact on learning processes and achievement. However, a certain degree of anxiety can also be performance-enhancing (Gläser-Zikuda & Mayring, 2003; Pekrun, 2014). Positive emotions which relate to the learning itself, the learning situation, are expected to have a positive effect on the learning process (Abele, 1995; Pekrun, 2014; see also Tan et al., 2021).

The emotional reaction of students in the same educational setting and situation to the same emotional stimuli is unique (Pekrun, 2014; Tyng et al., 2017). Different personality traits should be taken into account in this context (Gläser-Zikuda & Mayring, 2003; Montag & Panksepp, 2017), as well as differences in intellectual and performance capacity (Brackett et al., 2004; Gläser-Zikuda & Mayring, 2003) and sex (Cahill, 2003). Ingleton (1999) pointed out that emotions are "more than the product of individual personalities and experiences, they are constitutive of social settings that comprise interpersonal relationships of power and control (...)" (p. 9).

The interaction of emotion and learning takes place primarily via an influence on attention (Frederickson, 2001; Pekrun, 2014), cognition (Abele, 1995; Frederickson, 2001; Pekrun, 2014), memory (Vogel & Schwabe, 2016), interest and motivational effects (Abele, 1995; Pekrun, 2014). In addition, researchers could show that emotions also have an influence on self-regulation (Pekrun, 2014) and the use of learning strategies (Acosta-Gonzaga & Ramirez-Arellano, 2021).

So far, we have spoken of emotions, relying on the terms used in the cited literature, without specifying what exactly is meant by emotions. This seems important for our further work, as does the differentiation from other terms such as feelings and moods. Scherer (2005) argued for a clear conceptual distinction between "fundamentally different affective processes, states, and traits" (p. 595). Emotions are defined more broadly and consist of several components (Barbalet, 1998 as cited in Ingleton 1999; Hascher, 2010; Scherer, 2005; Scherer et al., 2013). Barbalet (1998, as cited in Ingleton 1999, p. 2) distinguished between three components "a subjective component of feelings, a physiological component of arousal, and a motor component of expressive gesture". Scherer (1984, 2005) spoke of five components and understands feeling as one of these components. In our work, we refer to feeling as "a subjective cognitive representation of the emotional state which reflects a unique integration of mental and bodily changes in the context of a particular event" (Scherer, 2013 et al., p. 281) "(...) allowing the individual to reach awareness of his/her state and label it – stating that he/she has or feels a particular emotion (...)" (Scherer et al. 2013, p. 281).

1.1. Purpose of the Present Study

This study aimed to investigate the emotional experiences of undergraduate students in the initial phase of a community-based research service-learning course. We focused our research on two different groups of actors. We have attempted to distinguish between feelings that arose in the context of the cooperation with partner organisations, representatives with social organisations and feelings that arose in the context of meetings and conversations with vulnerable people. Moreover, we set out to determine whether students' feelings changed after the first encounters.

1.2. Course Concept and Course Design

Our accompanying research refers to a course, a study project in the bachelor's degree programme in geography at the Ruhr University Bochum, which was offered in the years 2019 and 2020 in this form for the first time. The course covered the topics of social inequality, poverty and homelessness with a focus on the local conditions and specific social problems in the Ruhr area, an old-industrialised region located in the western part of Germany in the state of North Rhine-Westphalia. Our work concentrated on two case study cities, Bochum and Essen.

In the "study project" module, several courses were offered for the students to choose from, which differed in content and teaching format, but all ran for one year and had comparable examination requirements and a regional focus. The development of a new course concept, which combined elements of research-based learning and service-learning approaches, was funded by the university as part of a programme to implement innovative, forward-looking teaching formats (Ruhr University Bochum, 2020). The received funding also made this accompanying research possible.

Service-learning, as a form of experiential learning, pursues the fundamental goal of providing a service to the community. At the same time, the civic engagement also benefits the students, resulting in personal outcomes like an enhancement of personal development, personal growth and life skills acquisition through the learning opportunities offered and learning processes taking place in real-world constellation on real problems in collaboration with the community and community partners (Furco, 1996).

In service-learning projects, students work together with peers and partner organisations, in exchange and with support of lecturers or programme coordinators, on new, complex, socially relevant issues, in an unfamiliar context that brings challenges. As a rule, this gives rise to a variety of emotions (see e.g. Cattaneo et al., 2023; Darby et al., 2015; Hunt, 2007; Priesmeyer et al., 2016), which can change in the course of the service-learning experience (Carson et al. 2013).

Even if there is no single valid definition for research-based learning, but rather different understandings (Deicke, 2016; Huber & Reinmann, 2019) and delimitations (Huber & Reinmann, 2019), we can simplify and say research-based learning combines learning with research activities (Wessels et al., 2021) whereby learners are given an active role in shaping the learning process and a high degree of autonomy in the sense of a social constructivist view of teaching and learning (Wessels et al., 2021; Winkel et al., 2017).

We made the attempt to combine elements of both mentioned forward-looking approaches to teaching and learning, service-learning and research-based learning and embedded them in the given overall structure of the study project course. The overarching thematic framework "social inequality, poverty and homelessness" formed the starting point for the students to find a research topic they want to investigate. The students worked together in three heterogeneously composed teams. The first step was an extensive theoretical familiarisation with the topic as part of the literature evaluation and the compilation and analysis of secondary statistical data.

This was followed by a creative idea-finding phase to think of socially relevant issues. The project teams searched for possible non-university partners, social organisations in the region for which there would be added value through cooperation. Contacts were established, and the further development of the project topics was carried out in close consultation with the three partner organisations, and aligned with their real interests and needs. The students contributed their theoretical and methodological knowledge and skills to the project work with the aim of supporting the social organisations with helpful additional knowledge for their daily work. Furthermore, the students also considered the possibility of providing additional services to the social organisations. In the first phase of the study project, all students also took part in a social city tour through Bochum, visiting various social organisations organised by a street newspaper organisation, one of the community partners and led by a formerly homeless person. The three groups then went on to work on their own projects in consultation with their respective partner organisations.

2. Methods

2.1. Research Design and Research Focus

We used a qualitative research design to explore the fears, anxieties, concerns and worries of the course participants about working with vulnerable people and social organisations. We were interested in the personal stories, experiences and impressions of the course participants, which can be adequately captured in detail with this limited number of study participants through a qualitative approach to the object of research (see e.g. Creswell & Poth, 2018; Flick, 2018; Panke, 2018). Additionally, we aimed to understand how the first meetings took place, how the students perceived the meetings and the communication situations, and whether existing fears and worries had been fulfilled or whether these had become superfluous as a result of personal encounters.

The investigation of these questions was integrated into a more extensive qualitative interview study, designed as accompanying research for the study project course. The research strategy for the overall research study was developed in advance, as were the research instruments used and the type of initial data analysis. However, it only became apparent during the course of the project, through statements in reflection sessions and informal discussions with the senior lecturer, as well as through observations made, that feelings, worries and anxieties seem to play a special role in the formation of the contacts between students and community partners as well as students and vulnerable people. That these have an influence on the further project work, the cooperation of the project participants in the project groups, the formation of the contacts with the community partners and vulnerable people and the performance achieved in the course by the students.

In accordance with the openness in the research process, an important prerequisite in qualitative research which can also include the extension of the research focus and should include the "conscious perception and involvement of the research and the communication with the researched people" (Kardorff, 1995, p. 4), we decided to focus on the question of feelings in the initial phase of a community-based research or service-learning project in a separate data analysis. The decisive factor here was also Prof. Philipp Mayring's recommendation for this additional analysis focus on a research method workshop in 2022 where the research study was presented to a larger audience for the first time.

In relation to the questions under investigation, we concentrated our analysis on the initial phase of the project's life cycle, the first phase of the project, the conception and planning phase. In other words, the phase in which the students made first contacts with prospective

partner organisations, they prepared the meetings with the social organisations and vulnerable people under the guidance and supervision of the experienced senior lecturer. The first project phase is also of particular importance for the further success of the project because it is here that the team members of the individual research groups establish more regulated forms of collaboration, and the thematic focus of the projects is elaborated and defined in more detail.

We conducted a qualitative interview study following the approach of Helfferich / Kruse (2009, 2015). As an initial approach to analysing the data, we chose qualitative content analysis method. Among the various content analysis methods (Stamann et al., 2018), we refer to the data analysis techniques described by Mayring (2010, 2022a; Mayring & Frenzl, 2019), which are to be "understood as qualitatively oriented, category-led text analysis" (Mayring, 2010, p. 604). We understand qualitative content analysis as a method that links qualitative and quantitative research, allowing an initial qualitative analysis, such as the inductive formation of categories from the available interview transcripts, to be followed by quantitative analysis steps, such as the observation of the category frequencies (Mayring, 2001).

2.2. Study Participants and Setting

At the end of the course, all students were invited to participate in the accompanying research study. Participation was voluntary, informed consent was obtained, participation was not linked to academic achievement. The interest was great, only two students of those participating until the end opted out. Being a participant in this research study gave the students the opportunity to experience the research process from different perspectives, both as researchers and as those being researched.

A total of 13 students took part in the qualitative interview study. The mean and median age of the study participants was reported 22 (SD=1.6), the range was between 21 and 27 years for the oldest participant. All study participants, five male and eight female students, were currently enrolled in the bachelor's degree programme in geography. The majority of the students were born in the Ruhr area (10 out of 13 students) in Germany. Only a few students were born abroad or grew up in other parts of Germany.

As part of the qualitative interview study, we also asked about the course participants' personality traits and value orientation (Bittner & Kempchen, 2024b) using the HEXACO model of personality structure for classification according to personality traits (Ashton & Lee, 2007). The results showed, for example, that six students described themselves as rather or clearly extroverted personalities, while one student described herself as clearly introverted. Three students told us that they were helpful and respectful in dealing with others, two of whom also stated that they were able to adjust or adapt well to other people and their behaviour. Two other students indicated in the interviews that they were generally not afraid of contact and enjoyed coming into contact with different people.

2.3. Data Collection

The interview communication situation was strongly oriented to the principles and requirements of qualitative interview research as described by Helfferich in her "manual for conducting open interviews" (2009) and building on this Kruse in his comprehensive work on qualitative interview research (2015). We developed the interview guideline in a multi-stage process according to the rules and the SPSS method for creating interview guidelines with the aim of creating relatively open, narrative-generating interview situations possible in order to obtain extensive, high-quality qualitative data material despite structuring the interview (Helfferich, 2009; Kruse, 2015). The interview guideline consisted of 12 narrative-generating

key questions, questions to maintain the "narrative fluff" and specific follow-up questions for each key question. The key questions also covered the other sub-studies of the overall study. The interviews were each concluded with a very open final question to give the interviewees the opportunity to address aspects that were still important from their personal point of view but may not have been discussed during the interview. We intended to satisfy the primacy of openness in the research process of qualitative social research (Kardorff, 1995). The following interview questions were relevant to the research focus on feelings.

- Now we work in the project with and for social organisations as well as with and for so-called vulnerable groups of people. If you remember back, can you tell me what fears and anxieties you had regarding the cooperation with and for social organisations as well as with and for so-called vulnerable groups of people at first, i.e. at the very beginning (i.e., before the meetings took place) in the project? (RQ 2, RQ 1)
- Can you please describe to me how it was for you in the further course, in the first phase of the project? That means, can you please tell me how it felt for you personally, the first contacts with the cooperation partners, i.e., the social organisations, the first contacts with vulnerable groups of people. How did it feel, what did you think? (RQ 4, RQ 3)

The length of each interview was between 32 and 60 min (based on the interview questions in the various sub-studies) and the interview language was German. The interviews were all conducted by a student research assistant, a master student in geography with a specialisation in urban and regional development management to reduce the effects of power imbalance in the interview situation. In one interview, a part of the conversation was conducted in English. The online ZOOM interviews were audiorecorded, special features of the conversation were recorded in writing in a postscript, and the interviews were transcribed entirely (content-semantic transcription: Dresing & Pehl, 2017).

2.4. Data Analysis

We used qualitative content analysis as a first step in qualitative data analysis. Here, we refer to the data analysis procedure described by Mayring (2010, 2022a; Mayring & Frenzl, 2019) and also use the terminology for the content analysis method described here. We defined the coding unit, the respective selection criterion and the level of abstraction in advance (Mayring, 2022a). The preselected coding unit determines the minimum size of a text element that could be assigned to a category. We decided on the clear meaning component (seme) in the text. The context unit, the maximum size of a text component that can be assigned to a category was defined as one document, one transcript. The recording unit included all interview transcripts. In particular, the method of inductive category formation was applied. Based on the four research questions, four initial selection criteria and the associated levels of abstraction, which indicated of how specific the built categories should be, were defined. These formed, to a certain extent, the search grid with which the text, the individual transcripts, were analysed line-by-line in search of relevant text passages. The summarisation and reduction of text material through category formation were carried out very closely to the available text material. Further categories were created as the data was analysed line-by-line. Text material that fitted an existing category was subsumed under it (cf. Mayring, 2022a).

We also involved deductive content-analytical steps. Categories at the superordinate level were named by orienting towards classification models for emotional expressions. The data analysis was software-supported (MAXQDA Analytics Pro software, version Release 22.8.0, Kuckartz, 2010; Kuckartz & Rädiker, 2020). We want to note that we deliberately refrain from the use of the AI-assist, i.e. the use and activation of AI assisted technology in MAXQA for the

summarising and analysis of qualitative data. We used the software for the manual development of the category system, visualisation, carrying out various further analyses and writing down work processes, ideas, definitions and interpretation results (Kuckartz, 2010; Kuckartz & Rädiker, 2020).

3. Results

In the following sections, we would like to address the research study's most important results. In accordance with the conventions for the presentation of the results of a qualitative content analysis, the category system developed using the inductive category formation method is reported here. Due to the limited number of study participants, the focus is on the main categories with the corresponding frequencies. Interview quotations illustrate subcategories formed at a subordinate level.

3.1. Fears, Anxieties, Concerns, Worries About Working with Vulnerable People

In this section, we present the results of RQ 1. No data is available for one interview. As a result of the coding process of the course participants' answers, the following five main categories are given in descending order of occurrence frequency: a) fears (75 %, 9 out of 12 interviewees), b) uncertainty (25 %, 3 out of 12 interviewees), c) no fears (25 %, 3 out of 12 interviewees), d) nervousness (8 %, 1 out of 12 interviewees) and e) negative feelings (8 %, 1 out of 12 interviewees). Please also refer to Table 1.

Table 1.

Negative Feelings and Fears About Working with Vulnerable People

Categories	Documents	Percentage	Percentage (valid)
Fears	9	69.2	75.0
Negative feelings	1	7.7	8.3
Uncertainty	3	23.1	25.0
Nervousness	1	7.7	8.3
No fears	3	23.1	25.0
Documents with code(s)	12	92.3	100.0
Documents without code(s)	1	7.7	
Analysed documents	13	100.0	
Total of coded segments	22	100.0	

Note. This table shows the main category frequencies which result from content analysis of 13 interviews with course participants (inductive category formation) to the question of what were fears, anxieties, concerns and worries (insecurities, perceived discomfort) about working with so-called vulnerable groups of people at the beginning of the project.

The most common fears concern fears of contact on both sides, on the side of the students and the side of the vulnerable people, usually homeless or formerly homeless people. That you are not on an equal footing, that there is or remains a distance between the students and the homeless people. General fears about meeting and working with strangers, people you don't know were also mentioned and fears about making contact in general.

One participant (Lotte Heinrich, female student) explained about a possible lack of openness or a distanced attitude towards students from the university, "And in relation to the people, i.e. the vulnerable people, that we are perhaps approached with a certain scepticism and a certain - yes, not fear of contact, but a certain distance, possibly even aversion. Depending on which group of people we are talking about. For example, with homeless or homeless people, people assume that if students come and ask you about it, it might be a bit intrusive or they might be a bit critical of the whole thing."

Existing concerns were also described as to whether homeless or formerly homeless people, who have experienced a lot in their lives, want to talk about their individual life stories. "I was afraid at first that it would be difficult, especially with homelessness. That's always a big issue. I find it difficult to work with homeless people, homeless people in general, because they all have a history, a certain background. You never know exactly what has happened in their lives. And some people don't take it so well when you report on them, even if it's anonymously. Nevertheless, many don't want to tell their story. And that's difficult when you don't know the people either. And yes, I think to myself, if I were in their situation, I wouldn't be doing so well anyway. And personally, I wouldn't feel like giving interviews right now either" (Berta Schleich, female student).

Another participant expressed fears about approaching people the students had never met before. Alfons Eberth, a male student, said, "I believe that this is not only due to the vulnerable groups themselves but also these situations when you have to approach strangers or want to approach strangers and start a conversation with them on a topic that you may not be very familiar with at first. And then you have to familiarise with the other person's life and story and try not to misunderstand them in order to keep the situation as upright and pleasant as possible. That was my biggest requirement. And that was the reason for it."

In particular, concerns arising from existing uncertainties were also reported. The study participants talked about concerns arising from existing uncertainties, insecurities, not knowing exactly how to deal with people whose life paths are completely different from their own, how to behave or should behave in communication situations. Alfons Eberth, for example, also described his uncertainty in dealing with vulnerable people, "How to deal with them from this perspective or how to address them. They all come from very different backgrounds, cultures or have very different underground histories and are therefore affected differently, affected to different degrees. And when you approach this person from the outside and get to know their story, it's difficult to communicate with them."

An inner restlessness, a tension that arose from a new and unpredictable situation, nervousness that is what Ludmila Mude, a female student, was talking about, "And I was also quite nervous around the vulnerable people affected, and I didn't know what to expect. For example, with the interviews. How should I deal with them exactly, how do I address the questions? (...)"

Negative associations and thoughts that influenced the work in the project arose from experiences and impressions gained in youth with homeless people. So one of the course participants said when we asked about the fears, anxieties, concerns and worries about working with so-called vulnerable groups of people, "So yes, I think I had a bit of a negative image at the beginning because I didn't know them. In general, homeless people are... Yes, it's just such a sensitive topic, I think. Especially because I couldn't assess them well. And then I had rather negative associations (with them). This was also a bit due to the fact that our school at the time was located near the park, where they often romped, alcoholics too. Thus, I always had a bit of a negative image. And I just didn't know what to expect. So yes, I was a bit negatively predisposed. You always think that alcoholics might be a bit aggressive. Or just what they want with students? Do they even care? (...)" (Enno Roskoth, male student).

Three students stated they had no fears or concerns about working with vulnerable people. It was indicated, for example, that they found the project fundamentally interesting and were open to the collaboration with vulnerable people. And because of the clear framework of the course, they knew exactly what to expect.

3.2. Fears, Anxieties, Concerns, Worries About Working with Social Organisations

We identified five main categories from the interview material with regard to RQ 2. Three interviewees did not respond to the question in this regard. The findings are the following, listed according to their frequency of occurrence: a) fears (70 %, 7 out of 10 interviewees), b) no fears (40 %, 4 of 10 interviewees), and three other categories, each of which appears in one of the interviews (10 %): uncertainty, curiosity and joy/ looking forward (see Table 2 for details).

Table 2.

Negative Feelings and Fears About Working with Social Organisations

Categories	Documents	Percentage	Percentage (valid)
Fears	7	53.8	70.0
Uncertainty	1	7.7	10.0
No fears	4	30.8	40.0
Curiosity	1	7.7	10.0
Joy / looking forward	1	7.7	10.0
Documents with code(s)	10	76.9	100.0
Documents without code(s)	3	23.1	
Analysed documents	13	100.0	
Total of coded segments	22	100.0	

Note. This table shows the main category frequencies which result from content analysis of 13 interviews with course participants (inductive category formation) to the question what were fears, anxieties, concerns and worries, (uncertainties, perceived discomfort) about working with and for social organisations. At the beginning of the project.

The fear that no partner would be found and no benefit would be seen on the part of the social organisations was mentioned several times. In addition, fear of making contact, fear of not being taken seriously and fear of what impression will be made on the community partner were each mentioned once.

Berta Schleich mentioned the limited time resources of the community partners as a problem, "Because, for example, they have a lot to do in their daily lives, the organisational partners or organisations in general. And I think many of them simply don't have the time and the opportunity to deal with students. Because it takes up a lot of time." And Rosi Trupp, another female student, was concerned whether the social organisations saw added value in the collaboration, "So, especially with regard to the community partners, I was really afraid that no one would want to work with us. So I put myself in the shoes of the engagement partners and asked myself if I would want to work with a couple of students when I don't even know how much knowledge they have and how much added value they can bring me and it costs me a lot of time, which I have to invest in it, which I then might not have." Furthermore, she thought about a possibly rather critical attitude on the part of the social organisations, "And I just thought that most of the engagement partners are very critical of us and the whole situation. Because maybe they've never done it before and it's a new project. You've never seen this study before, you've never heard of it. And then suddenly, we come along and want something from them. And I was rather very critical."

One participant reported uncertainty regarding the forthcoming cooperation with social organisations. This refers to the overall situation or the process, uncertainty about the people you will meet in the social organisations and the question of how you should present yourself and behave. The uncertainty results from the fact that no previous experience has been gained with social organisations, "You also knew, I didn't really know what exactly was in store for me before we visited, let me say, an institution. That was somehow also perhaps a fear, this

uncertainty. So, what exactly do I have to expect now? What's the best way to present myself. Do I have to change somehow? That's what you sometimes think. So do I somehow have to adapt completely or can I be who I want to be. How do I present myself. So I think those were the little fears you had" (Maria-Luise Haase, female student).

Four participants stated that they had no fears and concerns working with and for social organisations. It was also emphasised that the partners' work is rated as good and honourable. There were also reports of positive feelings, such as excitement and curiosity about what is to come or the anticipation of something you have never done before. "Basically, it's all good and honourable what people are doing, and so I didn't have any concerns, so I wouldn't say it was anything scary or bad or dangerous. Those weren't my first thoughts, I was just curious about what was to come or what might have come" (Nico Gunf, male student). Amelie Scheibe, a female student, said, "I actually had no reservations about working with the organisations themselves, I was really happy about that because I had never really done that before."

3.3. Sensations, Perceptions, Feelings That Occurred During the First Contact with Vulnerable People

It was interesting to see what the first contacts, meetings and conversations between the students, vulnerable people and employees of social organisations were like (RQ 3). How did students perceive the situations? What feelings arose? Regarding the first contacts with vulnerable people, we should mention, sorted by frequency (see also Table 3) the following categories: a) fears were quickly dispelled (50 %, 5 of 10 interviewees), b) nervousness (50 %, 5 of 10 interviewees) c) positive feelings (40 %, 4 of 10 interviewees) d) normal (conversation) situation (20 %, 2 of 10 interviewees) e) fears have been reduced (20 %, 2 of 10 interviewees) f) uncertainty (10 %, 1 of 10 interviewees) g) curiosity (10 %, 1 of 10 interviewees). No data is available for three interviews.

Table 3.

Sensations, Perceptions, Feelings During the First Contact with Vulnerable People

Categories	Documents	Percentage	Percentage (valid)
Uncertainty	1	7.7	10.0
Nervousness	5	38.5	50.0
Fears have been reduced	2	15.4	20.0
Fears were quickly dispelled	5	38.5	50.0
Normal (conversation) situation	2	15.4	20.0
Curiosity	1	7.7	10.0
Positive feelings / joy	4	30.8	40.0
Documents with code(s)	10	76.9	100.0
Documents without code(s)	3	23.1	
Analysed documents	13	100.0	
Total of coded segments	25	100.0	

Note. This table gives category frequencies for sensations, perceptions and feelings that occurred during the first contacts with so-called vulnerable groups of people.

Some students felt a certain amount of uncertainty and nervousness during their first meetings with vulnerable people. Berta Schleich talked about uncertainty about how to behave, for example, "But I already do things like buying food and drink for the homeless when I'm on holiday, so I'm willing to help. But working with them is something new. And I also have respect for people. And we were at the sales meeting. I was a bit nervous then, because you don't know exactly what to expect, how people look at you, because you still come from different life worlds, so to speak. But it was very positive." Lotte Heinrich also reported feeling

nervous, "Yes, well, I don't know if that makes you a bit more nervous somehow. It's a group that I don't always approach, so I don't really get in touch with them in my free time, because they're in their own circles and with their own friends. And, yes, in general, it's not easy to talk to people, but we were prepared to talk to them. So at the beginning I was a bit more afraid and more nervous than with the organisations." Just like Norma Girschner, a female student, "So nervousness and this general uncertainty about how I should behave. I think that goes together with nervousness. Yes. I think actually just that."

Several students rated the participation in vendor meetings of a street newspaper organisation and the discussions held here as positive and stated that fears and reservations were reduced or completely dispelled based on their experiences. Norma Girscher told us in the interview, "Yes, well, as I said, from the vendor meetings onwards, after I simply sat down and talked to the other (...) salespeople, just normally about everyday life or problems that they had or just to know that they wanted to talk to someone, even if it wasn't necessarily about problems relating to poverty or homelessness, but problems that we can also have as students or something. All my fears were, yes, they all pretty much went away." It was emphasised that the students were met with more openness than expected and that most of the vulnerable people the students came into contact with were friendly and open-minded which was seen as positive and helped to reduce or dispel initial concerns. Berta Schleich also addressed this point, "(...) I heard from my fellow students that it was not as we initially thought. Rather, people are more open than we feared and are also willing to talk." And Wolfram Wagner, a male student, said too, "These [fears, worries] vanished into thin air relatively quickly. Both on the part of the aid organisation, because they approached us in a very positive and friendly manner. But above all, the people concerned surprised me the most in this regard because they also told their story openly, approached us openly and were also pleased when we showed up at the sales meetings (...), for example." And Nico Gunf, "But most of them were, as I said, open-minded and friendly, maybe even more so than you would expect if you went there with such an intention."

And Berta Schleich, a rather extroverted student, reported that she was initially shy in the new situation, but that this subsided and a positive feeling set in, "I was a bit shy at times, reserved. But the longer you spend with people, the more open you become. And then you also notice that people are more open - some are more open than others. But they talked to us normally, not like you see in movies or the media or anything like that. So that gave me a positive feeling, yes." Maria-Luise Haase told us about a happy and positive moment for her, "Maybe what I remember most about this (...) [social city] tour [by the street paper organisation] was when we bought the (...) magazines plus the DVD, just the joy that really came from him [the seller]. But this honest joy, this radiance. And that was also a nice feeling that somehow we were able to give something back. That he [the seller] likes doing what he does. And that he then somehow also had a good feeling, we had a good feeling. And just by doing such a small thing, we were able to bring joy. That was really nice. That has definitely stayed with me."

3.4. Sensations, Perceptions, Feelings That Occurred During the First Contact with Social Organisations

The first meetings with representatives of social organisations were rated remarkably positively, despite the students' existing nervousness (RQ 4). The following categories were worked out through content analysis: a) nervousness (62 %, 8 of 13 interviewees), b) positive assessment/ feelings/ joy (54 %, 7 of 13 interviewees), c) fears (8%, 1 of 13 interviewees) d) fears were quickly dispelled (15 %, 2 of 13 interviewees), e) uncertainty (8 %, 1 of 13 interviewees), f) discomfort, unpleasant feeling (8 %, 1 of 13 interviewees), g) relaxation, relaxed attitude, relaxed manner (8%, 1 of 13 interviewees).

Table 4.
Sensations, Perceptions, Feelings During the First Contact with Social Organisations

Categories	Documents	Percentage	Percentage (valid)
Fears	1	7.7	7.7
Discomfort / unpleasant feeling	1	7.7	7.7
Uncertainty	1	7.7	7.7
Nervousness	8	61.5	61.5
Fears were quickly dispelled	2	15.4	15.4
Relaxation / relaxed attitude	1	7.7	7.7
Positive feelings / joy	7	53.8	53.8
Documents with code(s)	13	100.0	100.0
Documents without code(s)	0	0	
Analysed documents	13	100.0	
Total of coded segments	29	100.0	

Note. Category frequencies are given in this table to the question what were sensations, perceptions, feelings that occurred during the first contacts with social organisations.

One student project group was very reserved at the first meeting with their partner organisation and was supported by the accompanying experienced lecturer in leading the conversation. The atmosphere during the conversation was described as tense; some students also felt uncomfortable, had some negative feelings, perhaps even felt overwhelmed. The student group felt a little uneasy about the course of the first conversation. Alfons Eberth described his feelings and impressions as follows, "Well, I felt it, I personally felt it, but that is also the feedback from my group; we felt a bit, let's say, uncomfortable during the conversation. We may have had different expectations or perhaps thought that the conversation itself would be different. And that's why we left the conversation feeling a bit uncomfortable, because we had imagined things differently in terms of exchanging and perhaps presenting the information and ideas we had with the partner, with the cooperation partner. And in retrospect, we were a bit unsure as to how it could have been done better."

We were often told that the students were excited, tense and nervous in such a situation that was new to them, at the first meetings with representatives of social organisations. They didn't know exactly what would happen or what to expect; some felt not sufficiently prepared and others were happy to be accompanied by an experienced teacher and not to be alone.

Carmen Spieß, a female student, described her feelings at the first meeting as follows, "I was excited. In the beginning, I was excited because I had the feeling that we were not well prepared for the work, what these people do on a daily basis, and what difficulties there might be in politics at the moment or current examples. I felt a little unprepared and was therefore a little nervous about whether we would be able to do it at all. In other words, to be able to provide a service for them, because we don't yet have a degree and are not as familiar with the subject as the institution's employees." Enno Roskoth explained, "So I was a bit nervous. Because I didn't know exactly what to expect personally. So in general, I don't know, maybe it's a bit like a job interview. But not really. And I don't know, I was just, no, I don't know, kind of weird, special. Yes, so I would - I think nervous would be the best way to describe it." Norma Girschner also reported feeling nervous at the first meeting, "So at the beginning I was definitely nervous and was also glad that I wasn't alone, so that the lecturer of the course was there too. And I mean, the first time, (incomprehensible) #00:13:50# was there too. So there were at least three of us. And yes, there was a bit of uncertainty about what you can say, what you can't say? How should you formulate it now? And exactly, at the first meeting, it was like a meeting. (...) It was like a normal meeting and a few things were clarified. And then, yes, in the end we stayed longer

and talked to the (individuals?). And I was nervous about sitting down at the beginning and starting a conversation. But after that it was fine. It was okay."

Some students reported that initial fears and insecurities were dispelled by getting to know the representatives of the social organisations personally, intensively preparing in the project seminar, and familiarising themselves theoretically with the topic.

It was also mentioned that joy was felt, or positive feelings arose because the search for a community partner was successful, that the first meetings and discussions were positive, that there was a relaxed, friendly atmosphere and that there was an interest in working together. The students also said that they rated it as positive, and they were pleased because the impact of their own work was recognised. The following told Rosi Trupp, "So after the interview or after we landed an engagement partner, I was very optimistic. Because our interview went very well. We noticed that the engagement partners were also very optimistic, and they really wanted to work with us. And they also saw this added value. And they trusted us and also, yes, helped us a lot so that we could continue our work." Marie-Luise Haase described how she was positively surprised by the meeting with the representatives of social organisations, the engagement partner of her research group, "In any case, I was very positively surprised by our partner, how relaxed and friendly he was. That he was really interested in our problems, in our research. That he really wanted to interact with us. And that a lot came back from him. That's right. That was my first impression. So I had a very positive first impression. I realised, okay, it wasn't based on one-sidedness, that we liked having him as a project partner, but that it was based on reciprocity. And that was also a very good feeling at the beginning."

4. Discussion

In our study, we were able to show that in community-based research and service-learning projects, particularly in the initial phase, where a cooperative relationship is gradually established between non-university partner organisations and students, the students' fears, anxieties and uncertainties play a role. Suppose there is contact with vulnerable groups of people in the context of such projects. In that case, it should be noted that the students often have little or no experience with vulnerable people or in dealing with people whose realities of life and experiences differ fundamentally from those of the students, like homeless people or people who suffer from poverty. Some students may even have had negative previous experiences in the past or have prejudices and unexamined views and perceptions.

This results in uncertainties about how to behave correctly, how to introduce yourself and the institution, how to establish contact with a vulnerable person, and which questions you can ask and which you should perhaps rather not ask. Beyond that, it can be assumed that uncertainties in project-related meetings and professional communication situations are more relevant for younger students, who are not yet so far advanced in their studies, have had little or no experience with project-related forms of work and have generally also gained little practical experience outside the university context, than for older students.

We were able to show that positive experiences at the first meetings, in first conversations and discussions with representatives of the partner organisations, social organisations and with vulnerable people, in the case of our project in particular formerly or acutely homeless people and people affected by poverty, can reduce existing fears, anxieties and insecurities or, ideally, dispel them completely. This should have a positive effect on the further project collaboration, the students' learning success and their self-confidence.

Dealing with a completely different world, direct contact and discussion with those affected, as in case of our project course, dealing with poverty and homelessness, can be a great

opportunity to sensitise students to socially relevant issues. Our results of another sub-study on the question of students' motives for taking part in the course showed that there was a high level of interest in dealing with socially relevant issues. In addition, some students also wanted to get involved in social activities as part of the course, make a difference, do something practical (Bittner & Kempchen, 2024b). In professional cooperation with partner organisations, students gain insights into other professional fields while expanding their practical professional skills. By dealing with issues of social inequality and social diversity through personal contacts, conversations, problems and conflicts that have arisen and been resolved, feelings, reflections on the experiences, the project, the collaboration and working together, through „learning by experience“ (Kolb & Kolb, 2009), it was possible to contribute to sensitisation, a better understanding of social problems and the reduction of fears of contact and prejudices (Bittner & Kempchen, 2024a). Emotional experiences of all kinds and dealing with them are part of such learning experiences as „holistic process(es) of adaption“ (Kolb & Kolb, 2009, p. 43) and certainly play a greater role in challenging learning arrangements, dealing with complex, socially highly relevant issues, working in heterogeneous composed teams, confronting students with realities of life that are fundamentally different from their own.

5. Strength and Limitations

The main limitation of the study relates to the small sample size. Even though the number of cases in qualitative studies is significantly lower than in quantitative studies, the generalisability of the results of qualitative studies is also being discussed (Osbeck & Antczak, 2021). Considerations regarding a sufficient number of cases play a role in content analytical studies (Mayring 2022b). Due to time constraints, we were not able to determine intra- and intercoder reliability. It should also be noted that the course of the one-year study project, which was accompanied by research, had to be changed due to the COVID-19 pandemic, the closure and the university's requirements and was converted to an online format after six months. As we are focussing our research on the first project phase, which is particularly important, these organisational changes at a later stage have no relevance to the specific research questions that we investigated.

No results are available for individual interviews for RQ 1, RQ 2 and RQ 3. The corresponding question was asked, but the interviewee's response only addressed one aspect of the question. The interviewer did not broach the question again later on. It can be assumed that the question was not recorded correctly due to its complexity. Or that there were no fears and anxieties with regard to the aspect not addressed in the answer. In any case, it would seem reasonable to divide the questions into two parts for further investigations.

6. Conclusion

To conclude, in our view, feelings linked to personal experiences are an important part of the learning process, are relational in nature (Quinlan, 2016), embedded in communication situations (Götz et al., 1993) and can contribute to personal growth and development in experiential learning settings. However, these emotional experiences, thoughts, and sensations should be discussed with the students in reflection sessions, as should the students' personal experience in the course. Together with writing tasks (reflective papers), these sessions offer the students the opportunity to review the past, slow down the process, take a step back and become aware of the individual (emotional) experiences they made, access to their feelings and the changes that these have undergone (c.f. to the change of emotions in SL, Carson et al., 2013). The lecturer's task is to offer support and guidance where individual students might otherwise be overwhelmed. In particular, the first project meetings and discussions, meetings

with vulnerable people, should be well prepared and discussed with the students in advance. The students should know roughly what to expect, should be sensitised to the communication situations, and the representatives of the social organisations should also be sufficiently informed about the students and the concerns of the course. At the first meetings, younger students without or with little previous experience should also be accompanied by an experienced lecturer. This creates the framework for a relaxed atmosphere, positive impressions and contributes to the further success of the course and the learning success of the students. In addition, a relaxed and positive atmosphere at the first conversations and meetings with the students is also particularly important for the vulnerable persons with their special needs and life stories. Different personality traits of students and their influences on information processing, perception, expectation, behaviour, and evaluation of situations, as well as their individual emotional experience, should be taken into account by the lecturer.

Further studies with a more significant number of cases focussing exclusively on the occurrence of feelings and their importance in community-based research and service-learning projects can be very valuable in our opinion. The first phase of the project seems particularly interesting to us. In studies with a larger number of study participants, it makes sense to include the different personality traits of the students in order to work out whether and, if so, what differences exist about emotional experiences.

7. Practical Recommendations for Educators

In summary, we would like to make the following practical suggestions for educators to prepare the students well for what to expect, to avoid overwhelming them, to contribute to a positive learning experience, holistic learning process and to reflect on emotional experiences:

- For service-learning and community-based research projects that deal with complex socially relevant issues, the lecturer should provide students with comprehensive theoretical familiarisation before the actual cooperation with the partner organisations in preparation of the project work. This can be done by using scientific texts that discuss different aspects of the overarching issue, which are read and discussed by students in groups in preparatory sessions. So, the students get a more comprehensive picture of the issue and important information on what to bear in mind in further work.
- To raise awareness, it is also helpful that the lecturer not only draw on scientific literature for preparation, but also, for example, provide newspaper articles, a book written from the perspective of someone affected, or watch a film together with the students about the topic. Another approach that we recommend is to deal with the specific manifestation of the phenomenon in the region based on statistical data.
- We also recommend explicitly addressing social organisations' tasks and working methods in one or two preparatory sessions. For this, further information should be gathered on the areas of responsibility, fields of action, organisational structure, projects of the social organisations with which you work in the course or comparable organisations.
- For courses dealing with homelessness, we suggest that, if possible, the lecturer should offer the students the opportunity to make initial contacts with homeless or formerly homeless people in an organised framework, for example, as part of a social city tour that includes visits to various social organisations. This helps to dispel fears in the early stages of the project and gives the students the opportunity to ask questions to enhance their understanding in an organised and supervised framework.
- Exercises such as a self-presentation or self-introduction in the course, using a prepared poster or flipchart, and repeatedly presenting initial project ideas or research results briefly

to the entire course help the students to learn important soft skills, build self-confidence and reduce anxieties.

- Initial project meetings with representatives of social organisations should be, if possible, accompanied by an experienced lecturer. It also helps inexperienced students to feel more confident in the conversation if the project group has formulated the most important aspects of the discussion in writing in advance and if they have also defined roles for the conversation strategy. If uncertainties, worries and difficulties arise, the lecturer should provide assistance and, if necessary, intervene in the conversation. It is also advisable for the lecturer to take the minutes of the conversation so that the students can concentrate fully on the conversation situation and on building a good, trusting relationship with the representatives of the partner organisation.
- Reflection sessions should be held at various stages of the project throughout the course. Sufficient time should be allowed for this. On the basis of, for example, given guiding questions, the students should have the opportunity to review the experiences they have had in the project so far, categorise them, discuss them with their fellow students and with the lecturer, and understand what feelings these experiences have triggered in them. In addition, practical questions regarding further project work, upcoming tasks and challenges can be discussed.
- We also recommend that the first meetings with vulnerable people be accompanied. In advance, it seems important to us that the lecturer obtain information through conversations with the social organisations about what might need to be considered and to point this out to the students. The support provided means that students can turn to the lecturer if they feel insecure, have questions or are experiencing anxiety. It often helps younger and more insecure and shy students to have the lecturer in sight to feel more secure and relaxed.
- Several opportunities to reflect briefly on one's experiences, impressions, and feelings should be provided in the initial phase of the project course, in addition to longer reflection sessions. These include opportunities for discussions between the lecturer and students immediately after initial project meetings with representatives of partner organisations and after initial meetings with vulnerable people.
- In addition, it makes sense to ask students about the emotional experiences they have had in connection with the experiences and impressions they have gained in the service-learning or community-based research course, in written reflections or qualitative interviews in order to draw further conclusions for the design of such courses.

Acknowledgements

We would like to thank all participants of this study.

Funding

This research study was financially supported by a teaching grant from the Ruhr University Bochum.

Authors Contributions

Janine Bittner: Conceptualisation, data analysis, manuscript draft preparation, reviewing and editing. Janina Kempchen: Data collection (conducting the online interviews), proofreading of the manuscript.

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