What is in a student-faculty relationship? A template analysis of students’ positive and negative critical incidents with faculty and staff in higher education

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Abstract
Supportive relationships between students and their educational faculty and staff can foster positive outcomes such as students’ involvement and development. However, research investigating how students perceive the quality of their relationships with educational faculty/staff (i.e., relationship quality) so far remains scarce. This study’s aim was to gain more insight into the construct of relationship quality in higher education using a qualitative approach. Students’ descriptions of their positive (n = 294) and negative relationship experiences (n = 395) were collected using a critical incident technique (final sample N = 513 critical incidents) followed by a template analysis with a priori themes (i.e., relationship quality dimensions: trust in honesty, trust in benevolence, satisfaction, affective commitment, affective conflict). Results indicated that students most often mentioned trust in honesty and trust in benevolence. Affective conflict was not always explicitly mentioned in negative experiences, nor satisfaction in positive experiences. Descriptions of trust in benevolence (n = 355) were equally distributed over positive and negative incidents. However, trust in honesty was more often referred to in negative (n = 145) than in positive incidents (n = 51). The results indicated that students considered timely response to assignments and emails important, and teachers showing interest and attention. The study’s findings provide a new view of how students might positively and negatively perceive the quality of their relationship with educational faculty and staff. This study adds to the theoretical and practical implications of relationship quality research in higher education and how relational aspects are important for students.

Keywords Student-faculty/staff relationships · Relationship quality · Higher education · Template analysis · Critical incident technique

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Introduction

Interactions and relationships between students and their educational faculty and staff are pivotal for educational learning processes (Cotten & Wilson, 2006; García-Moya et al., 2020; Hagenauer & Volet, 2014; Hagenauer et al., 2015). Positive outcomes include students’ development and involvement in several ways, such as (higher levels of) student motivation (Komarraju et al., 2010; Pascarella et al., 1978; Trolian et al., 2016), well-being (Roffey, 2012), school or student engagement (Bonet & Walters, 2016; Maulana et al., 2013; Roorda et al., 2011; Umbach & Wawrzynski, 2005), institutional commitment (Tinto, 1975), and student and alumni loyalty (Helgesen & Nesset, 2007; Hennig-Thurau et al., 2001; Snijders et al., 2019, 2020). Despite the importance of positive student-faculty relationships, so far only a few studies have shed light on the quality of those relationships in higher education, i.e., relationship quality (see Cho & Auger, 2013, Hennig-Thurau et al., 2001; Snijders et al., 2018, 2019, 2020). Relationship quality can be defined as “how healthy a relationship is based on the evaluation or assessment of the parties within that relationship” (Osobajo & Moore, 2017, p. 4) and also considers the strength of the relationship between two actors (Bowden, 2011).

A relationship quality approach in higher education (HE) was applied by Hennig-Thurau et al. (2001). Their study included measuring students’ trust in educational staff, students’ perceptions of the quality of teaching services, and students’ emotional (affective), cognitive, and goal commitment. Their findings indicated that students’ emotional commitment to their educational institution (HEI) is essential in building long-term relationships with the institution. Similarly, the study by Cho and Auger (2013) measured the relationship quality dimensions of trust, satisfaction, commitment, and control mutuality (i.e., lack of power imbalances between parties). Their results were inconclusive, yet pointed out that students who had good-quality interactions with their faculty were more satisfied. Recent studies by Snijders et al., (2018, 2019, 2020) applied a five-dimensional relationship quality scale and indicated that the relationship quality instrument was applicable in HE and relevant for positive outcomes.

To conclude, these quantitative studies imply that relationship quality might be necessary for students’ educational experience. In turn, for HEIs and educational practitioners, relationship quality is essential in relationship quality’s educational/academic outcomes such as student engagement and student loyalty (Hennig-Thurau et al., 2001; Snijders et al., 2019, 2020). Despite the importance of building strong, high-quality relationships with students through relationship quality in HE, the topic is still under-researched.

Recent studies in educational psychology called for qualitative research (e.g., Clem et al., 2020; García-Moya et al., 2020). These studies suggested examining the development of (positive) interactions between students and their higher education institutions (HEI; i.e., teachers, professors, mentors, and other faculty and staff). The current study addresses this gap.

Relationship quality in higher education

Trust

To understand the interactions that form student-faculty relationship quality, within the present study, we used social exchange theory (SET; e.g., Blau, 1964; Cook & Rice, 2003; Emerson, 1959).
1976; Thibaut & Kelley, 1959) as the overarching framework. According to SET, human relationships are formed using a subjective cost-benefit analysis expressed by the value (or worth) of a relationship (i.e., rewards/benefits minus costs). Qualitative data based on students’ descriptions of their positive (benefits) and negative (costs) experiences were examined by a template analysis of five a priori relationship quality dimensions: students’ trust in faculty/staff’s honesty, students’ trust in faculty/staff’s benevolence, students’ overall satisfaction with faculty/staff’s performance, students’ affective commitment, and students’ affective conflict (Snijders et al., 2018, 2019, 2020).

Trust is a “psychological state comprising the intention to accept vulnerability based upon positive expectations of the intentions or behavior of another” (Rousseau et al., 1998, p. 395). To build and establish long-term (enduring/lasting) relationships such as in the HE context, students’ trust in their interpersonal relationship with their educational faculty and staff is paramount (Tett et al., 2017). Two types of trust can be distinguished: trust in an entity’s credibility (or honesty) and trust in an entity’s benevolence (Roberts et al., 2003).

**Trust in honesty**

Trust in honesty reflects students’ perceptions of the educational faculty/staff or university’s credibility and integrity. Previous research indicated the importance of an instructor’s credibility, as perceived by students, and its positive effect on their learning effectiveness (Meyers, 2003) and higher motivation to learn (Martin et al., 1997). In other words, trust in honesty resembles the extent to which students believe educational faculty/staff’s word can be relied upon, considering their sincerity and their effective and reliable performance.

**Trust in benevolence**

Trust in benevolence refers to whether students feel that their faculty/staff or university understands and cares about their welfare (Roberts et al., 2003; Authors, 2018). If students experience trust in benevolence, they believe that faculty/staff have intentions and motives that are beneficial and that staff/faculty avoid acting in a way that will result in negative outcomes for them (Roberts et al., 2003; Authors, 2018). Students derive these beliefs, for instance, from how educational faculty/staff or the university respond(s) to students when they confide their problems.

**Satisfaction**

Satisfaction with a relationship can be considered a “summary measure that provides an evaluation of the quality of all past interactions with the service provider” (Roberts et al., 2003, p. 178). As a relationship quality dimension in HE, satisfaction refers to the level of cumulative satisfaction that students experience (Schlesinger et al., 2017), that is, the evaluation of all past interactions shapes future interaction expectations. Douglas et al. (2008) found that the most important source of students’ satisfaction was the university’s communication and responsiveness. Recent studies (e.g., Tompkins et al., 2016) indicated that university faculty/staff’s support was found to best predict the satisfaction of the educational program.
Affective commitment

The consensus among researchers is that commitment is an essential indicator of relationship quality. When there is no commitment, this will automatically lead to no relationship. A crucial indicator of a relationship’s health is a (customer’s) commitment to a service organization, such as an institution in HE. Commitment should thus be included as a dimension of relationship quality (Roberts et al., 2003). As the process of commitment develops over time, one might become accustomed to positive emotional responses, and, as a result, one becomes more secure in the relationship (Roberts et al., 2003). Affective commitment refers to the way someone feels attached. Within this study, affective commitment reflects students’ commitment to their educational faculty/staff (or university in general). Previous research indicated that when students perceived the interactions with their educational faculty/staff as satisfying, students showed a more significant university commitment (Strauss & Volkwein, 2004).

Affective conflict

The level of affective conflict represents a negative indicator of relationship quality. Conflict generally negatively affects the relationship between students and their educational faculty/staff or university, for instance, in weak interpersonal relationships, high stress, decreased student success, and increased absenteeism (Zhu & Anagondahalli, 2017). Roberts et al. (2003) described the affective conflict in terms of feelings of hostility, frustration, and anger towards a partner that might lead to conflict manifestation as an outcome behavior (e.g., complaint behavior or disagreement). A recent study by Clem et al. (2020) that investigated achievement emotions among young adolescent learners confirmed that teacher-student conflict harms their learning and might result, for instance, in anxiety.

Relationships and interactions in higher education

From a social psychological perspective, an interpersonal relationship can be considered a strong, deep, or close association or acquaintance between people. More generally, a relationship can be defined as forming bonds (Roberts et al., 2003). It is the nature of the interactions that affect and shape the quality of a relationship—for instance, in education between students and their teachers/staff (Roffey, 2012).

Student-faculty interactions form the basis for (the quality of) the relationships between students and their educational faculty and staff (Cotten & Wilson, 2006; Hagenauer et al., 2015; Kim & Sax, 2017). Contact between students and educational faculty/staff can be either formal or informal and in class or out of class (Meeuwisse et al., 2010). Formal contact between students and the educational faculty/staff often happens in class, where students and faculty stay in their roles as “student” or “teacher/lecturer” (Dobransky & Frymier, 2004). Informal contact happens between both parties when they communicate as individuals, which often occurs outside the classroom. Based on the abovementioned literature on student-faculty interactions, both contact types seem to be relevant to students.

Pascarella and Terenzini (1977) found that interactions focused on course-related content were a more important predictor of retention than other, informal matters. However, later on,
informal contact beyond academic content appeared the most influential (Pascarella, 1980). Pascarella (1980) further stated that the relationship quality derived from these informal interactions is the main predictor of a student’s chance to reach out to faculty in an informal manner. Another study by Cotten and Wilson (2006) found that context seems to be highly crucial for whether formal or informal interactions have an impact. They stated that when students interact with faculty members who do not lecture in any of their courses, formal interaction related to academics was more important.

In contrast, when students interact with their instructors, informal interaction with a social nature was important. When students were engaged in out-of-class contact with faculty, they reported higher levels of intimacy and shared control than students who did not participate in this type of interaction. However, the level of trust students experienced was not affected by out-of-class communication. While some studies (Cotten & Wilson, 2006) emphasized the relevance of formal contact (e.g., academic advising as effective out-of-class interaction; Allen & Smith, 2008), other research indicated informal (out-of-class) interactions between students and their faculty and staff to be essential for students’ success (e.g., Alderman, 2008; Komarraju et al., 2010).

In sum, these studies indicated that both formal and informal interactions between students and their educational faculty/staff and how they occur, when, with whom, and where seem to be important for positive (academic) outcomes. However, the importance of these interactions as part of the quality of the relationships between students and their educational faculty and staff in higher education (i.e., relationship quality) is unclear. Insight into students’ perceptions of relationship quality is needed to build positive relationships between students and their educational faculty and/or staff.

**Present study**

The present study aims to gain insight into students’ perceptions of their relationship with their educational faculty and staff. In that way, this study seeks to add to the theoretical and practical underpinnings of the relationship quality construct in HE. Within this study, through the lens of SET, aspects of relationship quality are addressed based on qualitative data analyses (i.e., real-life experiences presented in students’ examples).

The goal is to examine possible patterns of themes across the dataset as a whole so that we can further conceptualize relationship quality in the HE context. To this end, we applied the critical incident technique (CIT) to collect the data concerning students’ reflections on positive and negative relationship encounters (i.e., critical incidents). We used template analysis as described by King and Brooks (2016) to analyze the data. The a priori themes, that is, relationship quality dimensions, were based on previous studies of relationship quality in HE (Snijders et al., 2018, 2019, 2020).

The following research questions guided this study:

1. How do students perceive the quality of their relationships with educational faculty and staff (i.e., relationship quality dimensions)?
2. What positive and/or negative experiences do students describe?
3. How do students refer to the time (when), place (where) and/or form (how), and actors (who), regarding the quality of relationships with educational faculty and staff?
Materials and method

Context and participants

This study was conducted at a Dutch university of applied sciences. Within the Dutch HE system, two types of institutions can be distinguished: research universities and universities of applied sciences. Both systems have a bachelor’s-master’s degree structure. However, a difference is that it generally takes 3 years to complete a bachelor’s degree at a university and 4 years at a university of applied sciences. There are different kinds of roles for faculty/teachers and staff members at the institution under study. First of all, teachers are mainly the ones students have contact with regarding their learning process and other (personal) matters. However, study career coaches, student psychologists, mentors, or other contact personnel from institutional services, such as receptionists, janitors, and other staff members, can interact with students.

The students in this study were enrolled in different educational programs in the fields of economics, technology, and social work. The response rate of the online survey used was 15.26%, resulting in a total of 656 participants (71.1% female students; \( M_{\text{age}} = 21.25 \) years, \( SD = 4.50 \)). The vast majority of the participants were Caucasian, which is representative of all students at the university under study.

Although all students were invited to participate, mainly first-year students (\( n = 237; 165 \) females) took the survey. In addition, more descriptions of critical incidents from female students (\( n = 364 \)) than from male students (\( n = 148; 1 \) gender unknown) were included in the final sample of students’ responses. Overall, female students described slightly more positive experiences (218; 59%), than male students (85; 57%). Students from all educational programs were represented in the final sample of described experience (\( n = 492, 23 \) study program unknown; economics \( n = 128, \) technology \( n = 114, \) and social work \( n = 250 \)).

Data collection and procedure

This study was part of a larger project on relationship quality within HE (Snijders et al., 2018). The aim was to examine the measurement of the relationship quality construct. For this particular study, we focused on written feedback given by students, using an online version of the critical incident technique (CIT; see Butterfield et al., 2005; Douglas et al., 2008; Douglas et al., 2009; Flanagan, 1954), where we asked participants to describe concrete examples of at least one positive and one negative experience regarding relationship quality. Enrolled students at the university under study were invited to take an online survey sent out by campus email to all potential participants (approximately 4500) during the second semester. In that way, first-year students were also sufficiently able to provide answers reflective of their first-year experiences. As part of the survey, students were asked to describe at least one positive and negative occurrence that influenced their perception of the quality of their relationships with the university and their educational faculty/staff. To do so, we asked them to answer four open-ended questions concerning each occurrence they described: (1) Briefly describe the situation/incident in your own words. (2) When and where did the situation/incident happen? (3) What was done or said during the interaction? (4) What made you feel very positive or very negative about the relationship with contact persons from your university in that particular situation? No minimum or maximum word count was specified for the descriptions of the critical incidents.
As part of the complete survey, participants were asked for details about their age, gender, and educational program or major. We indicated that their participation was voluntary and that there were no right or wrong answers. At the end of the questionnaire, participants were asked for their permission to use their responses for research (i.e., informed consent) and that their responses would be treated anonymously (i.e., no one from their university could trace their remarks back to them individually). Ethical approval for the research undertaken was obtained following the policy of the institution under study. The Netherlands Code of Conduct for Research Integrity covered the research project. It was previously reviewed and approved by a committee from the Dutch Organization of Scientific Research.

**Analyses**

To analyze the data, we took the template analysis proposed by King (2012), using a priori themes (i.e., the five relationship quality dimensions). Template analysis is a step-wise type of thematic analysis (Frambach et al., 2014). In line with Kidd (2008), three researchers were involved in the data analyses, “making sure they discussed their own possible biases throughout, and continuously looking for evidence that contradicted the themes as well as confirmed them” (Kidd, 2008, p. 172). The coding process was iterative, included a search for disconfirming evidence (see Frambach et al., 2014), and was conducted with the three coders, thereby contributing to the trustworthiness of the data analysis process (Kidd, 2008).

Relationship quality can be conceptualized on two levels: relationship quality between students and their educational faculty/staff (i.e., interpersonal level) and relationship quality between students and their HE institution (organizational level; Rauyruen & Miller, 2007). However, in practice, these levels are sometimes intertwined. In the present study, we, therefore, interpreted students’ descriptions including both levels. To analyze the students’ quality perceptions, we used Grönroos’ total perceived quality model (1990) to guide the analysis of relationship quality dimensions within the descriptions. In general, quality perceptions concerning services are based on three levels: (1) evaluation of the functional quality (i.e., process quality, such as *how* the service is delivered), (2) evaluation of the technical quality (i.e., outcome quality, such as *what* was offered, either tangible or intangible), and (3) evaluation of the interpersonal quality (i.e., relationship quality, such as the quality of the relationship with whoever delivered the service). The first two levels form the perceived service quality (tangible and intangible service quality aspects). The third level can be considered the perceived relationship quality. However, where services consist of multiple and ongoing interactions such as in HE, the perceived quality of relationships (i.e., with “whom”), that is, relationship quality, is also influenced by “how” contact personnel act and “what” is delivered (service quality). Hence, although there is a theoretical difference between relationship quality and service quality, both constructs have similarities.

Figure 1 shows the template analysis process. The initial coding started with 50 cases that all three coders analyzed, keeping in mind the five a priori relationship quality dimensions (i.e., trust in honesty, trust in benevolence, satisfaction, affective commitment, and affective conflict).

The first calibration discussed procedural steps and conceptual ideas on relationship quality. The aim was to become further familiarized with the data and determine that all three coders had the same conceptualization of the constructs when allocating a relationship quality dimension to a particular critical incident. Further, all three coders analyzed another five cases and applied an initial template regarding relationship quality dimensions. During the second
calibration, the three coders discussed the results from the subsample of five cases and refined the template. Procedural steps were added to the template, such as completeness and interpretability of descriptions and actors who were mentioned; for example, if the actors referred to educational faculty/staff, then the description could be related to relationship quality. If not, then the description was left outside the analysis, that is, the incident does not refer to the relationship between students and their educational faculty/staff and should be deleted from the final analysis.

Furthermore, some clarification of the conceptual ideas concerning the relationship quality dimensions was needed. All three coders were aware that theoretically, relationship quality (“who”) and service and functional quality (“what” and “how”) differ. However, based on the critical incidents within the present study, it was sometimes hard to pinpoint what quality aspect the student was referring to; was it the relationship with educational faculty/staff, or the way educational faculty/staff (should) perform(s) professionally? All three coders analyzed the sample of 1323 cases applying the adjusted template. In the third calibration, we discussed the findings, which resulted in a few minor adjustments to the final template. Then two coders independently analyzed a sample of 250 cases (i.e., cases on which coders did not have an initial agreement) using the final template and discussed interpretations of differences during the fourth calibration. Finally, the first and second coders addressed the preparation of the final analysis. They analyzed 513 cases that were interpretable, complete, and considered to be related to students’ perceptions of the quality of their relationship with educational faculty/staff.

Additionally, all coders kept track of a codebook where they noted their remarks, similarities, or curious examples that were useful for calibration sessions and communication among coders. SPSS version 24 was used for the coding of transcripts and to determine inter-rater agreement. Based on student responses, the three coders interpreted the wording of the student’s critical incident and coded which dimension was being addressed and whether it referred to either a positive (benefit/reward) or negative (cost) one. Within one description, sometimes multiple relationship quality dimensions were mentioned. Furthermore, some incidents included mixed positive and negative elements, for example, sometimes a student

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**Fig. 1** Template analysis process. \( N = 1323 \) cases, including 13 duplicates; for final analysis \( N = 513 \) cases, including 11 duplicates.
started positively and ended negatively or vice versa. See Table 1 for the coding applied in the final template.

First, descriptions that were incomplete or ambiguous, and therefore unable to be interpreted, were left outside the analysis. Some of the described incidents were not always related to the relationship with the educational faculty/staff. For example, one of the students described a positive incident regarding good teamwork with fellow international students. Therefore, the descriptions that did not refer to a relationship with educational faculty/staff were discussed for calibration, and these cases were not included in further analysis (see Fig. 1). When two or three coders categorized a case as being related to relationship quality, this case was included. As a result, in the total sample of 1323 cases (including duplicates), 544 descriptions were rated as “not interpretable” by all three coders, 107 by two coders; 67 cases were coded differently by all three coders (e.g., a combination of coding by coder 1 who indicated “yes”; coder 2 “ambiguous/unclear”; and coder 3 “no”). Inter-coder agreement percentages among all three coders based on the sample of 1323 cases were as follows: trust in honesty, 69.5%; trust in benevolence, 66.1%; satisfaction 81.6%; affective commitment, 92.7%; and affective conflict, 94.6% agreement.

Results

The results will be discussed by the three research questions (RQ) that guided this study.

RQ1. How do students perceive the relationship quality with educational faculty and staff (i.e., relationship quality dimensions)?

The results of the analysis of students’ perceptions for their relationship experiences based on the template analysis using a priori relationship quality dimensions are presented by category, indicating frequency, relationship quality indicators, and a student example (see Table 2). Within student examples, we underlined wordings that indicated a specific relationship quality dimension or a positive or negative indication.

Incidents describing trust in benevolence \( (n = 355) \) were equally distributed over positive and negative incidents. However, trust in honesty was more often referred to in negative \( (n = 145) \) than in positive incidents \( (n = 51) \). In 97 cases, satisfaction was coded, nearly equally divided between positive and negative descriptions. Only a small number of critical incidents indicated affective commitment \( (n = 22) \) or affective conflict \( (n = 19) \), the latter only found in negative experiences.

Besides the a priori dimensions of relationship quality, we also noted other relational aspects within the analysis. While it is hard to cluster these aspects under one umbrella, students’ descriptions of positive and negative incidents indicated that students value a personal interest in them shown by faculty/staff, for example, displaying educational faculty and staff’s affection, such as in praise and attention. For instance, one of the students mentioned:

> During one of the exam inspections, I entered the room, and one teacher said to another teacher: ‘Look; there we have [student name]. She has scored an 88 and still comes in to
| Element                  | Coding                          | Description                                                                 | Indicators                                                                 |
|--------------------------|---------------------------------|-----------------------------------------------------------------------------|---------------------------------------------------------------------------|
| 1. Scope                 | a) Completeness                  | The written text is fully described to interpret                            | Complete                                                                   |
|                          | b) Interpretability              | The written text is understandable                                          | Incomplete (outside scope)                                               |
|                          | c) Relation with faculty/staff   | Degree of appropriateness of a relationship to fulfill the needs of the      | Detailed                                                                  |
|                          |                                 | student-customer, i.e., an indication of students’ perceptions of the bonds  | Ambiguous/unclear (outside scope)                                         |
|                          |                                 | between them and their educational faculty/staff                            | Relational quality; who considers aspects of the quality of the relationship: |
|                          |                                 |                                                                             | Teachers/lecturers                                                        |
|                          |                                 |                                                                             | Study career coaches                                                      |
|                          |                                 |                                                                             | Mentors                                                                  |
|                          |                                 |                                                                             | Deans                                                                    |
|                          |                                 |                                                                             | Other staff                                                              |
|                          |                                 |                                                                             | Technical quality (outside scope)                                         |
|                          |                                 |                                                                             | Functional quality (outside scope)                                       |
| 2. Kind of incident      | a) Positive                      | The incident described pointed at positive, negative, or a combination of    | The incident described had:                                              |
|                          | b) Negative                      |                                                                               | a) Positive aspects                                                       |
|                          | c) Positive/negative             |                                                                               | b) Negative aspects                                                       |
|                          | d) Negative/positive             |                                                                               | c) First positive aspects, then negative results                          |
| 3. Who matters           | a) Lecturer/teacher (coaches/mentors) |                                                                              | d) First negative aspects, then positive results                          |
|                          | b) Head of the educational program |                                                                              |                                                                          |
|                          | c) College/educational program as a whole |                                                                              |                                                                          |
|                          | d) University service\*          |                                                                              |                                                                          |
|                          | e) Examination committee/exam board |                                                                              |                                                                          |
|                          | f) The institution/university as a whole |                                                                              |                                                                          |
| 4. When and how/where does it matter? | a) During the program or (final) internship |                                                                              |                                                                          |
|                          | b) Classroom-related or not      |                                                                              |                                                                          |
|                          | c) Via email or face-to-face contact |                                                                              |                                                                          |
| 5. Relationship quality in higher education | Relationship quality dimensions | Students’ feelings that their faculty/staff or university understands and cares about their welfare, and belief that faculty/staff or university has intentions and motives that are beneficial to them and that staff/faculty avoid acting in a way that will result in negative outcomes | Concern about their welfare |
|                          | 1) Trust in benevolence          |                                                                              | Response with understanding when students confide their problems          |
|                          |                                 |                                                                              | Being able to be counted on                                              |
see her exam. Now that's what I consider a motivated student. ’ I really felt appreciated. First of all, because the teacher mentioned my name and mark. Secondly, for the teacher complimenting me on my effort. [F, 20, 1st year]

Students also value how they are treated as equals, for example, as responsible adults. For instance, one of the students mentioned: “A positive event is the fact that I had scored the highest grade in class..... Teachers also appreciated the fact that I had scored a good grade and were regarding me differently” [M, 19, 1st year].

**RQ2. What positive and negative experiences do students describe?**

All of the included incidents described a negative, positive, or mixed positive/negative experience of the relationship between students and their educational faculty/staff. Within
Table 2  Relationship quality-related experiences (\(N = 513\) cases including duplicates)

| Category                  | Frequency | Indicators                                                                 | Student examples                                                                                       |
|---------------------------|-----------|----------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|
| Trust in honesty          | 196       | Students indicate that their faculty/staff:                                | Positive (\(n = 51\)): “The coach is always there for you whenever you need to share something personal... I felt comforted by the way things were dealt with. The way of responding and the understanding that was showed felt really good..... it resulted in me being satisfied with the coach.” [F, 19, 1\(^{st}\) year] |
|                           |           | - Are reliable                                                            |                                                                                                        |
|                           |           | - Are sincere                                                             |                                                                                                        |
|                           |           | - Perform their role effectively                                           |                                                                                                        |
|                           |           | Positive (\(n = 145\)):                                                   |                                                                                                        |
|                           |           | “Often, there is no common approach among teachers. Their way of handling things is very different. For courses, this is no issue. However, in coaching students during their final thesis there should be one common approach according to me... Teachers cover each others' back and meanwhile, they all stick to their own approach. This disadvantages the students. I find it unfair that the success of your final thesis depends on your coach.” [F, 21, 4\(^{th}\) year] |
| Trust in benevolence      | 355       | Students indicate their belief in faculty/staff’s:                        | Positive (\(n = 176\)): “We were working on an assignment with our group and a teacher who passed us by, stopped to help us when he noticed we were having some issues. The teacher helped us, which enabled us to continue working on the assignment. As it was not the teacher who had set the assignment, this person did not have to help, but still, he did.” [F, 21\(^{st}\) year] |
|                           |           | - Concern for them                                                        |                                                                                                        |
|                           |           | - Intentions that are beneficial to them                                   |                                                                                                        |
|                           |           | - Response in understanding                                               |                                                                                                        |
| Satisfaction              | 97        | Regarding their overall relationship with faculty/staff, students feel:   | Positive (\(n = 51\)): “The last three months were rather hectic for me because of private matters. Therefore, I did not attend a couple of important classes... Fortunately, teachers responded with empathy through positive conversations outside class and by email... It was the attention I received that made me feel very satisfied.” [M, 20, 1\(^{st}\) year] |
|                           |           | - Happy                                                                   |                                                                                                        |
|                           |           | - Content                                                                 |                                                                                                        |
|                           |           | - Delight                                                                 |                                                                                                        |
|                           |           | Negative (\(n = 46\)):                                                   |                                                                                                        |
|                           |           | “I failed my course, and when I went to the meeting with my teacher and asked for advice, I did not receive a clear answer, only...” |                                                                                                        |
Table 2 (continued)

| Category                        | Frequency | Indicators                                                                                       | Student examples                                                                                                                                                                                                                                                                                                                                 |
|---------------------------------|-----------|-------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Affective commitment            | 22        | Students:                                                                                       | Positive (n = 16): “I experience good relationships with most of my teachers, sociable but also serious during classes. Relationships with teachers are important, it makes you more motivated to go to classes rather than staying at home.” [M, 19, 1st year] Negative (n = 6): “I followed a course from another educational program... it didn’t fit at all with what I was used to within my education... I felt lost because teachers stated that they were not available for help outside classroom hours... I would not recommend anyone else to start studying at that institution.” [F, 21, 4th year] |
| Affective conflict              | 19        | Regarding faculty/staff, students feel:                                                         | Negative (n = 19): “During my minor, there was a lack of communication ... No replies to emails and agreements are not met... As a result, I don’t feel taken seriously. Next to that, I looked like an idiot towards my external employer and future network. This results in a lot of frustration regarding the teacher.” [F, 22, 3rd year] |
| Other relational quality aspects|           | Students value faculty/staff’s:                                                                | Positive: “It was the personal contact with a teacher while organizing a mini-symposium for fellow students about the value of our degree after graduation. This teacher expressed his appreciation of our taking initiative regarding the symposium. He wished all degree programs could have ambassadors like us. It was the appreciation of the teacher and head of the department and being acknowledged for the actions we took regarding our study program and our representation of it that made me think very positively about this occurrence. Even if I felt like we went unnoticed.” [F, 24, 4th year] Negative: “During certain moments support was needed for the planning of a subject and feedback...it was claimed not to be compliant to the educational degree of my education, while it was the teacher who had, apparently, not given proper feedback. And the planning of the subject only got postponed but they did not ask later on whether things really had improved. These occasions are pretty unsettling as I felt neglected and not taken seriously. On top of that, I got the feeling...” |
In Table 2, we underlined the wordings that were indicative for the kind of experience. For example, one respondent described a positive experience as:

> My teachers in the program helped me a lot with getting my graduation on track right after it went wrong. The persons in my program understand that I could not continue with school and helped me a lot with getting my studies on track. The relationship with my study counselor has improved. At least now he knows who I am and what kind of research I do. [F, 21, 4th year]

Another respondent had this story about his positive experience:

> I received a motivating email from my teacher about completing my thesis in the last few months of my graduation year. He would like to help me finish my studies. I was positive about my teacher’s relationship because I usually do not experience these kinds of reactions from this teacher. [M, 25, 5th year]

On the other hand, one respondent described this negative experience:

> My graduation internship place was not taken seriously due to (I think) personal bias about the internship. Around February, at school, the internship was rejected outright without any request for clarification. Then I clarified myself, and then it was approved with moderate interest. I felt misunderstood and had hoped that the teacher himself would have asked for more clarification and that he would admit that he did not know precisely what it was about. [F, 20, 3rd year]

Another respondent also had a negative experience with a teacher:

> I have sent emails to a teacher asking if I could get more explanation on an assignment and got no response. I sent another email the other day. Unfortunately, no response. Nothing. I’ve turned in the assignment, hoping it was done right. I’m uncertain whether I will have done the assignment wrong while I still asked for help. [F, age unknown, year unknown]

Descriptions of some incidents included different aspects; for instance, it started positive and ended negatively, or the other way around. One student described her experience in this way:

> I failed my retake of [course name], and when I went to the discussion session and asked the professor for advice, I did not get a concrete answer [coded as negative]. I asked for
advice, and the advice was: be luckier in the future. I just wanted to know how I could get a passing grade next time. At this point, I was not so satisfied [coded as negative] with the present teaching professor of education but was glad [coded as positive] that I could talk to my study counselor about it. [F, 18, 1st year]

Another student had this to say about her experience:

I did my minor abroad and failed a test. After arranging a re-sit at [educational institution], when I came here from Spain to take the exam, it turned out that the wrong test had been sent to my school due to communication errors. Talked about where it went wrong [coded as negative], showed understanding, sought solutions, and discussed how it could be further regulated. The understanding attitude [coded as positive] and the fact that the people involved were also very disappointed and found it annoying how it had gone. Their positive attitude [coded as positive] and the input to finally solve it was satisfying for me. But the fact that there was no good communication [coded as negative] was very disappointing [coded as negative] to me. [F, 21, 3rd year]

**RQ3. When, where, how, and who is involved?**

In the analysis, we also coded the situational factors related to the critical incident that took place by study year, the form of contact (classroom-related or not or via email), and institutional actors, namely, which member of the educational faculty and staff students interacted with (e.g., teacher/lecturer, head of the department, someone from institutional services).

The incidents took place in various places, in or outside the classroom, and either in person on online, such as by email. For instance, one student responded:

The prompt responses I received from a number of teachers in reply to the emails I sent made me feel positive. These responses were usually within one day. Since I am almost not at school, due to graduation, it is nice to get a quick response, since this is the only way of communication at the moment. Emails were sent back and forth. These usually contained questions or included attachments with reports. Because in the first semester of this year I got little response to my emails from my supervising teacher or only very late response, it was nice to get a quick response from other teachers within the last months. [F, 22, 5th year]

Although the described incidents mainly concerned teachers/lecturers, other educational contact personnel were also mentioned to be necessary. Within their descriptions, students also mentioned, for instance, their mentors or study career coaches/counselors (who are sometimes not one of their teachers/lecturers) or the head of the department. For instance, one of the students described:

During a follow-up day (for trainees) there was room to just have a nice chat with my study counselor who was very sympathetic to me and open to contact. I had the space to tell how things went at the internship and my counselor was very understanding and interested. It was nice just to be able to tell your story. [F, 20, 2nd year]

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In Table 3, the results are presented by category, indicating the frequency and situational factors for each relationship quality dimension. Of the total student sample, first-year students reported the most critical incidents. The kind of situation that was described by students consisted mostly of non-classroom-related critical incidents. In their contact and interaction with the program and/or school, the relationships students built were mainly with teachers/lecturers or mentors.

In conclusion, more negative \( (n = 395) \) than positive \( (n = 294) \) incidents were described by students. We found that trust in benevolence was most frequently coded based on the template analysis, followed by trust in honesty. Overall, the results indicated that students considered teachers/lecturers as the primary contact person with whom they built a relationship. However, other faculty members, such as study counselors, were mentioned as well.

**Discussion**

The primary purpose of this study was to get a deeper understanding of relationship quality in HE. Drawing upon SET, we investigated students’ positive and negative relational experiences.

Table 3  Time, place/form, and actors regarding relationship quality-related experience \((N = 513)\)

| Category                      | Trust in honesty \((196/355\)%\) | Trust in benevolence \((355/\)%\) | Satisfaction \((97/\)%\) | Affective commitment \((22/\)%\) | Affective conflict \((19/\)%\) |
|-------------------------------|----------------------------------|-----------------------------------|------------------------|-------------------------------|-------------------------------|
| When Students’ contact during their study: |                                  |                                   |                        |                               |                               |
| First year                    | 74 (38)                          | 145 (41)                          | 48 (49)                | 10 (45)                       | 6 (32)                       |
| Second year                   | 29 (15)                          | 44 (12)                           | 14 (14)                | 1 (5)                         | 3 (16)                       |
| Third year                    | 38 (19)                          | 60 (17)                           | 12 (12)                | 3 (17)                        | 4 (21)                       |
| Fourth year                   | 29 (15)                          | 66 (19)                           | 16 (16)                | 7 (32)                        | 5 (26)                       |
| Fifth year or later           | 15 (8)                           | 22 (6)                            | 4 (4)                  | –                             | 1 (5)                        |
| Internship                    | 35 (18)                          | 61 (17)                           | 14 (14)                | 2 (9)                         | 2 (10)                       |
| Where/how Students’ contact that was: |                                  |                                   |                        |                               |                               |
| Classroom-related             | 26 (13)                          | 25 (7)                            | 16 (16)                | 3 (14)                        | 1 (5)                        |
| Not classroom-related         | 104 (53)                         | 221 (62)                          | 48 (49)                | 13 (59)                       | 8 (42)                       |
| Via email                     | 23 (12)                          | 49 (14)                           | 11 (11)                | 2 (9)                         | 7 (37)                       |
| Unclear/different coding      | 33 (17)                          | 60 (17)                           | 22 (22)                | 4 (18)                        | 3 (16)                       |
| With whom Students’ contact with Teachers/lecturers/mentors: |                                  |                                   |                        |                               |                               |
| Head of the department        | 1 (1)                            | 2 (1)                             | 1 (1)                  | –                             | –                             |
| Teaching team/the educational department | 13 (7)                          | 15 (4)                            | 4 (4)                  | 1 (5)                         | 1 (5)                        |
| Institutional services        | 1 (1)                            | 2 (1)                             | –                     | –                             | –                             |
| Educational institution       | 1 (1)                            | 3 (1)                             | 1 (1)                  | 1 (5)                         | –                             |
| Examination board             | 4 (2)                            | 4 (1)                             | 2 (2)                  | 1 (5)                         | 1 (5)                        |
| Internship mentor             | 1 (1)                            | 2 (1)                             | 1 (1)                  | –                             | –                             |
| Unclear/different coding      | 24 (12)                          | 40 (11)                           | 8 (8)                  | –                             | 2 (11)                       |

\( * N =490; 23 \) students did not indicate their study year

In Table 3, the results are presented by category, indicating the frequency and situational factors for each relationship quality dimension. Of the total student sample, first-year students reported the most critical incidents. The kind of situation that was described by students consisted mostly of non-classroom-related critical incidents. In their contact and interaction with the program and/or school, the relationships students built were mainly with teachers/lecturers or mentors.

In conclusion, more negative \( (n = 395) \) than positive \( (n = 294) \) incidents were described by students. We found that trust in benevolence was most frequently coded based on the template analysis, followed by trust in honesty. Overall, the results indicated that students considered teachers/lecturers as the primary contact person with whom they built a relationship. However, other faculty members, such as study counselors, were mentioned as well.
with educational faculty and staff. We initially used five a priori relationship quality dimensions that were used in previous research examining relationship quality in HE (Snijders et al., 2018, 2019, 2020): students’ trust in honesty, students’ trust in benevolence, students’ overall satisfaction, students’ affective commitment, and students’ affective conflict (as a negative indicator of relationship quality).

The survey’s open-ended questions prompted students to describe their recent positive and negative experiences related to relationship quality. However, within our study, while coding the critical incidents with a priori themes, we also noticed an overlap between the relationship quality dimensions (see Table 1). For instance, a case could describe trust in benevolence and also refer to satisfaction or another relationship quality dimension. For example, we coded a female (19, first-year) student’s description “… I felt comforted by the way things were dealt with. The way of responding and the understanding that was showed felt really good... it resulted in me being satisfied with the coach” for trust in honesty, but also satisfaction because the words “felt really good” and “satisfied” also indicated this relationship quality dimension. These findings are in accordance with the theoretical concept of relationship quality, which is formed by distinct but related dimensions (Grönroos, 1990; Roberts et al., 2003).

Interestingly, the study’s findings also revealed that more negative (n = 395) than positive (n = 294) incidents were described by students, which supports research by Clem et al. (2020). They indicated that students’ negative emotions, such as their perceived conflict, are more influential factors in the teacher-student relationship than closeness. Most negative experiences in our study pointed at students’ perceptions of lack of responsiveness by faculty/staff, for instance, email response time, returning a grade, or the time it takes to provide feedback on an assignment. Our results are in line with the study by Tantleff-Dunn et al. (2002), who also found that students’ perceptions regarding grades were the most often reported items by students concerning their perceived conflict. More specifically, lack of teacher feedback or a timely response was mentioned in negative experiences. Student engagement is vital in the process of receiving teacher feedback, which means that “students have a key role to play in making teacher feedback work” (Man et al., 2020). Positive interactions and relationships between students and their educational faculty may positively influence student involvement, such as study success (e.g., Meeuwisse et al., 2010) and the learning environment (e.g., García-Moya et al., 2020). Therefore, we believe that educational faculty and staff should pay greater attention to their manner of feedback and their response time.

The present study’s findings also revealed that for students, it is essential to be able to rely on honest and benevolent (re)actions from faculty and staff. Lack of trust in honesty and benevolence was described in many negative incidents. Attribution theory (Weiner, 1972) might provide an explanation; students’ attributions for success are mostly internally based, and attributions for failure are mostly externally based. Internal attribution refers to the process of assigning the cause of behavior to internal characteristics, such as motivation to learn in education—for example, a student who enjoys studying because he or she receives a high grade. External attribution refers to interpreting someone’s behavior that may be caused by external forces on the individual within a specific situation. When students experience their relationship quality negatively, within this study, it might be due to their lack of trust in their educational faculty and staff’s honesty as an external force, not because of their internal characteristics.

Positive experiences were often described in which students referred to how they were treated by their educational faculty/staff positively, for instance, by saying hello, asking how a student was doing, sometimes regarding personal matters (informal interaction), or otherwise
asking questions about their progress (formal interaction). Students mostly referred to out-of-class interaction in their positive examples of relationship quality with teachers/lecturers. Our findings support previous research (Alderman, 2008; Dobransky & Frymier, 2004; Meeuwisse et al., 2010) that indicated out-of-class interactions are important in the relationship between students and their educational faculty and staff.

In light of how Roberts et al. (2003) considered the development of affective commitment (i.e., one gets accustomed to positive emotional responses, and therefore it makes one more secure in the relationship), interestingly, within this study, we did not find convincing proof or indications of a growing feeling of trust. For instance, students in their last year before graduation did not explicitly express a more profound or higher commitment. In a similar vein, Sklar and McMahon (2019) referred to the stages of entrustment between teachers and learners, indicating that there must first be a presumptive trust to undergo deeper stages of trust based on experiences. Tett et al. (2017) also underlined that a trusting relationship must also develop for students to feel connected with their teachers, faculty, and/or staff. More generally, Bowden (2011) indicated that a positive relationship must contain a special status or a sense of closeness or attachment. Based on the number of descriptions of trust in the present study, we presume that students’ trust in honesty and benevolence form the basis for relationship quality in HE, and the affective components such as commitment, conflict, and satisfaction (Schlesinger et al., 2017) are results of the trust students experience. However, further research is needed to examine the sequential interplay of the relationship quality dimensions (Hennig-Thurau et al., 2001; Roberts et al., 2003). To our knowledge, no longitudinal study on relationship quality in HE has been conducted before.

Last, students’ descriptions in the present study also pointed at students’ feelings of wanting “to be treated as equals,” which is in line with the research by García-Moya et al., 2020). An explanation may be found in research on inequality or fairness in SET (e.g., Molm et al., 2006). When fairness or equality is lacking, in students’ perceptions, a relational (affective) feeling of conflict might arise (e.g., “I was not treated fairly, and, therefore, I felt angry”). However, within the present study’s coding process, we did not find explicit reasoning for this in the students’ descriptions.

Students also indicated “receiving attention and compliments” as positive, which we labeled as praise and attention. However, we found it difficult to assign these examples to one of the five a priori relationship quality dimensions. In their study based on positive psychology, Stevic and Ward (2008) pointed out that “receiving recognition and praise represent a type of positive interaction between two or more individuals... [which] could play a vital role in creating positive emotions in a student’s life” (p. 524). In other words, what students might tell us is that receiving attention, for instance, from a teacher, will make them feel good about the quality of the relationship. In that way, praise and attention might lead to students’ overall satisfaction.

Nevertheless, based on the descriptions in this study, further research is needed to know whether this assumption holds. Moreover, it is most likely that how the receiver perceives the compliment, praise, or attention, depends on the type of compliment (praise or attention) and the one who is giving it (i.e., the kind of relationship one has with the receiver). If the receiver looks up to that person, then the praise or attention is positively received and may presumably affect the relationship positively. On the other hand, if the receiver has no connection with the one giving attention or praise, it is unlikely that this will have an effect on that relationship.
Practical implications

To put these findings into practice, educational faculty and staff should consider how students perceive relational aspects. To date, most European HE institutions use surveys to evaluate students’ opinions. Although these surveys, such as the National Student Survey (NSE), shed light on students’ general satisfaction level, which is important to know, they lack a deep understanding of how students perceive the quality of their relationship with their institution. Therefore, we recommend that for universities, it is necessary to regularly evaluate students’ perceptions of their positive and negative relationship-quality-related experiences in an alternative way. This examination is much better to conduct qualitatively, for instance, using a CIT through focus group discussions instead of more general ideas taken from student satisfaction surveys, such as the NSE might indicate. To collect useful student feedback, a CIT enables gathering meaningful data on students’ satisfiers and dissatisfiers and/or student loyalty intentions (Douglas et al., 2009).

Furthermore, based on the students’ descriptions in this study, it seems that interactions and communication via email might be a powerful tool. Students in their last years before graduation described how it is essential to receive prompt feedback, especially within this phase. Previous research already indicated that for students, the most dissatisfying reaction is when teachers/professors do not react to a student’s problem (Tantleff-Dunn et al., 2002). For educational practitioners who want to interact and communicate either formally or informally with students, the use of email in reaction to students’ questions might help to respond in a timely way and subsequently initiate students’ trust in educational faculty and staff’s benevolence. As a result, students might, in turn, perceive less affective conflict.

Limitations and directions for further research

Although this study’s findings shed light on students’ perceptions of relationship quality, this study has a few limitations. First, reliance on retrospective reports of experiences (Kidd, 2008) is ambiguous (i.e., memory and attribution biases). Next, students’ willingness to respond to the questionnaire might be a possible issue. Students’ descriptions of their experiences influenced the number of cases that were eventually analyzed with the template we used. CIT has been demonstrated to be a valid method to use (Hughes, 2008). However, when collecting data from a student’s perspective (see Douglas et al., 2008; Douglas et al., 2009), we saw that not every respondent followed the instructions carefully to answer all questions or did not take the time to describe a critical experience adequately. As a result, parts of the descriptions were not always related to the quality of the relationship with educational faculty/staff (e.g., “I was very frustrated because I could not find a parking place nearby campus”). Because we asked students to respond online, correction of misinterpretations was not possible. In this study, as a result, a large portion of the responses were not included in the analyses because they fell outside the scope of this study’s purpose or were not sufficiently interpretable.

Furthermore, we only considered one side of the relationship (i.e., students’ perceptions). In line with interpersonal relationship research, it is crucial to collect information from both parties within the relationship to assess the stability of that relationship (Duck, 1990). Interactions between students and their educational faculty and staff are interrelated and may affect each other. Therefore, we recommend that future studies examine teachers’ (and other staff members’) evaluations of the interpersonal relationship they have with students. Last, to
gain more insight into the relationship quality construct in HE, Roorda et al. (2011) implied that the affective quality of relationships is important for students’ engagement and achievement, especially among adolescent learners. Therefore, further research should focus on longitudinal data to determine cause-and-effect relations within the relationship quality construct and its outcomes such as student involvement (e.g., student engagement and student loyalty). Cross-cultural research on relationship quality would also be useful to conduct to examine cultural differences in the way relationship quality in HE is perceived (García-Moya et al., 2020).

Conclusion

In conclusion, this study was based on 513 real-life descriptions of students’ perceptions, examining relationship quality in HE. It is of interest to know how their interactions affect students’ relationship quality for educational policymakers and practitioners who want to build and sustain positive relationships with students. Furthermore, it is necessary to understand what relational aspects are essential for students from their perspective (e.g., how students perceive their educational service either positively and negatively by way of (in)formal, in, or out-of-class interactions, orally or by email).

With our study’s findings, this research adds value to the growing literature on relationship quality in HE. The results indicate that a relational approach in HE seems to be essential to build and maintain positive relationships with students. Furthermore, this study calls for follow-up research on relationship quality. In the context of HE, further research is needed to better understand the relationship quality dimensions and their outcomes for students and HEIs in which students and educational faculty and staff socially interact.

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References

Alderman, R. V. (2008). Faculty and student out-of-classroom interaction: student perceptions of quality of interaction (Publication No. 3321628) [Doctoral dissertation, Texas A&M University]. ProQuest Dissertations and Theses Global.

Allen, J. M., & Smith, C. L. (2008). Faculty and student perspectives on advising: Implications for student dissatisfaction. Journal of College Student Development, 49(6), 609–624. https://doi.org/10.1353/csd.0.0042.

Blau, P. (1964). Exchange & power in social life. Wiley.
Tantleff-Dunn, S., Dunn, M. E., & Gokee, J. L. (2002). Understanding faculty–student conflict: Student perceptions of precipitating events and faculty responses. *Teaching of Psychology, 29*(3), 197–202. https://doi.org/10.1207/S15328023TOP2903_03.

Tett, L., Cree, V. E., & Christie, H. (2017). From further to higher education: Transition as an on-going process. *Higher Education, 73*(3), 389–406. https://doi.org/10.1007/s10734-016-0101-1.

Thibaut, J. W., & Kelley, H. H. (1959). *The social psychology of groups*. Wiley.

Tinto, V. (1975). Dropout from higher education: A theoretical synthesis of recent research. *Review of Educational Research, 45*(1), 89–125. https://doi.org/10.3102/00346543045001089.

Tompkins, K. A., Brecht, K., Tucker, B., Neander, L., & Swift, J. K. (2016). Who matters most? The contribution of faculty, student-peers, and outside support in predicting graduate student satisfaction. *Training and Education in Professional Psychology, 10*(2), 102–108. https://doi.org/10.1037/tep0000115.

Trolian, T. L., Jach, E. A., Hanson, J. M., & Pascarella, E. T. (2016). Influencing academic motivation: The effects of student–faculty interaction. *Journal of College Student Development, 57*(7), 810–826. https://doi.org/10.1037/tep0000115.

Umbach, P. D., & Wawrzynski, M. R. (2005). Faculty do matter: The role of college faculty in student learning and engagement. *Research in Higher Education, 46*(2), 153–184. https://doi.org/10.1007/s11162-004-1598-1.

Weiner, B. (1972). Attribution theory, achievement motivation, and the educational process. *Review of Educational Research, 42*(2), 203–215. https://doi.org/10.3102/00346543042002203.

Zhu, L., & Anagondahalli, D. (2017). Effects of academic entitlement on conflict management: Implications of a consumer culture for the student–teacher relationship. *Communication Reports, 30*(1), 14–25. https://doi.org/10.1080/08934215.2016.1225223.

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Snijders, I., Wijnia, L., Rikers, R. M. J. P., Loyens, S. M. M. (2019). Alumni Loyalty Drivers in Higher Education, *Social Psychology of Education, 22*, 607. doi:10.1007/s11218-019-09488-4

Snijders, I., Wijnia, L., Rikers, R. M. J. P., Loyens, S. M. M. (2020). Building bridges; Associations between Student-Faculty Relationship Quality, Student Engagement, and Student Loyalty, *International Journal of Educational Research 100*, doi.org/10.1016/j.ijer.2020.101538

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Wijnia, L., Loyens, S. M. M., & Derous, E. (2011). Investigating effects of problem-based versus lecture-based learning environments on student motivation. *Contemporary Educational Psychology, 36*(2), 101-113. doi: https://doi.org/10.1016/j.cedpsych.2010.11.003

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Rikers, R. M. J. P., (2006). A critical reflection on emerging topics in cognitive load research. *Applied Cognitive Psychology: The Official Journal of the Society for Applied Research in Memory and Cognition, 20*(3), 359-364. doi: https://doi.org/10.1002/acp.1252

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*Most relevant publications in the field of Psychology of Education:*

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Loyens, S. M. M., Broughton, S., Mikkers, J., & van Gog, T. (2015). Problem-based learning as a facilitator of conceptual change. *Learning and Instruction, 38*, 34-42. doi: https://doi.org/10.1016/j.learninstruc.2015.03.002

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