A Qualitative Analysis of Social Congruence and Student Engagement in Peer Mentoring and Faculty Mentoring: The Perspectives of Students

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Abstract

Research into improving the experiences of mentees in problem-based learning (PBL) environments, has shed light on the importance of peer-assisted learning (PAL). As a crucial factor of effective PAL, social congruence is profoundly understudied. Given the limited research into social congruence, as well as learner engagement, in the context of PBL and PAL, this study will adopt a qualitative approach to reduce the gaps in knowledge between these concepts. This study aims to provide insight into whether mentees experience qualitative differences in social congruence, between peer and faculty mentors, and whether this can influence their engagement. Semi-structured interviews were conducted with 12 mentees, taking the Academic Skills at the University of Groningen. The interviews were transcribed and coded, with the aid of ATLAS.ti (version 23.0.6). The main analysis was deductive, and a minor inductive analysis ensued. The deductive analysis found qualitative discrepancies in social congruence between peer and faculty mentors in the following components: personal interest and care for well-being and academic life; empathy and emotional support; similarity and relatability. The research finds that differences in mentorship influence the nature of social congruence perceived by mentees. Furthermore, variations in social congruence does appear to alter specific forms of learner engagement. Implications and future research are discussed below.

Keywords: Peer-assisted learning, peer mentoring, faculty mentoring, social congruence, learner engagement, behavioural engagement, cognitive engagement, affective engagement.

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Introduction

Peer-assisted Learning

Although the extensive research into mentoring and peer-assisted learning (PAL) is extensive, there is still considerable potential for research into further developing the effectiveness of these educational approaches. PAL has been heavily researched in medical contexts, yet it is relatively underexplored in other domains (Loda et al., 2019, Loda et al., 2020). It has been scrutinised with the intention of understanding the effectiveness of peer mentors in comparison with faculty mentors. Faculty mentoring is an educational approach where students and less experienced faculty members learn from experienced faculty members (Lockspeiser et al., 2008). Peer mentoring is an educational practice where students, who have been through certain experiences, facilitate the personal development and growth of other students unfamiliar with those experiences (Lockspeiser et al., 2008). Peer-assisted learning (PAL) is a collaborative teaching method where students of similar academic levels learn from and with each other, facilitating the learning process and improving the overall academic performance across various fields of study, such as health sciences and law (Lockspeiser et al., 2008; Loda et al., 2019). Problem-based learning (PBL) is a student-centred approach emphasising active learning, critical thinking, and problem-solving skills through real-world problems (Loda et al., 2020). The Academic skills course, taught at the University of Groningen, is one such example of a course that promotes a PBL environment. In this paper, we will explore the interplay between the concepts of social

congruence and learner engagement, and how they may enhance the effectiveness of these educational approaches.

Social Congruence

Theoretical Model on Problem-based Learning

Schmidt and Moust (1995) proposed a causal model that considers how, in PBL, mentors can influence the interests and achievements of mentees. They introduced three social congruence as a key concept that can contribute to effective mentoring. Social congruence is the degree to which the mentor establishes a positive relationship with mentees by displaying empathy, respect, and trustworthiness, taking a personal interest in their learning activities and well-being, being open to their points of view, and sharing similar social roles (Schmidt & Moust, 1995).

Components of Social Congruence

Social congruence signifies the extent to which a tutor demonstrates a genuine, personal investment in the mentees' learning journey and their individual and collective well-being (Yew & Yong, 2014). Facilitator traits include approachability, the ability to connect with mentees in a friendly manner, professionalism, motivational skills, and the ability to create a suitable learning environment (Loda et al., 2019; Loda et al; 2020; Yew & Yong, 2014). A good facilitator is also open to the diverse perspectives of their mentees, can evoke and elevate enjoyment, empathises with their mentees' struggles, and needs, and is competent in offering emotional support to foster a harmonious and enriching educational experience (Loda et al., 2019; Loda et al; 2020; Yew & Yong, 2014). Finally, social congruence also considers the extent to which mentors share similar social roles with their mentees (Loda et al; 2020).

Importance of Social Congruence

In problem-based learning (PBL), Peer Assisted Learning (PAL) is considered an effective approach due to its positive impact on student learning outcomes (Schmidt & Moust, 1995). Studies substantiate that social congruence is an especially critical factor in effective PAL (Loda et al., 2019; Rotgans & Schmidt, 2011; Schmidt & Moust, 1995; Yew & Yong, 2014). Schmidt and Moust (1995) found that social congruence and subject expertise are prerequisites for cognitive congruence and that higher levels of social congruence can yield higher levels of cognitive congruence. Social congruence also seems to directly facilitate group performance, as when mentors take an informal approach, they encourage participation by allowing mentees to feel more comfortable sharing their thoughts (Schmidt & Moust, 1995). Yew and Yong (2014) found that mentee feedback primarily emphasised the instructors' social congruence, suggesting that it is the most critical area for mentors to develop. Peer mentors can support mentees more effectively when they share similar social roles, allowing them to better comprehend their difficulties (Loda et al., 2020). Lastly, Social congruence can expedite the development of a positive mentor-mentee relationship, furthering the effectiveness of mentoring (Loda et al., 2019). This is especially true for PAL, as peer mentors are more inclined to show interest in mentees' daily lives and workload, given their similar experiences at earlier stages of their studies (Loda et al., 2019). Thus, further exploring social congruence may contribute valuable insights for refining the PAL experience for mentees and enhancing learner outcomes.

Engagement

Literature in Educational and Organisational Psychology suggests that research into engagement has risen in prominence. In the context of PAL, learner engagement can be defined as the level of active and productive involvement, focus, participation, and persistence that an individual exhibits towards a task or activity; it can be considered as acting

on one's motivation (Ben-Eliyahu, et al., 2018). It is a multidimensional construct comprising affective, behavioural and cognitive domains (Fredricks et al., 2014).

Affective Engagement

Affective engagement encompasses the following: an individual's emotional reactions, including positive and negative feelings (e.g., interest, boredom, anxiety, happiness), a sense of belonging, value, and identification; and the connections they form with their environment, including mentors, peers, tasks, and institutions (Fredricks et al., 2004). Affective engagement is vital because it drives motivation, academic success, and the overall institutional climate, directly impacting achievement gaps and well-being across diverse educational settings (Cook et al., 2020; Fredricks et al., 2004). Indicators of affective engagement entail feelings towards academics, a sense of safety, subjective emotional well-being, and school connectedness; high affective engagement is characterised by positive emotions, interest in academic work, motivation to learn, and a sense of belonging, while low affective engagement typically manifests as negative emotions, disinterest, lack of motivation, and feeling disconnected (Cook et al., 2020). To enhance affective engagement, mentors can foster positive relationships with mentees, empathetically respond to problematic behaviours, cultivate positive emotions, implement social-emotional learning, encourage peer connections, employ culturally responsive practices, and address specific sub-factors concerning school connectedness, relationships, and emotional well-being.

Cognitive Engagement

Cognitive engagement refers to an individual's psychological investment in learning and effort to grasp complex ideas and master skills, which can vary from simple memorisation to the implementation of self-regulated learning strategies (Fredricks et al., 2004). It involves valuing learning, setting goals, embracing challenges, persisting through difficulties, and applying metacognitive strategies to maintain focus and deepen

understanding (Fredricks et al., 2004). Cognitive engagement is essential as it has been associated with several positive outcomes, such as well-being, satisfaction, self-esteem, health, and academic success (Pohl, 2020). Indicators of cognitive engagement involve the motivation to learn, the utilisation of self-regulating strategies, and an investment in learning; high cognitive engagement may be characterised by attributing effort to success, exhibiting self-efficacy, valuing learning, goal-setting, and using learning strategies, while low cognitive engagement entails a lack of connection between academics and goals, disinterest in learning, and the absence of self-regulated learning strategies (Pohl, 2020). Various interventions can be used to enhance cognitive engagement, such as promoting future-oriented thinking, assisting in long-term goal setting, creating relevant and engaging tasks, teaching cognitive and metacognitive strategies, implementing self-monitoring methods, incorporating self-reflection, and formalised programs to enhance mentees' learning experiences (Pohl, 2020).

Behavioural Engagement

Behavioural engagement refers to observable actions that signify participation and involvement in learning activities, such as positive conduct, active participation in learning and task-related behaviours, and engagement in related extracurricular activities (Fredricks et al., 2004). This form of engagement is crucial for mentee success as it is the most predictive factor for school completion (or dropout), academic achievement, and resilience, especially for those with learning, behavioural, and emotional challenges, ultimately contributing to overall mentee well-being (Fredricks et al., 2004; King, 2020). Indicators of behavioural engagement include behaviour incidents, participation, and attendance; higher behavioural engagement in institutes includes regular attendance, active participation in activities, persistence when being challenged, and upholding expected standards, while those with low behavioural engagement may include absences, tardiness, truancy, suspensions, office referrals, and disciplinary records maintained by staff and central administration (Fredricks et

al., 2004; King, 2020). Additionally, cognitive and affective engagement can also be precursors to behavioural engagement (Pohl, 2020; Cook et al., 2020; King, 2020). Hence, enhancing the other forms of engagement can also encourage behavioural engagement (Pohl, 2020; Cook et al., 2020; King, 2020). Mentors can help improve behavioural engagement by identifying and addressing specific behaviours, providing choices and autonomy in learning, implementing collaborative learning activities, allowing mentees to respond, offering positive feedback and reinforcement, and advocating for individuals within the institution to ensure that their needs are met and that mentees have access to necessary resources (King, 2020).

Current Research

While both social congruence and learner engagement play a pivotal role in enriching the PAL experience, the interplay of these concepts in the context of PBL is limited. Hence, this paper will expound on the relationship between mentors, social congruence, and learner engagement to answer the following questions: To what extent do peer and faculty mentors foster social congruence with mentees? In what ways do the differences in social congruence engender discrepancies in learner engagement?

Given the multidimensionality of learner engagement and the complexity of social congruence, exploring the answers to these research questions may elevate our understanding of how social congruence may influence the interrelatedness of cognitive, affective, and behavioural engagement (Ben-Eliyahu, et al., 2018; Loda et al., 2019). We hypothesise that comparing faculty mentors and peer mentors will indicate disparities in social congruence and that, consequently, this will lead to differences in learner engagement.

Qualitative investigation

By taking a qualitative approach, we can broaden our understanding of how mentees experience social congruence and learner engagement (Importance of using qualitative analysis in studying PBL. It may help shed light on the degrees to which mentees are fixated

on specific facets of social congruence, whether this depends on the type of mentor, and how they justify their responses. Moreover, it can help elucidate whether mentees experience social congruence differently from how it has been defined, if social congruence relates more to some forms of engagement than others, and whether certain combinations of engagement are more prominent than others. Given that learner engagement can be measured using self-report measures, qualitative interviewing is especially appropriate here (Fredricks et al., 2004; Reschly, Pohl, & Christenson, 2020; Brinkmann, 2013).

Method

Design

This study employed a qualitative phenomenological approach to investigate student perceptions of their mentors. Specifically, the aim is to compare student and faculty mentors in terms of social and cognitive congruence and examine how these factors influence student engagement during class. The phenomenological approach, as outlined by Husserl (1859), focuses on understanding and exploring the lived experiences of individuals. It can provide greater opportunity to uncover psychological processes that can influence engagement (Ring 2017), which might be missed when using a quantitative approach. Additionally, the current method has previously been used in the educational setting to shed light on problems and experiences of the students (Ring 2017).

Method

Through the utilisation of semi-structured interviews, there is an opportunity to conduct an in-depth exploration of the students' experiences, a task that would prove challenging when employing a questionnaire that restricts participants to predetermined response options considering the limitations associated with questionnaires (Razavi, 2001). Given the capacity of the phenomenological approach to accommodate open-ended questions

(Ring, 2017), we opted for a comparable semi-structured format. The questions were divided into two sections, with one section focusing on social congruence and the other on cognitive congruence. Within each section, the latter half concomitantly asked about cognitive, affective, and behavioural engagements. When warranted, follow-up questions were asked. Thus, there was ample opportunity to elaborate and ask follow-up questions, to ensure that we captured the unique, subjective experiences of the students.

Participants

The study employed a purposive sampling approach. Contact with potential participants was established through a combination of in-person and online methods as part of the meticulous sampling process. Once participants provided their informed consent, interviews were scheduled at mutually agreed-upon dates and locations. To ensure consistency and adherence to specific criteria, we specifically targeted first-year psychology students at the University of Groningen who possessed proficient English language skills and were actively enrolled in the "academic skills" course. This particular course provides valuable academic support to students through the provision of both a faculty mentor and a peer mentor. A total of 12 participants were gathered as this has been found to reach data saturation (Guest, Bunce, & Johnson, 2006). This indicates that the sample size was sufficient to capture a comprehensive range of perspectives and insights relevant to the research objectives.

Data collection

This research study was approved by the ethics committee of the University of Groningen in April 2023. To ensure anonymity of all parties involved the participants were asked not to mention anyone by name during the interview. During the transcribing phase, all names were removed from the text altogether. Second, participants were told that the

interview was confidential. Additionally, participants were asked to sign an informed consent form where it was briefly explained to them what the study is about and that the interview would be recorded. Lastly, participants were told they could retract their data from the study within 10 days and that they were entitled to their right to withdraw.

Regarding the research timeline, the initial phase encompassed the formulation of interview questions. Prior to commencing actual data collection, practice interviews were conducted as a preparatory measure. To enhance the validity of the questions, several measures were implemented. The first version of the interview script underwent scrutiny by our supervisor and an external expert well-versed in qualitative research. Subsequently, a pilot study was conducted, involving three practice interviews. In addition to the two designated interviewers, an additional researcher was present to carefully monitor the participants' comprehension of the questions and evaluate whether the questions effectively elicited the desired information. As the researcher's interviewing skills improved and confidence grew, the interview format transitioned from group sessions with three interviewers to sessions conducted by two interviewers. However, it should be noted that one interview was conducted by a single interviewer. These meticulous steps were taken to ensure the integrity and reliability of the interview process, and to continuously refine and enhance the methodology throughout the study. We chose to revise the script after the practice interviews and after the first real interviews due to a lack of response or confusion from the participant. This is a common event in qualitative research as it is a reflexive process (DeCarlo, 2019). The main changes during these revisions consisted of cutting out questions that did not give new information, finding clearer formulations for questions that were confusing to the participants, and adding follow-up questions in places where we did not get sufficient depth of information with our original questions. Thus, the quality of the script was

continually improved to ensure that the acquired information fit the constructs the study was designed to measure and had enough depth to answer the research questions.

Procedure

Before the interviews the participants were informed about the confidentiality of the data and each interview started with small talk and a few easy questions. The questions were based on previous literature (Schmidt & Moust, 1995; Loda et al., 2020). More specifically, we adopted similar themes in order to better understand the student experience of congruence. The duration of the interviews ranged from 35 to 80 minutes. All the interviews were conducted in the Faculty of Behavioural and Social Sciences. For most interviews a private room could be arranged, but some interviews were conducted in public areas; in those cases, it was ensured no one could overhear the interview. Most of the participants were provided with snacks and/or something to drink in order to make them feel comfortable and relaxed enough to engage in conversation. Furthermore, all the interviews were audio recorded on a device, as well as a second recording to prevent loss of data. Recordings were transcribed and all the participants were given a number from one to twelve to sort the transcripts. Names were only used to keep track of which transcripts were done and kept between members of the research team. Lastly, the names of the mentors of the students were not mentioned in the interviews and otherwise excluded in the transcript.

Data analysis

After the successful collection and transcription of data, a systematic process was initiated to analyse the data. Predetermined categories, informed by the literature, allowed for a predominantly deductive analytical approach (Brinkmann, 2013; Döringer, 2021). Any instances of inductive analysis followed thereafter, to capture emergent insights or themes not initially considered. Using ATLAS.ti software (version 23.0.6), the transcripts were

meticulously coded according to these categories, ensuring the representation of every piece of information was accurate (Tort-Nasarre et al., 2023). Upon conducting a comprehensive deductive analysis, a layer of inductive analysis was carried out (Döringer, 2021; Bingham and Witkowsky, 2022). This facilitated the identification of new themes or patterns that emerged from the data, potentially offering novel insights (Tort-Nasarre et al., 2023). To support the results, quotes that accurately reflected the categories and unique findings were carefully selected and extracted from the transcripts (Loda et al., 2020; Tort-Nasarre et al., 2023).

Results

Deductive Analysis: Social Congruence

The transcripts of 12 first-year students (mentees), following the Psychology Bsc programme at the University of Groningen were considered (Guest, Bunce, & Johnson, 2006). All these mentees took the English track for the course Academic skills, where both peer and faculty mentors are involved in their education. The participants' transcripts were first coded under social congruence, into the following categories: Personal Interest Well-being, Personal Interest Academic Life, Empathy, Trust, Safety, Similarity, Relationship (Loda et al., 2019; Loda et al; 2020; Schmidt & Moust, 1995; Yew & Yong, 2014). Their preferences between the mentors were also coded. Upon analysing and comparing transcripts, the participants' responses did identify with the pre-determined themes—perceived personal interest and care shown by the mentors (faculty/peer) for mentees' well-being and academic life; empathy and emotional support; similarity and relatability, as both fixed and personal factors—as indicated in Figure 1, below (Döringer, 2021; Bingham and Witkowsky, 2022; Loda et al., 2019; Loda et al; 2020; Schmidt & Moust, 1995; Yew & Yong, 2014).
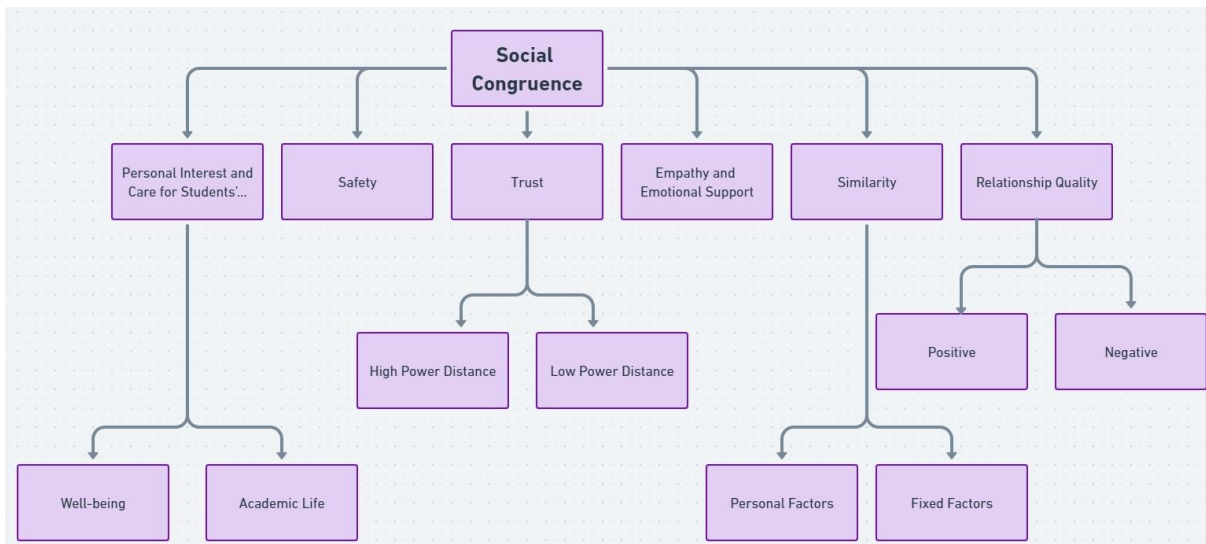
Figure 1: Social congruence and its subcategories (deductive)

Deductive Analysis: Learner Engagement

Information that was coded under social congruence, was also simultaneously examined for instances of affective, cognitive, and behavioural engagements (Bingham and Witkowsky, 2022; Döringer, 2021; Fredricks et al., 2004; Reschly, Pohl, & Christenson, 2020). Each of these codes were then attributed to one (or more) of the subcategories of each engagement—based on previous research—as seen in Figure 2, below (Fredricks et al., 2004; Reschly, Pohl, & Christenson, 2020).
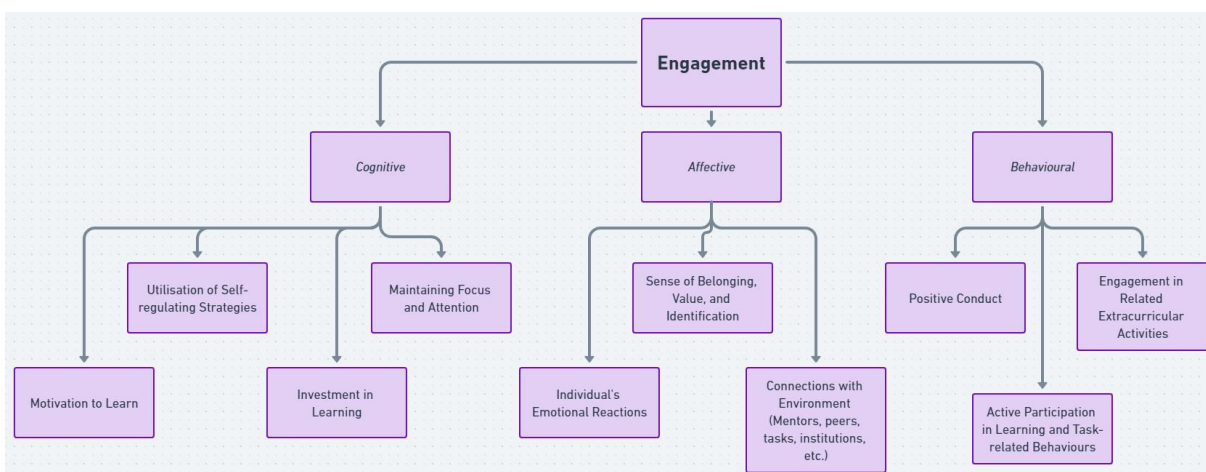

Figure 2: The three subgroups of learner engagement and their subcategories (deductive)

Perceived Personal Interest and Care

… For well-being. Mentees feel that both peer and faculty mentors would show care and interest for their well-being before and after each session.

- *"I suppose both of them, they usually open the sessions with asking us like how are you doing?" – Mentee 6*

...For academic life. According to mentees, both peer and faculty mentors would show interest in the mentees' academic lives and struggles, by asking questions about their performance, mental state, goals, etc. in relation to academia.

- *"But also she started like for that… I think, 'How is student life going? How is university?'… stuff like that. I didn't have much to say to her because I'm satisfied."* – Mentee 3

Affective engagement. This engagement could be observed, particularly when mentees perceived a care and interest for their well-being. In these instances, mentees exhibited positive emotions that relate to "feeling nice", felt appreciated, and experienced a sense of connectedness and belonging to the group.

- *"It made feel as if they didn't look at me as a student, but as a person. And that they wanted to know a bit about me, which is nice." – Mentee 1*
- *"the more they were interested in us and me, the more it made us feel connected because it was not just with me that they were interested, but with all of us," – Mentee 8*

Cognitive engagement. Showing an interest in mentees' academic lives and progress was communicated alongside cognitive engagement, in the forms of motivation and self-regulating strategies. Care and concern for academic progress and learning were also observed, with mentees being motivated to improve their performance and adopt better learning strategies.

- *"...definitely because like, you know that you have the class and if you're not prepared then it's like, hmm, okay, you can't talk to him... like not like everyone was working and then he would talk to each person alone. Like, 'What's the progress? How are you thinking of approaching this?'... So, you kind of were being watched and you were like, 'Okay, tomorrow I have Academic Skills. I still have to do something for my papers.'"* – Mentee 9

- *"I think like the fact that they did show interest probably did like affect my motivation in like a positive way…"* – Mentee 5

Behavioural engagement. At moments where the mentors were perceived to have an interest and care for the mentees' well-being, they would actively participate in task-related behaviours and engage in discussions. Affective engagement could be seen as a precursor to behavioural engagement on such occasions—mentees felt connected to the classroom and mentors; they ascribed positive qualities to their experiences.

- *"It also increased just because as much as we felt the more we felt comfortable in the class, the more people spoke up about personal things or also general issues just because they felt there was no right or wrong. It is a very open class, very honest class. We felt it was fun to do that. yeah. So it increased the participation… we had like a personal connection"* – Mentee 8

Similarly, mentees were *behaviourally engaged* when perceiving an interest and care for their academic lives—they would ask more questions, actively participate in discussions, and engage with tasks more diligently. In such circumstances, cognitive engagement existed as a precursor to behavioural engagement, typically as motivation.

- *"Definitely more like the faculty mentor, just because he did check in during those weeks every week, like what was your progress and you were like, 'OK, if I did nothing for this class I'm screwed.' So, you kind of do more…"* – Mentee 9

- *"The student mentor… that concern and like knowledge about us, made him more like integrated into this like one big group and then that was in terms of teaching, was what allowed that, like group discussions to take place rather than him just teaching us."* – Mentee 11

Preference. Mentees tend to prefer their peer mentors as they perceive them to effectively show a greater interest and care for their well-being and life outside of academia.

- *"Yes. Yeah. Yeah. Understand it's more like, like both tried, but one is a little more successful, which just also has to do with the, the group's feeling and the group's behaviour."* – Mentee 9

As for a perceived interest academic life, the preference was more ambiguous. While the faculty mentors would encourage and invite discussions about the mentees' academic life, the peer mentors seem to be far more successful at showing care for their mentees' academic progress. There was a greater mutual interest and connection with the peer mentors in the academic context.

- *"She usually asks, like at the first session she's like 'Ok, what did you guys do today. in terms of academics? What, did you guys did you manage to do anything? How's your schedule? Do you help with your schedule and stuff like that?' and the student mentor is more like,, 'Ok. How was your day?' And then would go like with the academic stuff like you wouldn't relate the beginning of the session like to academics necessarily."* – Mentee 2
- *"For the student mentor? Yes. Again, because she was interested in all of our personal answers, also to things like procrastination or study schedule, study methods or something I think all of us were a bit more inclined to answer those questions and to share something personal"* – Mentee 8

Perceived Empathy and emotional support

Mentees perceived mentors showed empathy and emotional support, either via email, or verbally. Empathy was acknowledged or perceived, when explicitly mentioned by the mentors, or when mentees were able to perceive that their mentors could understand their struggles. Emotional support was typically experienced in the form of compliments, kindness, and care.

- *"I think they were both very understanding. I actually did contact them. Regards to some of my struggles, like when I failed my first exam or when I, like, for example, I once didn't get the credits for an exam I did pass and I asked them on one-on-one like 'What can I do to do that?' And I think they were both very patient and understanding in that sense."* – Mentee 2

- *"Through the way they express themselves, the way they offered help and assistance, the way they listen to your problems, the way they try to consider you, who you are and what problems you're having… So, I think these ways, like mostly verbally."* – Mentee 10

Cognitive engagement. Mentees experienced a connection between the mentors' display of empathy and emotional support, with cognitive engagement, as they resorted to the use of self-regulating strategies.

- *"…he said that he thinks I will be a really good PhD candidate eventually down the road. So, I really like that and I sustained that."* – Mentee 10

- *"Like, struggles we have, I don't know, with academic writing style… 'How can I improve it?' And then the faculty mentor kind of helps to have like ideas…Regarding to the… procrastination. He understands it really well cuz he says like, 'I do that too.' So, we talked a lot about how to not procrastinate… and strategies… in class, 'How do we phrase this?'"* – Mentee 9

Affective engagement. Mentees were affectively engaged, suggesting the experience of positive emotions when they perceived empathy, as understanding of struggles, and emotional support, as care for their struggles.

- *"I actually failed social psychology… I have to resit and I shared that with her and she told me that like she empathised with me a lot because she also thought that he was one of the hardest courses in the first year for… So, I felt really good about that."* – Mentee 2

- *"…as of this student mentor I'd say just how he approached in general, or how open he was also to our conflicts. That was very empathetic and just in general, the way he's-he spoke to us was really nice. So, it was they had it again like this nice atmosphere in class. "* – Mentee 6

Behavioural engagement. Mentors were able to facilitate mutual empathy and emotional support as well as show understanding of struggles in the course. Both affective and cognitive engagement were present, as precursors to behavioural engagement. When mentees were affectively engaged, they felt connected to the mentors, which increased their participation in class and asking of questions. Mentees experienced cognitive engagement when driven to implement self-regulating strategies. Hence, mentees were more actively engaged in discussions.

- *"Again, because I felt like I have a sympathetic connection with my student mentor. I would be more willing to just also speak up and participate or ask questions and that I think already… makes the class more interesting"* – Mentee 6

- *"So, like of course he wouldn't just say, "yeah, that's right" even though it's completely wrong. But it's more of you already know that you are allowed to have like faults… and with like the emotional care… Like, because you already said, 'Hey, I struggled with… I don't know, motivation.' And it was already like the student mentor*

already gave you like the feedback of 'That's okay. Like, everybody has that. I had that too.' then you would also be encouraged to make more like mistakes in class" –
Mentee 9

Preference. Mentees had a clear preference for the peer mentors, stating that their peer mentor not only had a better understanding of their struggles, but were also more willing to do so. Moreover, they successfully showed more emotional support for the mentees, resulting in their efforts appearing more genuine.

- *"So, I think the student mentor was more caring, just more empathetic kind of, yeah."* – Mentee 5

- *"But in general, like the, I feel like the empathy from like the student mentor was also because he's just more present. Like the empathy that the student mentor, because he's more immediate, it was more personal and… yeah, it just felt a little more like authentic."* – Mentee 9

Perceived Similarity and relatability

Fixed factors. Mentees perceived a similarity with mentors when they realised or recalled that they speak the same language, are closer in age, have a similar amount of experience, and have the same ethnicity.

- "We have the same native language... so, that's also a factor which makes the conversation a bit better I guess." – Mentee 12

- "And also, I think just like the less of an age gap obviously made a difference, as... we could get on a bit better" – Mentee 11

Personal Factors. Mentees also perceived a sense of similarity with peer and faculty mentors, regarding shared personal characteristics and experiences. This is especially true when mentors were able to relate to mentees' interests, hobbies, activities, values, morals, attitudes, personality traits (such as extraversion), and quality of experience.

- *"I would say… we've got… study psychology… so like there is definitely the common interest for the field… well in the same setting we all came to the city. I think important for us, for me… especially in the beginning that it's harder… the struggles of trying to find a new home and find new friends and social connections in a different country… Yeah, that's… definitely something we have in common."* – Mentee 9

- *"…he can relate better to like personal, like all hobbies or music. So, I think that was picked up sometimes, super rarely, but you know that felt like there was similarity."* – Mentee 6

Affective engagement. Mentees perceived similarity and relatability as personal factors when their mentors engaged in casual conversations with them outside of the classroom setting and were able to establish common ground. In such instances, affective engagement was also present, as evidenced by a sense of connectedness with the mentors and displaying positive emotional reactions.

- *"I felt like I had a lot of a lot in common with my first student mentor because we... talked about a lot of topics which were more general to the student life... And I think it was also that because of that, we felt more on an equal basis because we talked about so many things which are very normal in the student life, especially if you just begin your first year. Like you're very overwhelmed... I felt like I had a lot in common with her also because she shared many personal issues... So, a lot of nice things she shared about herself... just made us feel good about ourselves.*" – Mentee 8

Mentees showed signs of affective engagement when they perceived similarity with their mentors as fixed factors. Positive emotions were experienced by mentees who perceived similarity due to language, while a sense of connection was felt by those who perceived similarity in age and amount of experience.

- *"I mean… when we had our… individual meeting, I felt a bit better because she spoke the same language."* – Mentee 12

- *"We're also way closer and the personal connection is maybe, maybe better and… Yeah. The feeling is definitely there… probably also realistic because we're closer in age and experience."* – Mentee 9

Cognitive engagement. Mentees who perceived similarity and relatability with their mentors as personal factors also conveyed being cognitively engaged. Specifically, cognitive engagement was evidenced by a motivation to learn and self-regulating strategies that involve learning new information from mentors' similar past experiences and adopting strategies.

- *"Well, it helped that my student mentor also did the propaedeutic paper. And she showed us some examples of her paper, how she did it and what she did. And I think in that way it helped me to do that as well. To try to use her approach."* – Mentee 1

- *"Yeah, I think my student mentor's love for research was really motivating in a way... because he actually does some studies on, like, psychedelics... or something like that... I felt like, 'OK, wow! I could do something in the future. Like, that's very interesting. I can imagine myself in that position, sort of.' So, I think... It really sparks some passion and motivation"* – Mentee 2

Behavioural engagement. Mentees who perceived similarity and relatability with mentors, were also behaviourally engaged, as they participated more in class. Affective engagement could also be seen as a precursor to behavioural engagement, due to the mentees' feeling of connectedness with their mentors.

- *"So, what I meant just before that I participated more because... I saw our student mentor rather as a friend or as pal like, like, not an actual friend but you know, just... So that made me a little bit more motivated. And with the faculty mentor, I wouldn't say I was less motivated… Participation is nice in class, so I would do that*

nonetheless, but perhaps I was a little bit more motivated with the student mentor." –

Mentee 6

Preference. Mentees generally perceived greater similarity and relatability, as combination of personal and fixed factors, with peer mentors over faculty mentors. Peer mentors were more available and open to discussions and conversations outside of classroom contexts, facilitating the discovery of shared personal characteristics. Moreover, mentees typically perceive the age gap to be a common denominator in this aspect. They also prefer being able to relate to their mentors beyond an academic sense, which is more difficult with the faculty mentors than the peer mentors.

- *"The student mentor, I mean, since he's only like a bit older than us—I don't know how old our faculty mentor is, but whatever—he has a better way of relating everything to us in our daily life"* – Mentee 12

- *"Yeah, I feel like I prefer my student mentor… I feel like this is just like a very general thing because it's someone you can relate to and someone who can also help you through stuff like without being always theoretical about things."* – Mentee 2

Inductive analysis

Sense of Obligation.

An emergent theme throughout the interviews was a 'sense' or 'feeling' of obligation towards the mentors, that most of the mentees felt towards their mentors. Some of them categorised their perceived obligation as being either moral/social or academic/professional. This awareness, recognition and consideration for these obligations appear to be antecedents to behavioural engagement, in the form of positive conduct, following class rules and actively partaking in discussions (Fredricks et al., 2004). This was usually reported along with most aspects of social congruence—trust and respect, personal interest and care for mentees' well-

being, similarity and relatability, and empathy and emotional support. However, it is still unclear as to whether differences in the type of awareness of obligation affected the quality of behavioural engagement. Still, mentees inherently favour instances where they have a more moral/social sense of obligation towards their mentors and the course, over a more professional/academic one.

- *"If I didn't do any work and I didn't even try to do my readings and I didn't participate in class like, I would feel bad because like, I actually like respect the like relationships that they have with my mentors."* – Mentee 11

- *"Personally, I'd say for both of the mentors, the rules I set, I would usually just oblige because I found that was the appropriate thing because they were, in a way, the authorities."* – Mentee 6

Distinctions were made, attributing the moral/social obligations as a response to interactions with the peer mentor and academic/professional obligations as a response to interactions with the faculty mentor.

- *"Well, for the faculty mentor was the authority, I guess you want to also kind of impress maybe the faculty mentor you know, because you might see them again. Or it's just, yeah, feels more professional. With the student mentor, because I found it very sympathetic that he offered that, you know, he was kind about it and I—yeah, I just… But like I want to respect him and I found it nice… he's being nice to us, so why not being nice to him and follow the rules."* – Mentee 6

- *"But yeah, it was definitely like there is more of an obligation in a like academic way and with a student mentor, like in a social way. The obligation. Yeah."* – Mentee 9

Discussion

Findings

This research aimed to use the perspectives of mentees to explore how social congruence influences the social roles and mentoring approach of peer and faculty mentors, in relation to learner engagement. This study found that social congruence was cultivated, as consequence of the mentors' efforts, whereby mentees successfully perceived a personal interest and care for their well-being and academic lives, empathy and emotional support towards their struggles and circumstances, as well as a perceived similarity and relatability with their mentors on the basis of attributes that are fixed (age, ethnicity, culture, nationality, etc.) and personal (hobbies, interests, activities, personality traits, etc.). Nevertheless, the quality of this congruence appears to be more pronounced with peer mentors. As expressed by the mentees, peer mentors demonstrate greater personal interest, enhanced empathy, and have a stronger perceived similarity, which contributes to their ability to foster a deeper sense of social congruence. The variations in social congruence, as brought about by the differences between peer and faculty mentors, lead to distinct patterns of learner engagement.

These findings are in line with those of Yew's and Yong's research (2014), that mentors or facilitators deviate from the traditional mentoring approach. This is because both peer and faculty mentors were focused on cultivating a socially congruent environment, in the Academic skills course, which was a PBL-based course (Yew & Yong, 2014). Moreover, these findings also support the research by Schmidt and Moust (1995), as they suggested that social congruence may contribute to increased learner engagement.

Theoretical and Practical Implications

In general, this research aids our theoretical understanding of learner engagement by, emphasizing the role of social congruence. It suggests that engagement is a multifaceted phenomenon influenced by the quality of interpersonal relationships in an educational setting

(Ben-Eliyahu, et al., 2018). This study extends the understanding of social congruence by elucidating how aspects such as perceived personal interest, empathy, and perceived similarity play a role in academic mentorship contexts beyond other qualitative research (Loda et al., 2020). Moreover, the emergent theme of 'sense of obligation' provides a potential new dimension to consider in the theoretical framework of social congruence and learner engagement, bridging the two concepts. Also, these findings further contribute to the PAL literature on the dynamics between mentor and mentee, by highlighting the differential impact of peer and faculty mentors on social congruence and, consequently, on various aspects of learner engagement.

The results also suggest a number of practical recommendations. The findings underscore the importance of fostering social congruence in educational mentoring relationships. Training programs for both peer and faculty mentors could focus more on developing skills and attitudes that promote social congruence, such as empathetic communication, expressing personal interest, and sharing relatable experiences. Institutions might consider continuing the investment of resources in refining PAL programs, as this approach could provide students with distinct, yet complementary types of social congruence and engagement, optimizing their overall learning experience. Lastly, the 'sense of obligation' offers an interesting avenue for program developers. Incorporating elements that enhance the moral and social obligations towards mentors might lead to increased behavioural engagement, potentially enhancing learning outcomes.

Limitations

This research presents a few limitations to consider. First, the use of a qualitative phenomenological approach limits the generalizability of the findings (Brinkmann, 2013). The sample size of 12 participants may not capture the full diversity and range of experiences within the target population, despite reaching saturation (Brinkmann, 2013; Guest, Bunce, &

Johnson, 2006). The focus on understanding the lived experiences of a small sample of psychology students at one specific university, may not be representative of the wider student population or other educational contexts. Therefore, caution should be exercised when applying the results to broader settings. Another limitation is the possibility of researcher bias and subjectivity in the interpretation of the interview data. Despite efforts to maintain rigor and ensure consistency, the limited experience with qualitative research and interviewing may have further influenced the subjective nature of the findings. Furthermore, the use of semi-structured interviews, although offering in-depth exploration of participants' experiences, may also present other constraints. For instance, the reliance on interviews as the primary data collection method, may have introduced biases inherent in self-reporting and participants' ability to accurately recall and articulate their experiences. This is particularly relevant, given the diversity of the participants' backgrounds. Lastly, the structure of the course probably played a role in the mentees' experiences. Peer mentors had generally accumulated a longer time spent with the mentees as groups. However, the faculty mentors had individual meetings with the mentees, which also appeared to have a prominent effect on their relationship with their faculty mentors. So, while qualitative differences were present in social congruence, the aggregate findings may not accurately portray the disparity in preference between peer and faculty mentors.

Future research

While previous research supports the notion that social congruence may be the biggest contributor to academic progress in a PBL environment, it is still unclear as to which component of social congruence is the most valuable according to the views of mentees. Hence, a follow-up qualitative study could be used to gather empirical evidence on the reasons behind which mentors might want to prioritise promoting social congruence through certain facets first, potentially as a means of quickly engaging mentees in the learning

activities (Loda et al., 2020). The current study was conducted with first-year psychology students at the University of Groningen. Future research could consider different academic disciplines, cultural settings, or educational levels to assess the generality of these findings. Additionally, the awareness or sense of obligation towards mentors potentially opens up a new area for exploration. Future studies could focus on understanding the nature of this obligation and how it could be leveraged to promote learner engagement. Lastly, this study provides a snapshot of learner experiences. Future research could employ a longitudinal design to assess the long-term impact of social congruence on learner engagement and academic outcomes.

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Appendix A

Four versions of the interview questions were made, with each successor having been modified in according with Loda et al.'s (2020) research.

Pre-Interview Questions

Introduction:

- Get them comfortable with questions like: Did you find your way here well? What do you think of the psychology program so far? How do you like living in Groningen?
- Confidentiality
- Sign the informed consent
- 10 days to email that they want the recording deleted
- Ask them if it's okay to record the interview
- there are no right or wrong answers
- They can stop at any time
- Interview is about an hour

Broad starter question

- What did you think about the course?
- How did you like your class?

Questions concerning cognitive congruence

Cognitive congruence refers to the ability to express oneself in a language students can understand, using concepts they use and explaining concepts in ways easily grasped by students (Schmidt & Moust, 1995)

- What did you think about the explanations of the mentors? How did they compare? Whom did you prefer? Why?

- What did you prefer about the way your mentors communicated during the explanations, and why? What did you not like as much? Whom did you prefer?

- How understandable was the language that the tutor used? How did the mentors compare? What did you prefer and why? How did they use terminology?

- How did the mentors explain difficult topics? Were they able to break down difficult concepts into simpler ones? How did they compare? Whom did you prefer and why?

- To what extent were your mentors capable of understanding your academic problems? How did they differ from each other in this regard? Whom did you prefer and why?

* Short intro what we talked about and what it does to engagement*

- we have talked about the language that your tutors used to explain the material

- let's focus on the consequences that it might have had on you

Engagement questions

cognitive engagement

- How did your mentors' explanations of difficult topics influence your motivation to learn?

- How did your mentors' skill of explaining topics influence your ability to understand the course material? What about your ability to take on challenging tasks? Why do you believe so?

affective engagement

- How did your mentors' way of explaining difficult topics make you feel during class?

- How did your mentors' teaching style influence your sense of belonging and connectedness to the class environment?

- To what extent, do you believe that your mentors' understanding of your academic struggles influence your emotions, feelings, and attitudes towards the class?

behavioural engagement

- How did your mentors' way of leading discussions influence the extent to which you participated in class? What made you participate?

- How does your mentors' way of presenting the material influence your desire to follow the class rules? (attendance, positive conduct, effort)

Questions concerning social congruence:

Social congruence refers to a teacher's personal interest in or concern for his/her students

- How much do you believe your mentors showed care for their students?
  - Can you provide an example of this?
  - Were there any differences between the two and whom did you prefer? Why?
- How approachable were each of your mentors? How did they differ from each other? Why do you believe so? Whom did you prefer in this aspect and why?
- In what ways did your mentors display empathy and emotional support towards you? Were there any differences between their competence in these matters? Why?
- How did your mentors show interest in their students? Yes, in terms of their personal lives and well-being? Were there any differences between the two?

- How did your mentors express praise and criticism? How much did they acknowledge the effort you had put into the work? How did this compare to the other mentor? Whom did you prefer and why?

- Overall, what do you and your mentors have in common? In what ways are they 'like you'? What makes you say this? Were there any differences between the two? Why do you think so? Whom did you prefer, regarding this?

Short intro what we talked about and what it does to engagement*

- We have already talked about tutors' interest in your personal life etc.

- let's focus on the consequences that it might have had on you

Engagement questions (updated 23.04)

cognitive engagement

- In what ways do you believe that your mentor's interest in your personal life impacts your motivation to learn? How did having experiences in common influence your motivation?

- How did the extent to which your mentors' encouraged collaboration influence your ability to understand the course material? What about your ability to take on challenging tasks? Why do you believe so?

affective engagement

- During the lessons, how did your mentor's interest in your personal life make you feel?

  1. How did that influence your attitudes towards the class?

- How did your teachers' concern for you influence your sense of connectedness to the class environment?

behavioural engagement

- What influence did the mentor's interest in the students personal lives, and emotional support, have on the extent to which you participated in class?

- How did your mentor's relationship with you affect your desire to follow the class rules? (attendance, positive conduct, effort)

Questions for interview: Version 2

Introduction:

- Get them comfortable with questions like: Did you find your way here well? What do you think of the psychology program so far? How do you like living in Groningen?

- Confidentiality

- Sign the informed consent

- 10 days to email that they want the recording deleted

- Ask them if it's okay to record the interview

- They can stop at any time

- Interview is about an hour

Broad starter question

- What did you think about the course?

- How did you like your class?

Questions concerning cognitive congruence

Cognitive congruence refers to the ability to express oneself in a language students can understand, using concepts they use and explaining concepts in ways easily grasped by students (Schmidt & Moust, 1995)

- What did you think about the explanations of the mentors? How did they compare? Whom did you prefer? Why?

- What did you prefer about the way your mentors communicated during the explanations, and why? What did you not like as much? Whom did you prefer?

- How understandable was the language that the tutor used? How did the mentors compare? What did you prefer and why? How did they use terminology?

- How did the mentors explain difficult topics? Were they able to break down difficult concepts into simpler ones? How did they compare? Whom did you prefer and why?

- To what extent were your mentors capable of understanding your academic problems? How did they differ from each other in this regard? Whom did you prefer and why?

* Short intro what we talked about and what it does to engagement*

- we have talked about the language that your tutors used to explain the material
- let's focus on the consequences that it might have had on you

Engagement questions

cognitive engagement

- How did your mentors' explanations of difficult topics influence your motivation to learn?

- How did your mentors' skill of explaining topics influence your ability to understand the course material? What about your ability to take on challenging tasks? Why do you believe so?

affective engagement

- How did your mentors' way of explaining difficult topics make you feel during class?

- How did your mentors' teaching style influence your sense of belonging and connectedness to the class environment?

- To what extent, do you believe that your mentors' understanding of your academic struggles influence your emotions, feelings, and attitudes towards the class?

behavioural engagement

- How did your mentors' way of leading discussions influence the extent to which you participated in class? What made you participate?

- How does your mentors' way of presenting the material influence your desire to follow the class rules? (attendance, positive conduct, effort)

Questions concerning social congruence:

Social congruence refers to a teacher's personal interest in or concern for his/her students

- How much do you believe your mentors showed care for their students?
  - Can you provide an example of this?

- o Were there any differences between the two and whom did you prefer? Why?

- How approachable were each of your mentors? How did they differ from each other? Why do you believe so? Whom did you prefer in this aspect and why?

- In what ways did your mentors display empathy and emotional support towards you? Were there any differences between their competence in these matters? Why?

- How did your mentors show interest in their students? Yes, in terms of their personal lives and well-being? Were there any differences between the two?

- How did your mentors express praise and criticism? How much did they acknowledge the effort you had put into the work? How did this compare to the other mentor? Whom did you prefer and why?

- Overall, what do you and your mentors have in common? In what ways are they 'like you'? What makes you say this? Were there any differences between the two? Why do you think so? Whom did you prefer, regarding this?

Short intro what we talked about and what it does to engagement*

- We have already talked about tutors' interest in your personal life etc.
- let's focus on the consequences that it might have had on you

Engagement questions (updated 23.04)

cognitive engagement

- In what ways do you believe that your mentor's interest in your personal life impacts your motivation to learn? How did having experiences in common influence your motivation?

- How did the extent to which your mentors' encouraged collaboration influence your ability to understand the course material? What about your ability to take on challenging tasks? Why do you believe so?

affective engagement

- During the lessons, how did your mentor's interest in your personal life make you feel?

    1. How did that influence your attitudes towards the class?

- How did your teachers' concern for you influence your sense of connectedness to the class environment?

behavioural engagement

- What influence did the mentor's interest in the students personal lives, and emotional support, have on the extent to which you participated in class?

- How did your mentor's relationship with you affect your desire to follow the class rules? (attendance, positive conduct, effort)

Questions for interview 2

Introduction:

- Get them comfortable with questions like: Did you find your way here well? What do you think of the psychology program so far? How do you like living in Groningen?
- Confidentiality
- Sign the informed consent

- 10 days to email that they want the recording deleted

- Ask them if it's okay to record the interview

- They can stop at any time

- Interview is about an hour

- We will ask about your experiences with the course, Academic Skills, and your student and faculty mentors.

Broad starter question

- What did you think about the course?

- How did you like your class?

Questions concerning cognitive congruence

Cognitive congruence refers to the ability to express oneself in a language students can understand, using concepts they use and explaining concepts in ways easily grasped by students (Schmidt & Moust, 1995)

- What did you like about the way your mentors communicated? What did you not like as much? Whom did you prefer? Why?

- What did you think about the explanations of the mentors? How did they compare? Whom did you prefer? Why?

- How understandable was the language that the tutor used? How did the mentors compare? What did you prefer and why? How did they use terminology?

- How did the mentors explain difficult topics? Were they able to break down difficult concepts into simpler ones? How did they compare? Whom did you prefer and why?

- To what extent were your mentors capable of understanding your academic problems? How did they differ from each other in this regard? Whom did you prefer and why?

* Short intro what we talked about and what it does to engagement*

- we have talked about the language that your tutors used to explain the material
- let's focus on the consequences that it might have had on you

Engagement questions

cognitive engagement

- How did your mentors' explanations of difficult topics influence your motivation to learn?
- Earlier we asked you how your mentors explained difficult topics. In that regard, how did this affect your confidence in your ability to understand the course material? What about your confidence in your ability to take on challenging tasks? Why do you believe so?

affective engagement

- How did your mentors' way of explaining difficult topics make you feel during class?
- How did your mentors' teaching style influence your sense of belonging and connectedness to the class environment?
- Going back to obstacles that you faced throughout the course, how did your mentor's understanding of these struggles influence your emotions, feelings, and attitudes towards the class?

behavioral engagement

- How did your mentors' way of leading discussions influence the extent to which you

  participated in class? What made you participate?

- How does your mentors' way of presenting the material influence your desire to

  follow the class rules? (attendance, positive conduct, effort)

Questions concerning social congruence:

Social congruence refers to a teacher's personal interest in or concern for his/her

students

- How much do you believe your mentors showed care for their students?

  - Can you provide an example of this?

  - Were there any differences between the two and whom did you prefer? Why?

- In what ways did your mentors display empathy and emotional support towards you?

  Were there any differences between their competence in these matters? Why?

- How approachable were each of your mentors? How did they differ from each

  other? Why do you believe so? Whom did you prefer in this aspect and why?

- How did your mentors show interest in their students? Yes, in terms of their personal

  lives and well-being? Were there any differences between the two?

- How did your mentors express praise and criticism? How much did they acknowledge

  the effort you had put into the work? How did this compare to the other mentor?

  Whom did you prefer and why?

- Overall, what do you and your mentors have in common? In what ways are they 'like

  you'? What makes you say this? Were there any differences between the two? Why

  do you think so? Whom did you prefer, regarding this?

Short intro what we talked about and what it does to engagement*

- We have already talked about tutors' interest in your personal life etc.

- let's focus on the consequences that it might have had on you

Engagement questions (updated 23.04)

cognitive engagement

- In what ways do you believe that your mentor's interest in your personal life impacts your motivation to learn?

- Earlier, you talked about what you had in common with the mentors. How did having these experiences in common influence your motivation to learn?

- How did the extent to which your mentors' encouraged collaboration influence your ability to understand the course material? What about your ability to take on challenging tasks? Why do you believe so?

affective engagement

- During the lessons, how did your mentor's interest in your personal life make you feel?

  1. How did that influence your attitudes towards the class?

- How did your teachers' concern for you influence your sense of connectedness to the class environment?

behavioral engagement

- What influence did the mentor's interest in the students personal lives, and emotional support, have on the extent to which you participated in class?

- How did your mentor's relationship with you affect your desire to follow the class rules? (attendance, positive conduct, effort)

Questions for interview 3

Introduction:

- Get them comfortable with questions like: Did you find your way here well? What do you think of the psychology program so far? How do you like living in Groningen?

- Introduce everyone and explain what they will do (especially the one taking notes)

- Confidentiality

- Sign the informed consent

- 10 days to email that they want the recording deleted

- Ask them if it's okay to record the interview

- They can stop at any time

- Interview is about an hour

- We will ask about your experiences with the course, Academic Skills, and your student and faculty mentors.

Broad starter question

- What did you think about the course?

- How did you like your class?

Questions concerning cognitive congruence

Cognitive congruence refers to the ability to express oneself in a language students can understand, using concepts they use and explaining concepts in ways easily grasped by students (Schmidt & Moust, 1995)

- What did you like about the way your mentors communicated? What did you not like as much? Whom did you prefer? Why?

- What did you think about the explanations of the mentors? How did they compare? Whom did you prefer? Why?

- How understandable was the language that the tutor used? How did the mentors compare? What did you prefer and why? How did they use terminology?

- How did the mentors explain difficult topics? Were they able to break down difficult concepts into simpler ones? How did they compare? Whom did you prefer and why?

- To what extent were your mentors capable of understanding your academic problems? How did they differ from each other in this regard? Whom did you prefer and why? How did you find the individual meeting with your faculty mentor?

* Short intro what we talked about and what it does to engagement*
- we have talked about the language that your tutors used to explain the material
- let's focus on the consequences that it might have had on you

Engagement questions

cognitive engagement

- How did your mentors' explanations of topics influence your motivation to learn? How was your motivation different after a meeting with your student mentor or with your faculty mentor?

- Earlier we asked you how your mentors explained difficult topics. In that regard, how did this affect your confidence in your ability to understand the course material? What about your confidence in your ability to take on challenging tasks? Why do you believe so?

affective engagement

- How did your mentors' way of explaining topics make you feel during class?

- How did your mentors' teaching style influence your sense of belonging and connectedness to the class environment?

- Going back to obstacles that you faced throughout the course, how did your mentor's understanding of these struggles influence your emotions, feelings, and attitudes towards the class?

behavioral engagement

- How did your mentors' way of leading discussions influence the extent to which you participated in class? What made you participate?

- How does your mentors' way of presenting the material influence your desire to follow the class rules? (attendance, positive conduct, effort)

Questions concerning social congruence:

Social congruence refers to a teacher's personal interest in or concern for his/her students

- How much do you believe your mentors showed care for their students?

    o Can you provide an example of this?

    o Were there any differences between the two and whom did you prefer? Why?

- In what ways did your mentors display empathy and emotional support towards you? Were there any differences between their competence in these matters? Why?

- How approachable were each of your mentors? How did they differ from each other? Why do you believe so? Whom did you prefer in this aspect and why?

- How did your mentors show interest in their students? Yes, in terms of their personal lives and well-being? Were there any differences between the two?

- How did your mentors express praise and criticism? How much did they acknowledge the effort you had put into the work? How did this compare to the other mentor? Whom did you prefer and why?

- Overall, what do you and your mentors have in common? In what ways are they 'like you'? What makes you say this? Were there any differences between the two? Why do you think so? Whom did you prefer, regarding this?

Short intro what we talked about and what it does to engagement*

- We have already talked about tutors' interest in your personal life etc.

- let's focus on the consequences that it might have had on you

Engagement questions (updated 23.04)

cognitive engagement

- In what ways do you believe that your mentor's interest in your personal life impacts your motivation to learn?

- Earlier, you talked about what you had in common with the mentors. How did having these experiences in common influence your motivation to learn?

- How did the extent to which your mentors' encouraged collaboration influence your ability to understand the course material? What about your ability to take on challenging tasks? Why do you believe so?

affective engagement

- During the lessons, how did your mentor's interest in your personal life make you feel?

    1. How did that influence your attitudes towards the class?

- How did your teachers' concern for you influence your sense of connectedness to the class environment?

behavioral engagement

- What influence did the mentor's interest in the students personal lives, and emotional support, have on the extent to which you participated in class?

- How did your mentor's relationship with you affect your desire to follow the class rules? (attendance, positive conduct, effort)