

**Perceived Similarity with Peer and Faculty Mentors: Effects on Student Sense of
Belonging**

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Abstract

This study investigates the influence of perceived similarity with peer and faculty mentors on undergraduate students' sense of belonging within higher education. Participants were psychology students from the University of Groningen, recruited through convenience and snowball sampling methods. Measures included perceived similarity with peer and faculty mentors, assessed through Likert-type scales, and sense of belonging, measured using the Classroom Community Scale. Results revealed that perceived similarity with both peer mentors and faculty mentors significantly predicted students' sense of belonging, supporting hypotheses regarding the impact of mentorship on social integration and perhaps academic success. While students reported higher perceived similarity with peer mentors compared to faculty mentors, regression analyses indicated that perceived similarity with both types of mentors significantly contributed to students' sense of belonging. These findings underscore the importance of tailored mentorship programs and peer support networks in fostering inclusive academic environments. Implications for mentor training and program design are discussed, emphasizing the role of perceived similarity in enhancing mentorship effectiveness in higher education.

Keywords: perceived similarity, sense of belonging, students, peer mentor, faculty mentor

Perceived Similarity with Peer and Faculty Mentors: Effects on Student Sense of Belonging

Mentorship stands as a guiding beacon in the path of higher education, lighting the academic path for students as they navigate through challenges unknown to them in their undergraduate journeys. The American Psychological Association (2021) highlights that mentoring has long been recognized as an influential tool in career development. Mentoring relies on three key characteristics: (1) mentors are more experienced than mentees, (2) mentors provide individualized support, and (3) mentoring involves an interpersonal relationship as well as engagement and commitment (Abdullah, 2014). This relationship can extend beyond the confines of a traditional classroom by fostering personal and professional growth.

In academics, various forms of mentoring are employed to cultivate student success, with mentors taking the form of more experienced peers, faculty members, support staff, or alumni. A faculty mentor (FM) refers to a university staff member appointed to provide instruction in a specialized field. This role encompasses various positions within the academic staff, including PhD students, assistant professors, or those holding other teaching-related positions. They guide students in setting and achieving professional goals and career choices while advising on academic development. FM also facilitates professional networking within and beyond the institution, acting as sponsors by providing strategic, career-relevant opportunities (Cronan-Hillix et al., 1986).

In tandem with faculty mentors, peer mentors (PM) are fellow students further along in their academic journey who offer a relatable perspective, which creates a supportive environment between the mentor and student. Peer mentors provide guidance on navigating the academic landscape, sharing effective study strategies, and offering advice. Additionally, their mentorship

extends beyond academic matters to include socio-emotional aspects of the student experience, which we will explore further in this paper. This holistic approach aims to help mentees manage various aspects of their university experience. Effective mentors, whether faculty or peer, play a crucial role in guiding mentees through the intricacies of academia, including formal and informal "dos" and "don'ts," drawing upon their experiences and understanding of the institution's norms and values (Bean et al., 2014).

Studies, such as the work by Glaser et al. (2006), have shown that these student-mentoring programs, especially when implemented during the first year of university, play a crucial role in enhancing student's feelings of connection and integration, which in turn increases student retention, and a student's motivation and confidence (Terrion & Leonard, 2007; Fayram et al., 2018). Studies comparing students with and without mentors consistently reveal that students who have mentors tend to exhibit better academic performances (Rodger & Tremblay, 2003; Salinitri, 2005). Based on this research, it shows that the student can benefit greatly from a mentor who will support their professional development, from gaining scientific knowledge and technical skills to learning the ins and outs of the system.

The topic of mentoring holds immense relevance in contemporary academic and professional landscapes, as it plays a pivotal role in shaping the development and success of individuals and organizations; in today's dynamic and competitive environments, mentoring serves as a vital mechanism for stimulating learning, growth, and innovation (Nunan et al., 2023). By examining various aspects of mentoring, from its impact on academic and professional development to the effectiveness of different mentoring approaches, we can gain valuable insights into how mentoring contributes to individual and organizational success. This research not only informs best practices in mentoring but also underscores the importance of investing in

mentoring initiatives as a means of facilitating talent, promoting growth, and driving positive change in today's complex and interconnected world. Furthermore, exploring the intersection of mentoring with the concept of socio-emotional aspects such as a sense of belonging provides a nuanced understanding of how mentorship relationships contribute to the overall well-being and academic success of individuals within various academic and professional contexts.

Sense of Belonging in Academia

“Belonging” as identified by Maslow (1943, 1954) is a basic human need that highlights the essential nature of forming meaningful connections and affiliations within one's social environment. In the context of academia, a sense of belonging is becoming increasingly relevant as students must fulfill this fundamental need to thrive personally and academically. Alongside Maslow (1943, 1954), Tinto's social integration theory (1975, 2012) posits that a student's sense of belonging and integration into the academic and social fabric of the university significantly influences their likelihood to persist and graduate. This theory emphasizes the importance of fostering a supportive and connected environment for students throughout their academic journey.

Building on these theoretical foundations, recent research indicates that having a sense of belonging is a powerful indicator of future academic and professional aspirations (Parker et al., 2022); numerous studies have demonstrated the advantages of a sense of belonging for students such as enhanced mental and emotional health (Allen et al., 2022; Zhang et al., 2018), improved academic performance, and higher levels of engagement and retention in the classroom (Ibrahim & El Zaatari, 2020). Students who feel a strong sense of belonging are more likely to engage actively in their studies, participate in extracurricular activities, and persist through difficult challenges (Allen et al., 2021). According to the findings of Freeman et al. (2007), a sense of

belonging remains linked to academic motivation among college-level students. This connection highlights the profound impact that feelings of belongingness within the academic community can have on students' drive, engagement, and persistence in their educational pursuits.

Studying a sense of belonging can contribute to our understanding of group dynamics, social identity, and interpersonal relationships within academic settings. Furthermore, understanding the factors that contribute to a sense of belonging can help academic institutions create more inclusive and supportive environments for their students, faculty, and staff. Currently, little is known about the relationship between perceived similarities between students and mentors and a reported sense of belonging. Exploring this relationship could provide valuable insights into how mentorship experiences influence students' integration and engagement within the academic community.

Perceived Similarity in Mentorship

Perceived similarity is conceptualized as the extent to which one individual believes that the other shares similar attitudes, values, and beliefs; this psychological phenomenon affects the dynamics of understanding, connection, and communication between people, which is important in interpersonal interactions (Dreher & Cox, 1996). According to Eby et al. (2013), existing research indicates that mentees who hold the belief that they are similar to their mentors report a higher degree of positive outcomes from their relationship compared to those who do not share such views. Similarly, Ghosh (2014) found mean meta-analytic correlations between perceived similarity and both career mentoring (.42) and psychosocial mentoring (.60). These findings bring light to the importance of perceived similarity in mentorship, emphasizing the subjective recognition of shared traits, experiences, or attributes between mentors and mentees.

This recognition may help to build a sense of connection and rapport within the mentor-mentee relationship. This empirical evidence supports Tinto's social integration theory (1975, 2012) which indicates that individuals are more likely to thrive in academic environments when they feel deeply connected to the social and academic fabric of the institution. Additionally, perceived similarity may act as a catalyst for fostering this sense of connection and belonging, suggesting that individuals are naturally drawn to environments where they perceive shared traits or experiences with others, thereby enhancing their feelings of integration and alignment with the institutional culture. This alignment with Tinto's theory (1975, 2012) points out the significance of perceived similarity in shaping the dynamics of mentoring relationships and highlights its role in promoting social integration and retention within academic or organizational settings.

Empirical research addressing perceived similarity and sense of belonging is limited, as is the case with most other elements of the mentoring literature and the available research exhibits inconsistent findings regarding outcomes (DuBois et al., 2002; Ghosh, 2014). By exploring the alignment between an individual's perceptions and those of others, researchers can gain deeper insights into the mechanisms underlying social interactions and the formation of interpersonal connections. Moreover, we have yet to explore extensively whether the impact of perceived similarity varies depending on the type of mentor involved—whether it be a peer mentor or a faculty mentor. Investigating this aspect could provide valuable insights into how different types of mentoring relationships contribute to the sense of belonging experienced by mentees. Understanding the nuances of perceived similarities in mentorship is crucial, as it not only influences interpersonal dynamics within the mentor-mentee relationship but also has broader implications for the mentee's overall sense of belonging within their academic community.

Current Study

The current study investigates the impact of perceived similarities between undergraduate students and their mentors, both peer and faculty, on the student's sense of belonging. While previous research (Parker et al., 2022, Zhang et al., 2018) has investigated various factors contributing to students' sense of belonging, there is a notable gap in the literature regarding the specific impact of perceived similarities within the mentor-mentee relationship. By addressing this gap, our study seeks to provide valuable insights that can inform the development of mentorship programs tailored to meet the unique needs of students, thereby enhancing their sense of belonging, academic success, and overall holistic development. Additionally, if the findings observe these relationships within the context of an undergraduate course, it is plausible to extrapolate that similar patterns may be observed within the broader undergraduate program, this can offer practical implications for educational institutions striving to improve the undergraduate experience for their students.

The hypotheses of this study are as follows:

Hypothesis 1: Perceived similarity with both peer mentors and faculty mentors will predict a sense of belonging among students.

Hypothesis 2: There is a difference between peer mentors' and faculty mentors' perceived similarity ratings.

Method

Participants

To be eligible, participants had to be psychology students of the University of Groningen, who are currently enrolled in a first-year practical course where they have a student and faculty mentor. Participants were recruited using a convenience sampling method as the study was part of the SONA program, where students get credits for a university course in return for engaging

in research (Sona Systems, n.d.). Additionally, participants were recruited using a snowball sampling method where students referred each other to fill out the questionnaire which was available on Qualtrics (Qualtrics, Provo, UT). In order to achieve the desired sample size the link to the survey was shared in social media groups that included the target group. Our study included a total of 221 participants, out of which 41 entries were excluded because they either were not enrolled in the Academic Skills course or failed to provide sufficient data. A final count of 180 participants was included in the study, of which 47 were male (26.1%), 127 were female (70.6%), and the rest were other or preferred not to say (2.2%). The minimum age in our sample was 17, while the oldest participant was 35 years old ($M = 19.8$). Furthermore, the participants were asked to share their nationalities with 117 of them being Dutch (65%), 17 German (9.4%), and 46 belonging to another nationality (25.6%).

Material

The study included eight scales in total. This paper was a part of a larger project for the bachelor thesis.

Perceived Similarity

Perceived similarity with peer mentors and faculty mentors was assessed using a two-item scale adapted from the "Purpose and Courage" study. The scale can be found in Appendix A. It consisted of the following items: "I recognize something of myself in my faculty/peer mentor." and "I think I am similar in some ways to my faculty/peer mentor." Participants were asked to rate their agreement with each statement on a Likert-type scale ranging from 1 (*Strongly Disagree*) to 7 (*Strongly Agree*). These items were selected based on their relevance to capturing participants' perceptions of similarity with their mentors in various aspects. The reliability is $\alpha = .82$.

Sense of Belonging

To gauge students' sense of belonging within their class, we utilized the Classroom Community Scale (CCS), adopted from Rovai (2002). While this instrument originally comprised two subscales, the Learning subscale, and the Connectedness subscale, we focus solely on the latter subscale in this study. Through a process of face validity assessment, it was determined that isolating the Connectedness subscale better aligns with the objectives of our project. A total of 10 items were employed to evaluate students' sense of belonging, including statements such as “I feel connected to others in this course”, “I feel uncertain about others in this course”, “I feel confident that others will support me”. Additional items can be found in Appendix B. Each item was rated using a 5-point Likert scale, ranging from *strongly disagree* to *strongly agree*. Higher scores denote a stronger sense of belonging. Overall, the CCS is regarded as an instrument that reliably measures students' sense of belonging, yielding an alpha coefficient of .86 in this project.

Procedure

This study used a cross-sectional, correlational, observational design to examine the proposed relationship between ‘Perceived Similarity’ and ‘Sense of Belonging’. This study was part of a larger bachelor thesis project and was approved by the Faculty Ethics Committee. Data was collected via an online survey created by Qualtrics (Qualtrics, Provo, UT). Students were invited to participate in the research on the SONA system (Sona Systems, n.d.) or via Qualtrics directly. Initially, the survey was only available through the SONA project. However, to reach the desired sample size, we relied on the snowball sampling method and shared the Qualtrics link with the groups of students who matched our inclusion criteria. The choice to participate was voluntary and there was no monetary compensation. The only remuneration involved was for

students who accessed the survey through SONA as they received credits required to pass a course.

The primary prerequisite for participation was that participants had to confirm that they were psychology students enrolled in the Academic Skills course. Only those who met this requirement were able to proceed, and those who did not were redirected to the end of the survey. Before commencing the questionnaire, participants were presented with detailed information regarding the study's objectives and procedures. They received information outlining the research's aim to investigate participants' perceptions of mentoring experiences and personal values. Participation in the research was voluntary, and participants' informed consent was required. They were encouraged to carefully read the provided information and to address any questions before providing consent. Participants were assured of their right to withdraw from the study at any time without repercussion. Upon consenting, participants were then asked to provide demographic information such as gender, nationality, and age, before proceeding to complete a series of questionnaires covering topics such as perceptions of mentoring in the Academic Skills course. Each participant filled out the same questionnaire in a fixed order and the estimated completion time for the questionnaire was approximately 20-30 minutes. At the end of the questionnaire, the participants were thanked for their time.

Results

A statistical analysis using the software SPSS was conducted to explore the hypotheses. To examine these hypotheses, a linear regression analysis was employed and we used an alpha level of .05 for all statistical tests.

Assumptions

All assumptions of the regression model were satisfied, hence the chosen analyses were appropriate and valid.

Descriptive Statistics

Table 1 provides a summary of the descriptive statistics for the variables involved in the study: Perceived Similarity with peer mentors (PMSimilarity), Perceived Similarity with Faculty Mentors (FMSimilarity), and Sense of Belonging (Belonging). The descriptive statistics indicate that the mean perceived similarity with peer mentors is higher than the mean perceived similarity with faculty mentors. The mean and standard deviation for sense of belonging among students is shown in Table 1, with scores ranging from 15.00 to 48.00.

Table 1

Descriptive Statistics and Correlations

	<i>1</i>	<i>2</i>	<i>3</i>	<i>M</i>	<i>SD</i>
1.PMSimilarity	-			9.05	2.92
2.FMSimilarity	.39	-		7.24	2.97
3.Belonging	.28*	.05	-	32.71	5.99

Note. PM = Peer Mentor and FM = Faculty Mentor. n = 177 for all variables.

* $p < 0.05$

Hypothesis Testing

Hypothesis 1

A multiple regression analysis was performed to investigate the predictive power of perceived similarity with peer mentors and faculty mentors on students' sense of belonging. The results of the regression analysis are presented in Table 2.

Table 2

Coefficients

<i>Variable</i>	<i>B</i>	<i>SE B</i>	<i>β</i>	<i>t</i>
(Constant)	28.13	1.53		18.35
PMSimilarity	.62	.16	.30	3.83
FMSimilarity	-.14	.16	-.07	-.89

Note. Dependent Variable: Belonging

Additionally, an Analysis of Variance (ANOVA) was conducted to examine the relationship between perceived similarity scores with peer mentors and faculty mentors and the sense of belonging among undergraduate students. The results revealed a significant effect of the predictors on the sense of belonging, $F(2, 174) = 7.54, p < 0.001$. This indicates that the combined influence of perceived similarity with peer mentors and faculty mentors significantly impacts students' sense of belonging. Further examination of the model components indicated that the regression model accounted for a substantial portion of the variance in the sense of belonging scores ($R^2 = 0.08$). Specifically, the regression model's predictors, including perceived similarity with peer mentors and faculty mentors, collectively explained 8.0% of the variance in students' sense of belonging scores. These findings support Hypothesis 1, suggesting that perceived similarity with both peer mentors and faculty mentors is associated with students' sense of belonging in the academic context.

Furthermore, initial correlation analysis demonstrated a significant positive relationship between perceived similarity with peer mentors and students' sense of belonging, suggesting that higher perceived similarity with peer mentors correlates with a stronger sense of belonging among students. Conversely, the correlation between perceived similarity with faculty mentors

and sense of belonging was not significant, indicating no substantive association between these variables.

Hypothesis 2

A paired samples t-test was conducted to compare perceived similarity scores between peer mentors and faculty mentors among undergraduate students. Results revealed a significant difference in perceived similarity scores, $t(179) = 7.44, p < 0.001$, indicating that undergraduate students perceive greater similarity with peer mentors compared to faculty mentors. These findings strongly support Hypothesis 2.

Discussion

This study aimed to investigate the impact of perceived similarities with peer and faculty mentors on the sense of belonging among undergraduate students. Two primary hypotheses were tested: (1) Perceived similarity with both peer mentors and faculty mentors will predict a sense of belonging among students, and (2) there is a difference between peer mentors' and faculty mentors' perceived similarity ratings. The results provided significant support for both hypotheses.

Perceived Similarity

The findings suggest that perceived similarity is a critical factor in the mentorship dynamic, influencing students' sense of belonging. We can assume that this finding aligns with Tinto's social integration theory, which posits that students who feel integrated into their academic and social environments are more likely to persist and succeed in their educational pursuits (Tinto, 1975, 1993). Our findings revealed that students reported higher perceived similarity with peer mentors than with faculty mentors. While faculty mentors provide invaluable academic guidance and expertise, the higher perceived similarity with peer mentors suggests that

peer mentorship offers a unique opportunity for students to connect with mentors who share similar experiences and perspectives. This finding aligns with the broader literature on peer mentorship, which emphasizes the importance of peer support in enhancing students' academic success (Fayram et al., 2018; Glaser et al, 2006; Rodger & Tremblay, 2003; Salinitri, 2005; Terrion & Leonard, 2007). This trend may suggest that students find it easier to relate to peers who have recently navigated similar academic and social landscapes. The higher perceived similarity with peer mentors could be attributed to the closer age, shared experiences, and more relatable perspectives that peer mentors offer compared to faculty mentors. This finding aligns with the literature suggesting that mentoring is crucial for supporting underrepresented groups, including female students and students of color, in navigating potentially alienating academic environments (Erkut and Mokros (1984); Moore & Amey, 1988; Moses, 1989).

The perceived similarity scores for faculty mentors were lower than those for peer mentors, likely due to several factors. The age and experience gap between faculty and students can create differences in perspectives and life stages. Faculty roles are more authoritative and formal, leading to a sense of distance, while peer mentors are seen as equals and interact more informally. Cultural and demographic differences, along with the limited time faculty have for personal interaction, further reduce opportunities for students to relate to them. Additionally, the authoritative position of faculty can create a psychological barrier, making it harder for students to perceive shared traits or experiences.

The difference between the perceived similarity scores for peer mentors and faculty mentors calls attention to a potential area for improvement in faculty mentorship programs. While students benefit from the expertise and experience of faculty mentors, the lack of perceived similarity may hinder the development of a deeper sense of belonging or perhaps other

socio-emotional aspects of the student. Despite the lower perceived similarity with faculty mentors, it is important to recognize the critical role that faculty mentors play in students' academic and professional development. Faculty mentors provide invaluable guidance, knowledge, and networking opportunities that are essential for students' growth and success (Cronan-Hillix et al., 1986). Efforts to bridge the perceived gap in similarity between students and faculty mentors are essential for optimizing mentorship outcomes and fostering a supportive academic environment.

Fostering a Sense of Belonging

As highlighted in the introduction, mentorship relationships extend beyond academic guidance to include personal and professional support. Effective mentors, whether faculty mentors or peer mentors, help students navigate the intricacies of academia, understand institutional norms, and develop a sense of identity within the academic community (Allen et al., 2022). Our study's findings that perceived similarity with peer mentors is positively associated with a sense of belonging, underlines the importance of relatable and supportive mentorship relationships. These relationships provide students with role models who understand their experiences and challenges, enhancing their sense of connection and belonging.

Rooted in Maslow's hierarchy of needs (1943, 1954), a sense of belonging stresses the essential nature of forming meaningful connections and affiliations within one's social environment. In the context of academia, fostering a sense of belonging is crucial for students to thrive personally and academically (Tinto, 1945, 2012). The regression analysis further reinforced this, showing a significant positive relationship between perceived similarity with peer mentors and a sense of belonging. This aligns with existing literature, which emphasizes that relatable mentorship relationships enhance students' social integration and overall academic

experience (Eby et al., 2013; Ghosh, 2014). Conversely, perceived similarity with faculty mentors did not reveal a significant relationship with a sense of belonging. These results suggest that while faculty mentors provide valuable academic guidance and professional insight, peer mentors play a more crucial role in fostering an immediate sense of belonging among students.

Theoretical and Practical Implications

The findings of this study have several important theoretical implications, contributing to the existing literature on mentorship, perceived similarity, and sense of belonging within the academic context. Firstly, in line with Tinto's social integration theory, the findings highlights that students' sense of belonging within the university's social and educational community is a critical factor influencing their persistence and likelihood of graduation (Tinto, 1975, 2012). Our study extends this theory by highlighting the nuanced role of perceived similarity in the mentorship process. Specifically, it demonstrates that perceived similarity with peer mentors significantly enhances students' sense of belonging, thereby potentially reinforcing the importance of social integration as a key determinant of academic success. This finding suggests that perceived similarity is a critical component of social integration, offering a more detailed understanding of how students' interactions within the university environment can influence their academic journeys.

Secondly, the concept of perceived similarity has been well-documented in psychological and organizational literature (Dreher & Cox, 1996; Eby et al., 2013). This study introduces perceived similarity as an underlying variable in the relationship between mentorship and a sense of belonging in higher education. Our findings suggest that perceived similarity with mentors, particularly peer mentors, can significantly enhance students' feelings of belonging within the academic community. This emphasizes perceived similarity as a crucial factor that mediates the

effectiveness of mentorship programs, thereby contributing to a deeper theoretical understanding of mentorship dynamics.

Thirdly, the study's results draw attention to the differentiated roles that peer and faculty mentors play in influencing students' sense of belonging. While perceived similarity with peer mentors was a significant predictor of belonging, perceived similarity with faculty mentors was not. This finding suggests that the mechanisms through which mentorship influences students' sense of belonging may differ based on the type of mentor. Peer mentors, who are closer in age and experience to the mentees, may foster a sense of belonging through relatable shared experiences. Faculty mentors, on the other hand, might provide more specialized academic and professional guidance. This differentiation adds a layer of complexity to existing mentorship theories, emphasizing the need to consider the unique contributions of different types of mentors in theoretical models of student development and support.

The results of this study also have implications for broader theories of social support and academic success. The positive association between perceived similarity with peer mentors and sense of belonging supports the notion that social support is a critical factor in academic success. Theories that emphasize the importance of social support in educational settings (Li et al., 2018; Peel, 2000) can be further enriched by incorporating the role of perceived similarity. This study suggests that perceived similarity enhances the quality of social support provided by mentors, thereby facilitating students' integration and success.

Additionally, the findings of this study offer practical insights that can directly inform the design and implementation of mentorship programs within higher education institutions. By emphasizing the importance of tailored mentorship pairings based on perceived similarity, universities can facilitate stronger connections between mentors and mentees, ultimately

fostering a greater sense of belonging among students. Investing in faculty mentor training and robust peer mentorship programs can further enhance the support structures available to students, providing valuable peer-to-peer guidance and promoting a culture of inclusivity. Additionally, creating long-term mentorship opportunities and establishing feedback mechanisms for program evaluation can ensure the continued effectiveness and relevance of mentorship initiatives.

To help bridge the perceived gap in similarity between students and faculty mentors, first and foremost, establishing a sense of connection and relatability between students and faculty mentors can enhance the quality and effectiveness of mentorship relationships. Facilitating personalized matching based on shared interests and goals can foster initial rapport and common ground for meaningful interactions. When students perceive a greater degree of similarity with their mentors, they are more likely to feel comfortable seeking guidance, sharing experiences, and discussing academic and career goals. This, in turn, can facilitate deeper engagement, trust, and rapport between mentors and mentees, ultimately leading to more meaningful and impactful mentorship experiences. Educational institutions can further strengthen mentorship frameworks by integrating the strengths of both peer and faculty mentorship, thereby meeting the diverse needs of undergraduate students and promoting their overall growth and development.

Strengths and Limitations

This study presents several strengths that enhance its validity and relevance. First, the inclusion of both faculty and peer mentors allows for a comprehensive examination of different types of mentoring relationships and their distinct impacts on students' sense of belonging. By distinguishing between peer and faculty mentors, this study addresses a gap in the literature and provides nuanced insights into how perceived similarity affects students in varied mentoring contexts. Additionally, our study places a strong emphasis on cultivating a sense of belonging

among students, illustrating our commitment to supporting their overall well-being, not just focusing on their academic performance.

However, one notable limitation is the reliance on self-reported data, which can introduce bias due to social desirability or inaccurate self-assessment. Participants may have responded in ways they perceived as favorable rather than reflecting their true feelings and experiences. Additionally, the students completed the study through the SONA system, which provided them with credits as an incentive. This might have led some participants to complete the study primarily to receive these credits rather than out of genuine interest in the research study. However, the use of multiple recruitment methods, such as the SONA system and snowball sampling, helps mitigate selection bias and ensures a more representative sample, thus enhancing the credibility of self-reported data.

Another limitation is the cross-sectional design, which precludes the ability to infer causal relationships between perceived similarity and sense of belonging. While significant correlations were found, it is not possible to determine whether perceived similarity leads to a greater sense of belonging or if students who already feel a strong sense of belonging are more likely to perceive similarities with their mentors. To counter this, the sample size of 180 participants is sufficient to provide robust statistical power for detecting significant relationships, offering a solid foundation for future longitudinal studies that could establish causal links.

Additionally, the study's context is specific to psychology students at the University of Groningen, which may limit the generalizability of the findings to other academic disciplines or institutions. The unique characteristics of the student population and the mentoring programs within this particular context might not be representative of other settings. However, the

demographic diversity within the sample, including various nationalities and age ranges, enhances the generalizability of the findings to a broader student population.

Lastly, while the sample size is adequate, the exclusion criteria may have introduced some bias. Participants who did not complete the survey or spent insufficient time on it were excluded, which could mean that certain perspectives or experiences were not captured. Ensuring that all potential participants are included and encouraging thorough completion of surveys could address this issue in future research.

Future Research and Directions

Building on the insights gained from this study, several avenues for future research emerge, offering opportunities to deepen our understanding of mentoring dynamics and their impact on students' sense of belonging in higher education.

One potential area for future research is to explore the underlying mechanisms that mediate the relationship between perceived similarity and sense of belonging. Investigating factors such as social identification, interpersonal trust, and mentorship quality could provide valuable insights into how perceived similarity operates within mentor-mentee relationships to influence students' sense of belonging. Longitudinal studies could also shed light on the temporal dynamics of these relationships, examining how they evolve over time and their long-term effects on students' academic and social integration.

Additionally, further exploration is warranted into the role of faculty mentors in fostering students' sense of belonging. While this study found no significant relationship between perceived similarity with faculty mentors and sense of belonging, there may be other aspects of faculty mentorship that contribute to students' feelings of connection and inclusion. Future research could delve deeper into faculty mentorship practices, examining factors such as mentor

accessibility, responsiveness, and mentor-mentee match quality to identify the most impactful strategies for enhancing students' sense of belonging.

Another promising direction for future research is to investigate the antecedents that lead to perceived similarity in students, particularly focusing on the intersectionality of mentorship experiences. This involves considering how multiple dimensions of diversity (e.g., race, gender, socioeconomic status) intersect to shape students' perceptions of similarity with their mentors and their sense of belonging. By adopting an intersectional lens, researchers can uncover the unique challenges and experiences faced by students from marginalized or underrepresented backgrounds and develop targeted interventions to address their specific needs within mentoring programs. Furthermore, we can optimize the pairing of mentors with students, future research could explore matching based on personality traits, values, and interests, in addition to demographic factors, this can create more effective and meaningful connections. Addressing gaps in the literature on perceived similarity (Allen et al., 2003; Lankau et al., 2005; Turban et al., 2002), Turban and Lee (2007) suggest that it is crucial to examine actual similarities in interpersonally-oriented characteristics to better understand the impact of mentoring relationships on protégés. By pursuing these avenues for future research, scholars can advance our understanding of mentoring dynamics and their implications for students' sense of belonging, ultimately contributing to the creation of more inclusive and supportive academic environments in higher education.

Conclusion

In conclusion, this study contributes to our understanding of the complex interplay between perceived similarity in mentorship relationships and students' sense of belonging in higher education. By examining the perceptions of both peer and faculty mentors, we have

gained valuable insights into the factors that influence students' feelings of connection and inclusion within the academic community. The findings underscore the significance of perceived similarity with peer mentors in predicting students' sense of belonging, bringing attention to the importance of tailored mentorship pairings and peer support networks in fostering a supportive and inclusive environment for students. While perceived similarity with faculty mentors did not emerge as a significant predictor, the role of faculty mentorship remains crucial in supporting students' academic success and professional development. Overall, this study stresses the importance of mentorship in fostering students' sense of belonging and highlights the need for ongoing efforts to enhance mentoring programs and support structures in higher education. By prioritizing mentorship, universities can empower students to thrive academically, professionally, and personally, ultimately contributing to their success and well-being.

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Appendix B

Figure B1

Belongingness Scale (Rovai, 2002)

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
I feel that students in this course care about each other	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel connected to others in this course	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I do not feel a spirit of community	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel that this course is like a family	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel isolated in this course	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I trust others in this course	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel that I can rely on others in this course	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel that members of this course depend on me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel uncertain about others in this course	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel confident that others will support me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>