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Relationship quality time: the validation of a relationship quality scale in higher education

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ABSTRACT

This study investigated the overall *quality* of the interpersonal relationship students have with faculty and staff, that is, relationship quality (RQ). In relationship management research, RQ is paramount for the creation of bonds with customers, which in turn is necessary for the sustainability of organizations, that is, continuity and growth. In higher education, it is not only recent changes in funding of education that urge us to further investigate RQ, as students having relational bonds with their teachers and faculty/staff is important as well. These relationships are expected to positively influence students' college experiences. Although educational literature addresses the importance of student–faculty relationships, little is known about students' perceptions of the quality of their relationship with their program. The aim of this study was therefore to get a more in-depth understanding of the concept and measurement of RQ within a higher education context. To that end, an existing RQ scale was used measuring five dimensions: trust in honesty, trust in benevolence, satisfaction, affective commitment, and affective conflict. A confirmatory factor analysis (CFA) was conducted on survey responses of 551 students from a Dutch university of applied sciences. Next to the CFA, a small-scale focus group discussion was held to validate the quantitative findings of students' perceptions on RQ. The findings confirm that the RQ instrument is an adequate instrument to investigate RQ in a higher education context. Additional qualitative findings also suggest that students acknowledge the relevance of RQ and the need for having a good relationship with their faculty and staff.

Relationship quality (RQ) time

Time to degree completion is of growing concern to the funding of public higher education institutions (Suhre, Jansen, & Torenbeek, 2013). As a result, the importance of student–faculty relationships becomes of interest, because these relationships are expected to positively influence students' college experiences (Fuentes, Ruiz Alvarado, Berdan, & DeAngelo, 2014; Kim & Sax, 2009), and can therefore contribute to timely degree

completion. Tinto (1997) already asserted that student–faculty interactions are indicative of the student's level of academic integration in the college environment, and that students who engage in academic and social integration experiences are less likely to leave their institution. For instance, students who develop positive interactions with their peers, teachers, and faculty/staff are more likely to persist and complete a degree, and in the future, will be better able to build rapport. Positive student–faculty interactions also contribute to students' intellectual and personal development such as increased motivation, study success, engagement (Kim & Sax, 2009; Klem & Connell, 2004; Pascarella & Terenzini, 1991), and retention (O'Keeffe, 2013; Vander Schee, 2008a, 2008b). In addition, to improve students' overall evaluation of and satisfaction with their university, the relationships between students and their faculty/staff appear most crucial (Arena, Arnaboldi, & Azzone, 2010).

Research in the field of services and relationship management in higher education indicate that positive interactions and relationships are associated with student loyalty (Bowden, 2011; Helgesen, 2008; Hennig-Thurau, Langer, & Hansen, 2001; Macintosh, 2007), which is crucial for the continuity and growth of higher education institutions (e.g., word-of-mouth, recommendations to other potential students, ranking of higher education institutions, alumni offerings of student traineeships, and enrollment in post-graduate education). General ideas from the services and relationship management literature suggest that for any kind of services organization (profit or non-profit), it is important to retain customers. To establish long-term benefits for organizations such as customer retention and loyalty, services organizations should attract, maintain, and enhance client relationships (Berry, 2002; Gummesson & Grönroos, 2012; Zeithaml, 1981). Although previous studies indicated that having a focus on establishing a good relationship with students is of interest to higher education institutions (Cook-Sather & Luz, 2015; Cotten & Wilson, 2006; Zepke, Leach, & Butler, 2014), for instance, to reduce dropout rates (Helgesen, 2008; Schertzer & Schertzer, 2004) and improve student loyalty (Hennig-Thurau et al., 2001), little is known about the overall *quality* of the interpersonal relationship students have with university faculty and staff from a student's perspective, that is, RQ. RQ is especially important when the offered services are complex, delivered over time, and customized because interpersonal relationships are expected to be more vital in these contexts (Crosby, Evans, & Cowles, 1990). Higher education settings meet these criteria because the educational service consists of a high degree of interaction between students and faculty/staff (i.e., complex), expressed in multiple educational service encounters with different people and continuing over time. Moreover, through students' choice of courses, internships, and research projects students customize their educational program. The aim of this paper was therefore to get a more in-depth understanding of the concept and measurement of RQ within a higher education context.

Relationship quality (RQ)

RQ can be defined as the overall assessment of the strength of a relationship between two parties (Bowden, 2011; Dagger, Danaher, & Gibbs, 2009). Contrary to previous educational literature where student–faculty relationships only focus on one or few aspects such as frequency or quality of interaction between students and teachers, RQ in

relationship management research is often conceptualized as a multidimensional construct capturing different but related facets of a relationship (Lages, Lages, & Lages, 2005; Palmatier, Dant, Grewal, & Evans, 2006) such as trust, commitment, and satisfaction (Hennig-Thurau et al., 2001). Building on the work of Roberts, Varki, and Brodie (2003), RQ adjusted to a higher educational setting consists of five dimensions: trust in honesty, trust in benevolence, satisfaction, affective commitment, and affective conflict.

Trust in honesty in faculty and staff means trust in a university's credibility. This is based on the extent to which students believe university faculty and staff's word can be relied on, that they are sincere, and that they will perform their role effectively and reliably. *Trust in benevolence* in faculty and staff means the extent to which students believe staff and faculty are concerned about students' welfare. This includes having intentions and motives beneficial to students, and avoiding acting in a way that will result in negative outcomes for students. *Satisfaction* refers to cumulative student satisfaction with the overall quality of the relationship a student has with faculty and staff. It is the students' cognitive and affective evaluation based on their personal experience across all educational service encounters (i.e., every time a student interacts with someone from their university). *Affective commitment* refers to students' commitment to the university. Furthermore, affective commitment develops over time as individuals (service users/students) become accustomed to positive responses, leading them to become more and more secure in the relationship (with the university). Finally, *affective conflict*, is a negative indicator of RQ, that is, resulting in lower levels of RQ. In line with Roberts et al. (2003), affective conflict is used as a measure of the retained level of conflict felt by students concerning their relationship with faculty and staff.

Present study

In this study, we aim to get a more in-depth understanding of the concept of RQ in higher education. Drawing upon recent research in the field of services and relationship management in higher education (Arnett, German, & Hunt, 2003; Bowden, 2011; Helgesen, 2008; Woodall, Hiller, & Resnick, 2014), we assume that RQ in higher education can be applied similarly as in a profit context. This study addresses this issue by incorporating the concept of RQ as described in services- and relationship management literature, and investigated it in the context of higher education. First, we administered a questionnaire to measure RQ and examined whether this instrument and its five dimensions were applicable to a higher education context. A confirmatory factor analysis (CFA) was conducted to analyze the survey data.

To grasp students' perceptions of RQ from the students' point of view, we held an additional small-scale focus group discussion to validate the quantitative findings. The aim of the focus group discussion was to verify students' ideas of RQ dimensions. Focus groups can be used either as a method in their own right or in order to complement other methods such as quantitative research (Morgan, 1997; Morgan & Krueger, 1993; Wolff, Knodel, & Sittitrai, 1993), for example, checking validity (Gibbs, 1997). A combination described by Morgan (1997) is one where a survey is used as a primary method and a focus group acts as a follow-up research method that assists in interpreting the survey results. Drawing upon these ideas, in the present study, we conducted a focus group discussion after the survey.

RQ questionnaire

Method

Participants

Participants were students enrolled in an educational program at a Dutch University of Applied Sciences ($N = 551$). Most participants were female (59%), which is a slight over-representation when compared to the average percentage of female students enrolled at the institution under study (49.50%). All respondents were distributed across all study years, although students in their first year were highly represented (57.70%; 12.20% second year; 12.00% third year; 18.10% fourth year). The average age of participants was 20.97 years old ($SD = 4.54$).

Materials and procedure

A questionnaire consisting of 15 items, distributed over five subscales (i.e., trust in honesty, trust in benevolence, satisfaction, affective commitment, and affective conflict) was used to measure RQ. Each dimension was measured by three items (Roberts et al., 2003). All items were structured on a seven-point Likert-type scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*).

The survey was administered in Dutch. To ensure that the original items were correctly translated, a forward–back-translation process was employed (Craig & Douglas, 2005). At the end of the 2014–2015 academic year, a questionnaire containing a short description of the purpose of the study was sent by campus email to all 4600 students from the university under study. Filling out the questionnaire took approximately 10–15 minutes. First-year students who were not familiar with the questionnaire tool were asked to fill out the questionnaire in a classroom setting and were, when needed, assisted by their tutor, but only for practical purposes and not related to answering the questions (e.g., assistance in logging into the questionnaire tool). Participation was voluntary. Students were given a 27-day period to respond (one month before their exams started). Students who did not complete the survey received another email reminding them of the first email, and after a fortnight, they were asked again to fill out the questionnaire. A book voucher was rewarded to 15 randomly selected respondents.

Analyses

To investigate the applicability of the existing RQ scale in the context of higher education, we conducted a CFA on the survey consisting of 15 items. Based on the services and relationship management literature and empirical research on RQ, we postulated a model and tested it for its validity given the sample data. In this way, we determined the extent to which the items measured the RQ dimensions. All items comprising its RQ dimension (i.e., its subscale) were therefore expected to load onto their related factors. An alternative model of RQ with a one-factor structure was constructed to test whether this could lead to a better fit with the data. Thus, the second model contained all 15 items loading on one latent factor 'RQ.' A schematic representation of these models is shown in Figure 1.

Model 1 (see Figure 1(a)) postulates a priori that RQ is a five-factor structure composed of trust in honesty, trust in benevolence, satisfaction, affective commitment, and affective conflict. There are five factors (dimensions), as indicated by the five ellipses labeled Trust
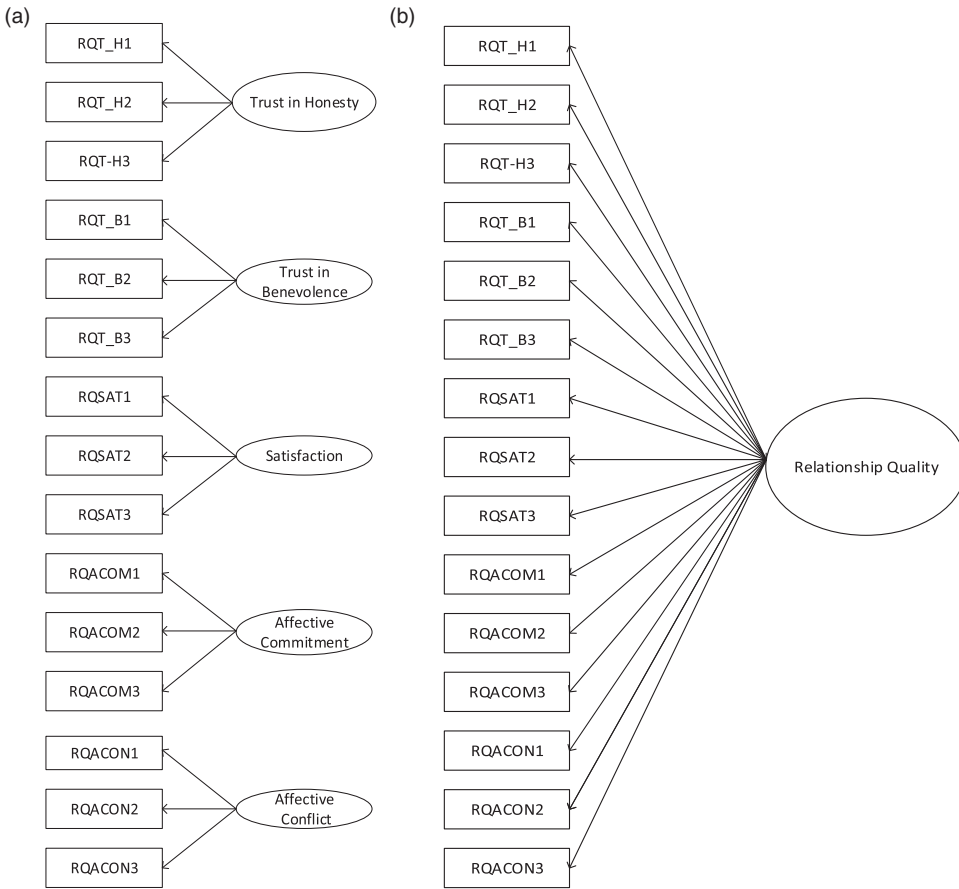
Figure 1. (a) Model 1, 15-item, five-factor model. (b) Model 2, 15-item, one-factor model.

in Honesty (RQT_H), Trust in Benevolence (RQT_B), Satisfaction (RQSAT), Affective Commitment (RQACOM), and Affective Conflict (RQACON). These five factors are determined by 15 observed variables, as indicated by the 15 rectangles. Likewise, Model 2 (see Figure 1(b)) is a RQ model with one latent factor, as indicated by the ellipse labeled RQ. In this model, all 15 variables as indicated by the rectangles are expected to load on one latent variable RQ. Responses to negatively stated items, that is, affective conflict, were reversed so that for all items the highest response was indicative of a positive rating of each of the five latent constructs.

Data were analyzed using a structural equation modeling approach (Byrne, 2013) to test whether the underlying dimensional structure of RQ had a good fit to the data, and hence whether this five-factor structure could be applied to a higher educational context. A CFA was conducted on the models presented in Figure 1 using Amos 22 (Arbuckle, 2013). For the estimation of the model's parameters, maximum likelihood estimations were used. Two groups of fit indices were selected: absolute and incremental.

In the present study, we used χ^2, accompanied by degrees of freedom, sample size, and p-value, as well as the root mean square error of approximation (root mean square error of approximation, RMSEA; Steiger, 1990) and standardized root mean square residual

(SRMR) as absolute fit indices. χ^2 has been used to test the closeness of fit between an observed and predicted covariance matrix. For RMSEA, the lower the value, the better the fit, with a cut-off value close to 0.06. RMSEA appears to be sensitive to model specification, minimally influenced by sample size, and not overly influenced by estimation method. SRMR values of 0.08 or lower are generally considered a good fit (Hu & Bentler, 1999). The Tucker–Lewis index (TLI) and the comparative fit index (CFI) were included as incremental fit indices. Both indices range from 0 to 1, with higher values indicating a better fit. Values close to 0.95 or 0.96 are suggested by Byrne (2013) to be associated with well-fitting models.

Results of questionnaire

Table 1 reports the questionnaire items with their factor loadings and the hypothesized dimensions of RQ together with Cronbach's alpha (α), means, and standard deviations (SD). Cronbach's α values for the five dimensions ranged from 0.84 to 0.96, all exceeding the 0.70 cut-off value (Nunnally, 1967).

The results confirm the five-factor structure. Analysis of the hypothesized model resulted in a χ^2 (80, $N = 551$) = 202.43, $p < .001$, CFI of 0.98, a TLI of 0.98, an RMSEA of 0.05, and an SRMR of 0.03. χ^2 statistics was statistically significant, which suggests that the hypothesized model does not fit the data very well. Nevertheless, the other indices of fit indicate a fairly good fit of the specified model with the data, and are to be preferred when evaluating a particular model (Marsh et al., 1994). A χ^2-difference test showed that the five-factor structure model had a significantly better fit than the one-factor structure model, $\Delta\chi^2$ (10) = 1705.55, $p < .001$ (Table 2).

Table 1. RQ dimensions and items.

RQ dimensions and items	M	SDs	α	Factor loadings
Trust in honesty			0.865	
RQ_TH1. My university is honest about my problems	4.83	1.47		0.88
RQ_TH2. My university has high integrity	4.96	1.49		0.84
RQ_TH3. My university is trustworthy	5.00	1.65		0.77
Trust in benevolence			0.840	
RQ_TB1. My university is concerned about my welfare	4.57	1.65		0.88
RQ_TB2. When I confide my problems to my university, I know they will respond with understanding	5.32	1.44		0.79
RQ_TB.3 I can count on my university considering how their actions affect me	4.90	1.57		0.73
Satisfaction			0.961	
RQSAT1. I am delighted with the performance of my university	4.80	1.50		0.94
RQSAT2. I am happy with my university's performance	4.67	1.52		0.96
RQSAT3. I am content with my university's performance	4.78	1.55		0.94
Affective commitment			0.873	
RQACOM1. I feel emotionally attached to my university	4.57	1.63		0.87
RQACOM2. I continue to deal with my university because I like being associated with them	4.79	1.74		0.83
RQACOM3. I continue to deal with my university because I genuinely enjoy my relationship with them	4.75	1.57		0.80
Affective conflict			0.903	
RQACON1. I am angry with my university	2.60	1.64		0.88
RQACON2. I am frustrated with my university	3.23	1.78		0.90
RQACON3. I am annoyed with my university	3.21	1.75		0.84

Note: α = Cronbach's alphas.

Table 2. Fit indices for the hypothesized and alternative one-factor model.

Model	χ^2	df	RMSEA	CFI	TLI
Model 1					
Hypothesized 15-item model, five-factor	202.43*	80	0.05	0.98	0.98
Model 2					
15-item model, one-factor	1907.98*	90	0.19	0.74	0.69

Note: χ^2 = Chi-square, df = degrees of freedom, CFI = comparative fit index, TLI = Tucker–Lewis index, and RMSEA = root mean square error of approximation.
*$p < .001$.

Focus group discussion

Method

Participants

Participants of the focus group discussion were students from the same university at which the survey study was conducted ($N = 9$). The average age of participants was 24.89 years old ($SD = 8.70$). Participants were selected following convenience and purposive sampling techniques (Brown, Varley, & Pal, 2009) in order to have a group consisting of an equal mix of male and female students from all study years and different educational programs. As suggested by Krueger and Casey (2000), a group consisting of five to 10 respondents is appropriate. In the present study, the group consisted of five female and four male students. They participated in the survey earlier conducted. Participants were distributed over all study years and enrolled in different educational programs (first year: 2; second year: 3; third year: 1; and, fourth year and longer: 3), and enrolled in different educational programs (i.e., Pedagogics, Aquatic Eco Technology, Communication, ICT, Logistics Engineering, Maritime Officer, Social Work, and Commercial Economics).

Materials and procedure

To get a more in-depth understanding of the concept under study, that is, RQ (Wolff et al., 1993), we organized a focus group discussion shortly after the survey was administered (i.e., October 2015, a few months after the survey was completed). Our aim was to clarify and elaborate on students' perceptions of RQ. Therefore, with the focus group questions, we aimed to gain a better understanding and interpretation of RQ, such as practical examples of a priori defined RQ dimensions.

Focus group performance was based on the main steps suggested by Krueger and Casey (2000). Ground rules for the discussion (e.g., there are no good or bad answers to the questions, it is your opinion that counts, and every participant's opinion is equally important) and general information about the topics to be discussed were given in advance to prepare participants to properly react to the questions and discussion that followed. The focus group discussion was to be held in a surrounding that was not related to the students' university setting. After participants were given a brief explanation of the research objectives, and were assured that all information provided would remain confidential, they were asked to sign a consent form. The session was guided by an independent moderator/facilitator, who was not familiar to the participants.

Before the start of the focus group discussion, each participant was asked to write down an example of a situation related to the RQ dimension (i.e., five in total). Then the actual focus group discussion started. For the exact formulation of the focus group questions, see Table 3.

Table 3. Focus group questions.

Focus group questions
1 Please give an example of your experience with the quality of the relationship you have with your faculty/staff.
2 If you were asked to describe aspects of relationship quality, in your opinion, what following aspects do you recognize?
(a) Trust in the university people's honesty (teaching and supporting front office staff) such as sincerity, integrity, or reliability.
(b) Trust in the university people's benevolence such as willingness to help, concern, and accountability.
(c) The degree you are satisfied with the relationship you have with the people from your university. For example, how happy, content, or satisfied you are with their performance.
(d) The extent to which you feel committed to the people from your university. For instance, the way you feel affectively attached or associated.
(e) The degree of affective conflict you experience in the relationship you have with the university people. For example, the degree you are angry, irritated, or frustrated about your relationship with those people.
3 How important is the relationship you experience with the people from your university, in general, related to your study achievements and/or to life itself?
Please explain why.
4 Would you like to add or further explain something you have heard or (have not) said about the topics we discussed.

First, we questioned 'Please give an example of your experience regarding the quality of the relationship between you as a student and university faculty and staff.' Next, we questioned students about each RQ dimension. Finally, we asked whether students thought that RQ is important in relation to their study achievements, their relationship with the university in general or even in life itself. After each question, the moderator summarized the discussion findings of that specific topic. Students' writings of examples (see supra) were collected at the end of the focus group discussion (examples are listed in Table 4).

To have an increased understanding of the RQ dimensions, participants were asked for consensus on the discussion findings (Onwuegbuzie, Johnson, & Collins, 2009). The session lasted for one hour and 15 minutes.

Analyses

To reflect on and further analyze the focus group findings, the discussion was videotaped. Focus group quotes were combined with the tape-based analysis. Although this mode of analyzing data is less rigorous than a transcript-based analysis, this type of analysis is helpful for the researcher to focus on the research questions (Onwuegbuzie et al., 2009), which suits the main goal of this focus group to follow up on the questionnaire data.

Table 4. Illustrative responses to RQ dimensions.

RQ dimensions	Illustrative example of focus group discussion
Trust in university's honesty	'During the first conversation with my study counselor, it was stated clearly that at all times, we have to be honest with each other, in order for teachers to get a clear picture of me as a student.' (SD, male, first year)
Trust in university's benevolence	'I consider my teachers being helpful and understanding, in reaction to what I pointed out my study problems are, and when and where I think I need support … .' (MvD, female, long-term student)
Satisfaction	'I am satisfied about the quality of the relationship I have with my university. Good! A lot of understanding, although, sometimes it takes a long time before you get a reaction.' (Anonymous)
Affective commitment	'I think I am very strongly committed to my educational program. Part of this is because of my own assertiveness. This is rewarded by people from my educational program. I believe I enjoy a special treatment by teachers, and everyone takes me seriously when I have something to say … Currently, I am chairman of one of the students' associations. For both ways, this stimulates commitment.' (L., male, second year)
Affective conflict	'There is one teacher who is very unfair about my choice in courses within my educational program. He does not want to compromise [frustration].' (RA, male, fourth year)

Results of focus group

First, all participants could provide examples of RQ based on their experience. This validated our idea that students are aware of RQ aspects within the relationship with their university. Moreover, all participants reacted to the examples that were introduced by their fellow students, resulting in a vivid and rich discussion.

Students referred to different situations during service encounters with faculty and staff, when they were asked to provide examples of the RQ dimensions in their educational service experience. At first, they only related to teacher–student interactions, which constituted the main part of students' encounters. However, other examples of their evaluations of RQ followed, such as encounters with the international office or study counselors. Interactions with staff from additional services such as the library, audiovisual services, and catering, which are also part of the total university offering, were not mentioned.

Furthermore, we wanted to know how these examples were related to their educational service experience. Therefore, participants were asked to elaborate upon and discuss examples of the five RQ dimensions. The discussion led to a better idea of how students perceive RQ aspects. This was established by the positive and negative examples of RQ and the naming of distinct situations based on the quality of student–faculty relationships.

Next, we wanted to know how these examples were related to their educational service experience. In general, focus group participants reacted positively to the question to what degree they are satisfied with the quality of the relationship between them and university faculty and staff. Although some participants placed critical remarks, for example regarding teachers' willingness to (quickly) respond to students' questions by email. Among participants, different interpretations of affective commitment and affective conflict were derived. For instance, students' commitment to their education and the interpersonal relationships between students and faculty/staff seemed to be based on reciprocity. In other words, the more a student is committed from the student's point of view, the more willing a teacher is to help and advise. Regarding affective conflict, frustrating or irritating situations can occur during one's program, for instance, when receiving critical remarks about one's work. Nevertheless, in retrospect, students understand and value these occasions. To conclude, we covered all aspects of RQ, we discussed the proposed dimensions (i.e., five-factor structure) and sought to find additional ones. Based on this focus group discussion, we were not able to find other RQ aspects, directly or indirectly pointed out by students.

Finally, we questioned whether students believe that RQ is important in relation to their academic achievements, in their relationship with the university in general, or even in life itself. Participants claimed that the importance of RQ was paramount, not only during courses to achieve better study results, but also in students' preparation in becoming a successful young professional who is able to connect to others and build fruitful professional relationships. In conclusion, the focus group findings support the quantitative findings from the survey.

Discussion

This study aimed to contribute to an improved understanding of the concept of RQ in higher education. To that end, five RQ dimensions were examined from a student's

perspective: trust in honesty, trust in benevolence, satisfaction, affective commitment, and degree of affective conflict. Furthermore, we explored the concept and dimensions of RQ by means of a small-scaled focus group discussion to investigate whether students acknowledge the concept of RQ and whether they can relate to practical examples based on their experience.

Based on our qualitative and quantitative findings, we found a good fit of the five-dimensional model of RQ and the alleged importance of RQ from a student's point of view. Our findings thus confirm prior assumptions that a relationship management approach (e.g., Bowden, 2011; Helgesen, 2008; Hennig-Thurau et al., 2001), or more specifically, RQ in higher education, is appropriate and seems to be an important issue for both higher education institutions and students.

Recent studies on interpersonal relationships still mainly focus on the relationship between teachers and students (see Hagenauer & Volet, 2014; Pianta, Hamre, & Allen, 2012). The current study adds to that research by taking a broader interpretation of the educational environment. Instead of only focusing on teachers, in our study, we consider all personnel students have contacts with in the context of their educational program, such as employees of the educational administrative office, library, or exam committee. Furthermore, in contrast to prior studies that have investigated one or a few aspects of student–faculty relationships, such as frequency of interaction (e.g., Cotten & Wilson, 2006; Kuh & Hu, 2001), our study emphasizes the *overall measure of RQ*. We used a five-dimensional structure of RQ in higher education, which enriches the conceptualization of RQ and strengthens its measurement in higher education contexts. By applying a more comprehensive and relational approach to investigate students' perceptions of the quality of student–faculty relationships, we believe that our findings contribute to a better understanding of how RQ can positively influence educational performance outcomes for students and higher educational institutions.

A recent study by Jones et al. (2015) indicated that a consumer's attitude towards relationship management has an impact on the willingness to engage in relationships with service organizations. In other words, if organizations apply relationship marketing tactics, consumers are more likely to (voluntarily) proceed in the relationship with one's service provider. By adopting a relationship philosophy focused on understanding the customer, and in this case, the student, organizations are better able to meet students' changing needs and expectations (Zeithaml, Bitner, & Gremler, 2009).

Implications

For policy-makers of higher education institutions, the RQ dimensions provide guidelines that are applicable in educational services. For example, trust in honesty of faculty and staff is reflected in the advice given to students. Besides institutional and educational program restrictions, staff members should be informed of students' skills as well. They then can give solid advice, when, for example, students ask for information about their study career choices and chances to go abroad or start an internship in a specific field.

The degree of responsiveness by teachers, for instance by grading an exam or responding to email, reflects trust in benevolence. Active students are more likely to receive help and guidance by teachers compared with non-active students, who are expected to be left

to their own devices. Transparency in when to respond seems to be of importance to communicate adequately to students.

Satisfaction with the quality of the relationship as perceived by students is part of the overall satisfaction students have about their educational services. It is therefore an important indicator of the students' willingness to participate and to engage in the educational experience. Unsatisfied students are not expected to be involved in educational activities. Moreover, they can have a bad influence on other students. Evaluations during courses could be informative regarding the degree of student satisfaction and ways to improve when necessary.

In order to be able to build good relationships with students, commitment is required. This commitment is not only stimulated by the course offering itself, but also by other educational activities (e.g., being a student member of a student association).

Finally, both quantitative and qualitative findings indicate that the degree of affective conflict such as irritation and frustrations by students is also part of the quality of the relationship perceived by students, and can influence the relationship positively. Although sometimes the initial conflict is perceived as negative, students indicate that during their personal development throughout their educational program, their view on the relationship with people from the educational program might change. Nevertheless, higher education institutions should provide customer services and the possibility to adequately respond to complaint behavior, or even foresee service recovery strategies.

Limitations and suggestions for further research

Although this study provides new insights into the concept of RQ in higher education, it also has limitations. In particular, the study was conducted in only one university of applied sciences. Future research should test if our findings hold in other samples. Also, one could examine differences among students by study year. As relationships grow over time, the evaluation of RQ could be influenced.

The qualitative findings were meant as a complementary study to the quantitative findings; however, multiple focus groups would provide a full qualitative methodology to study RQ among students. Because of the cross-sectional nature of the data, it was not able to demonstrate causality. Longitudinal approaches with RQ as an antecedent could be of interest.

Conclusion

The overall *quality* of the interpersonal relationship between students and faculty and staff is based on multiple interactions and sequential service encounters between students and different people from their university. Therefore, it is not equivocal to interpret and describe RQ in higher education. Nevertheless, a measurement of RQ does give an indication of the students' perceptions of the quality of the relationship they have with their university. Our results indicate that in the context of higher education, RQ quality has a place in an overall model of educational quality/academic success. The findings confirm that the five-dimensional RQ instrument is an adequate instrument to investigate RQ in a higher education context.

If higher education institutions acknowledge the importance of RQ, also seen from a services and relationship management point of view, they can positively influence their relationship with students (e.g., prompt reaction to students' questions and provide honest feedback). In line with the existing services and relationship marketing literature (Bowden, 2011; Helgesen, 2008; Hennig-Thurau et al., 2001; Macintosh, 2007), this could be beneficial for both higher education institutions and students. A good relationship between students and teachers and other faculty and staff is expected to have positive influences on the engagement of students during their education (Zepke et al., 2014), such as in classroom meetings or other extracurricular activities. This can increase their loyalty to the university (Bowden, 2011). Also, chances for achieving better study results might increase (Klem & Connell, 2004) which is not only a positive outcome for students, but in terms of efficiency and performance outcomes, for higher education institutions as well.

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References

Arbuckle, J. L. (2013). *IBM SPSS Amos 22 user's guide*. Crawfordville, FL: Amos Development Corporation.

Arena, M., Arnaboldi, M., & Azzone, G. (2010). Student perceptions and central administrative services: The case of higher education in Italy. *Studies in Higher Education*, *35*, 941–959. doi:10.1080/03075070903420708

Arnett, D., German, S., & Hunt, S. (2003). The identity salience model of relationship marketing success: The case of nonprofit marketing. *Journal of Marketing*, *67*(2), 89–105. doi:10.1509/jmkg.67.2.89.18614

Berry, L. L. (2002). Relationship marketing of services perspectives from 1983 and 2000. *Journal of Relationship Marketing*, *1*, 59–77. doi:10.1300/J366v01n01_05

Bowden, J. L.-H. (2011). Engaging the student as a customer: A relationship marketing approach. *Marketing Education Review*, *21*, 211–228. doi:10.2753/MER1052-8008210302

Brown, C., Varley, P., & Pal, J. (2009). University course selection and services marketing. *Marketing Intelligence & Planning*, *27*, 310–325. doi:10.1108/02634500910955227

Byrne, B. (2013). *Structural equation modeling with AMOS*. New York, NY: Taylor & Francis.

Cook-Sather, A., & Luz, A. (2015). Greater engagement in and responsibility for learning: What happens when students cross the threshold of student–faculty partnership. *Higher Education Research & Development*, *34*(6), 1097–1109. doi:10.1080/07294360.2014.911263

Cotten, S. R., & Wilson, B. (2006). Student–faculty interactions: Dynamics and determinants. *Higher Education*, *51*, 487–519. doi:10.1007/s10734-004-1705-4

Craig, C. S., & Douglas, S. P. (2005). *International marketing research*. Chichester: John Wiley & Sons.

Crosby, L. A., Evans, K. R., & Cowles, D. (1990). Relationship quality in services selling: An interpersonal influence perspective. *Journal of Marketing*, *54*, 68–81. doi:10.2307/1251817

Dagger, T. S., Danaher, P. J., & Gibbs, B. J. (2009). How often versus how long: The interplay of contact frequency and relationship duration in customer reported service relationship strength. *Journal of Service Research*, 11, 371–388. doi:10.1177/1094670508331251

Fuentes, M. V., Ruiz Alvarado, A., Berdan, J., & DeAngelo, L. (2014). Mentorship matters: Does early faculty contact lead to quality faculty interaction? *Research in Higher Education*, 55, 288–307. doi:10.1007/s11162-013-9307-6

Gibbs, A. (1997). *Social research update, issue 19: Focus groups*. Retrieved from http://sru.soc.surrey. ac.uk/SRU19.html

Gummesson, E., & Grönroos, C. (2012). The emergence of the new service marketing: Nordic school perspectives. *Journal of Service Management*, 23(4), 479–497. doi:10.1108/09564231211260387

Hagenauer, G., & Volet, S. E. (2014). Teacher–student relationship at university: An important yet under-researched field. *Oxford Review of Education*, 40, 370–388. doi:10.1080/03054985.2014.921613

Helgesen, Ø. (2008). Marketing for higher education: A relationship marketing approach. *Journal of Marketing for Higher Education*, 18, 50–78. doi:10.1080/08841240802100188

Hennig-Thurau, T., Langer, M. F., & Hansen, U. (2001). Modeling and managing student loyalty: An approach based on the concept of relationship quality. *Journal of Service Research*, 3, 331–344. doi:10.1177/109467050134006

Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternative. *Structural Equation Modeling: A Multidisciplinary Journal*, 6, 1–55. doi:10.1080/10705519909540118

Jones, M. A., Reynolds, K. E., Arnold, M. J., Gabler, C. B., Gillison, S. T., & Landers, V. M. (2015). Exploring consumers' attitude towards relationship marketing. *Journal of Services Marketing*, 29, 188–199. doi:10.1108/JSM-04-2014-0134

Kim, Y. K., & Sax, L. J. (2009). Student-faculty interaction in research universities: Differences by student gender, race, social class, and first-generation status. *Research in Higher Education*, 50, 437–459. doi:10.1007/s11162-009-9127-x

Klem, A. M., & Connell, J. P. (2004). Relationships matter: Linking teacher support to student engagement and achievement. *Journal of School Health*, 74, 262–273. doi:10.1111/j.1746-1561.2004.tb08283.x

Krueger, R. A., & Casey, M. A. (2000). *Focus groups*. Thousand Oaks, CA: Sage.

Kuh, G. D., & Hu, S. (2001). The effects of student-faculty interaction in the 1990s. *The Review of Higher Education*, 24(3), 309–332.

Lages, C., Lages, C. R., & Lages, L. F. (2005). The RELQUAL scale: A measure of relationship quality in export market ventures. *Journal of Business Research*, 58, 1040–1048. doi:10.1016/j.jbusres.2004.03.001

Macintosh, G. (2007). Customer orientation, relationship quality, and relational benefits to the firm. *Journal of Services Marketing*, 21, 150–159. doi:10.1108/08876040710746516

Marsh, H. W., Hau, K.-T., Roche, L., Craven, R., Balla, J., & McInerney, V. (1994). Problems in the application of structural equation modeling: Comment on Randhawa, Beamer, and Lundberg (1993). *Journal of Educational Psychology*, 86, 457–462. doi:10.1037/0022-0663.86.3.457

Morgan, D. L. (1997). *The focus group guidebook*. Thousand Oaks, CA: Sage.

Morgan, D. L., & Krueger, R. A. (1993). When to use focus groups and why. In D. L. Morgan (Ed.), *Successful focus groups* (pp. 3–19). Thousand Oaks, CA: Sage.

Nunnally, J. C. (1967). *Psychometric theory*. New York, NY: McGraw-Hill.

O'Keeffe, P. (2013). A sense of belonging: Improving student retention. *College Student Journal*, 47, 605–613.

Onwuegbuzie, A. J., Johnson, R. B., & Collins, K. M. (2009). Call for mixed analysis: A philosophical framework for combining qualitative and quantitative approaches. *International Journal of Multiple Research Approaches*, 3, 114–139. doi:10.5172/mra.3.2.114

Palmatier, R. W., Dant, R. P., Grewal, D., & Evans, K. R. (2006). Factors influencing the effectiveness of relationship marketing: A meta-analysis. *Journal of Marketing*, 70, 136–153. doi:10.1509/jmkg.70.4.136

Pascarella, E. T., & Terenzini, P. T. (1991). *How college affects students*. San Francisco, CA: Jossey-Bass.

Pianta, R. C., Hamre, B. K., & Allen, J. P. (2012). Teacher-student relationships and engagement: Conceptualizing, measuring, and improving the capacity of classroom interactions. In S. L. Christenson, A. L. Reschly, & C. Wylie (Eds.), *Handbook of research on student engagement* (pp. 365–386). New York, NY: Springer.

Roberts, K., Varki, S., & Brodie, R. (2003). Measuring the quality of relationships in consumer services: An empirical study. *European Journal of Marketing*, 37, 169–196. doi:10.1108/03090560310454037

Schertzer, C. B., & Schertzer, S. M. B. (2004). Student satisfaction and retention: A conceptual model. *Journal of Marketing for Higher Education*, 14, 79–91. doi:10.1300/J050v14n01_05

Steiger, J. H. (1990). Structural model evaluation and modification: An interval estimation approach. *Multivariate behavioral research, 25*(2), 173–180. Retrieved from: http://statpower.net/Steiger%20Biblio/Steiger90b.pdf

Suhre, C. J. M., Jansen, E. P. W. A., & Torenbeek, M. (2013). Determinants of timely completion: The impact of bachelor's degree programme characteristics and student motivation on study progress. *Higher Education Research & Development*, 32, 479–492. doi:10.1080/07294360.2012.684374

Tinto, V. (1997). Colleges as communities: Exploring the educational character of student persistence. *Journal of Higher Education*, 68, 599–623. doi:10.2307/2959965

Vander Schee, B. A. (2008a). Students as consumers: Programming for brand loyalty. *Services Marketing Quarterly*, 32, 32–43. doi:10.1080/15332969.2011.534331

Vander Schee, B. A. (2008b). The utilization of retention strategies at church-related colleges: A longitudinal study. *Journal of College Student Retention: Research, Theory and Practice*, 10, 207–222. doi:10.2190/CS.10.2.f

Wolff, B., Knodel, J., & Sittitrai, W. (1993). Focus groups and surveys as complementary research method. In D. L. Morgan (Ed.), *Successful focus groups* (pp. 118–136). Thousand Oaks, CA: Sage.

Woodall, T., Hiller, A., & Resnick, S. (2014). Making sense of higher education: Students as consumers and the value of the university experience. *Studies in Higher Education*, 39(1), 48–67. doi:10.1080/03075079.2011.648373

Zeithaml, V. A. (1981). How consumer evaluation processes differ between goods and services. In J. H. Donnelly & W. R. George (Eds.), *Marketing of services* (pp. 186–190). Chicago, IL: American Marketing Association.

Zeithaml, V. A., Bitner, M. J., & Gremler, D. D. (2009). *Services marketing*. Boston, MA: McGraw-Hill Irwin.

Zepke, N., Leach, L., & Butler, P. (2014). Student engagement: Students' and teachers' perceptions. *Higher Education Research & Development*, 33, 386–398. doi:10.1080/07294360.2013.832160