### **Student Transition and Out-of-Class Communication With Mentors:**

#### **Exploring the Effect of Immediacy, Trust, and Identification**

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PSB3E-BT15: Bachelor Thesis

Group 21

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June 30, 2023

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#### **Abstract**

As students transition to university, they face various challenges, such as academic pressures and social isolation. These can be navigated by engaging in out-of-class communication (OCC) with one's mentor, a potential source of social support. Research has found that communicating with a mentor outside of class about personal concerns (OCC<sub>p</sub>) can be predicted by a mentor's immediacy. The present study tested the previously unexplored mediating role of trust in the association between mentor immediacy and OCC<sub>p</sub>. Moreover, it was investigated whether identifying with one's mentor moderates the link between mentor immediacy and trust in the mentor. Lastly, we explored whether the suggested model varies for different kinds of mentors; faculty mentor and peer mentor. A convenience sample of N=288 first year psychology students from the University of Groningen completed an online survey measuring mentor immediacy, OCC<sub>p</sub>, trust in the mentor, and identification with the mentor in a correlational manner, for both types of mentors separately. The hypothesized model was tested using Hayes' (2013) PROCESS macro and support was found for the moderated-mediation model. Indeed, trust partially mediated the link between immediacy and OCC<sub>p</sub> and identification moderated the link between immediacy and trust. Both effects seem slightly stronger for faculty mentor than for peer mentor. The findings imply the importance of training mentors in crucial communicative behaviors, potentially helping students transition to university life as they confide in their mentor more easily. Limitations and future research suggestions are considered.

Keywords: transition, mentoring, immediacy, OCC, trust, identification

## Student Transition and Out-of-Class Communication With Mentors: Exploring the Effect of Immediacy, Trust, and Identification

As commonly known, transitioning and adjusting to university life can lead to unique challenges and stressors (Graham et al., 2022), such as academic pressures, social isolation, and changes in personal identity. Simultaneously, students are progressing to the independence of adulthood, bringing up even more challenges and new responsibilities (Ribeiro et al., 2021). According to Schlossberg's Transition Theory (Goodman et al., 2006), one factor that can help coping with an ongoing transition, is (social) support. Accordingly, one particular source of social support that can help students navigate these challenges in their first year of university, is a mentor, specifically a faculty mentor or a peer mentor (Collier, 2017). Especially peer mentoring has been found to help students transition to university and adjust to their new college student identity (Antoniadou & Holmes, 2016; Cornelius et al., 2016; Graham et al., 2022; Lefera & Swart, 2020). This form of mentoring has become increasingly popular throughout the last years and has been implemented, additionally to conventional faculty mentoring, in various universities (Antoniadou & Holmes, 2016). Similarly, in the University of Groningen, where the present research will be conducted, first-year students are mentored by a combination of a faculty mentor and a peer mentor.

This study investigates how mentors can facilitate the students' transition to university life. In class, by being warm and approachable, i.e., immediate, mentors can signal that they can be talked to outside of class hours, thereby offering their support. However, it is still unclear how a mentor's immediate communicative behaviors influence whether students talk to them outside of class. By scrutinizing the underlying mechanism as well as the contributing factors involved when students turn to their mentors regarding personal issues, this research aims to help establish how universities and other institutions can invest in training programs for mentors. Specifically, these programs could promote communication skills such as immediacy, encouraging students to open up about their concerns. As such, mentors can

potentially embody valuable resources for their students, helping them to adjust to university life and cope with other personal challenges.

In the following section, mentoring in university will be discussed, giving a framework to the current study. Afterwards, in-class mentor communicative behavior, in particular immediacy, will be looked at as a potential determinant of students' communication with their mentors outside of class hours. Subsequently, the concept of out-of-class communication (OCC) will be explained and further specified. Examining the relationship between mentor immediacy and OCC more closely, trust in the mentor will be introduced as a potential mediator. Lastly, we will explore the effect of identifying with a mentor on the relationship between mentor immediacy and trusting them.

#### **Mentoring in University**

In university mentoring, a mentor is working together with a mentee, typically a student. Generally, the mentor fulfills different functions, such as providing emotional and academic support (Law et al., 2020). In academic contexts, one mostly differentiates between faculty and peer mentors. Peer mentoring can be characterized as a relationship whereby a more experienced and academically advanced student is paired with a less experienced student. First and foremost, peer mentors provide guidance and support (Colvin & Ashman, 2010). Also, they serve as role models and help mentees navigate college life by building a trusting relationship (Collier, 2017). A faculty mentor, on the other hand, involves a mentoring relationship between faculty staff and a mentee. In contrast to the peer mentor, the faculty mentor conveys knowledge as well as what is expected of students in terms of academic outcomes and university standards (Collier, 2017).

Law et al.'s (2020) literature review found mentoring to be significantly correlated with various positive student outcomes. Also, research has now recognized mentoring as a crucial approach for promoting college student success (Collier, 2017). Particularly, positive effects of peer mentoring have been found regarding academic achievement indicators, such

as improved retention and better grades (Colvin & Ashman, 2010; Graham et al., 2022) as well as regarding personal indicators, i.e., being supported regarding personal concerns and a better adjustment to university life (Lefera & Swart, 2020; Yomtov et al., 2017). Similarly, students with a peer mentor have been found to feel more motivated, connected, and well-integrated in the university (Colvin & Ashman, 2010; Yomtov et al., 2017). Even though most studies have only tested the benefits of peer mentoring, looking at faculty mentors is just as important as they can provide valuable resources as well as social support to their students, too (Collier, 2017). In this study, we want to examine whether the model that is introduced in the subsequent sections differs between the two types of mentors who take on quite different roles, serve different functions and display varying characteristics. Then, by differentiating between mentors, we can explore how each mentor can offer the most support to their students.

#### **Immediacy Behaviors of Mentors**

In class, mentors can make use of various communication behaviors, for instance they can communicate in an immediate manner. Immediacy can be characterized as nonverbal as well as verbal communication behaviors that reduce the distance between two individuals, either physically or psychologically (Gorham, 1988; Mehrabian, 1971). Being immediate includes behaviors such as engaging in eye contact and showing an open body posture (Andersen, 1979) as well as "using language that engages the students and creates rapport" (Jaasma & Koper, 1999, p.46). In line, mentors can be immediate and create rapport to their students in class by signaling warmth and approachability, by that reducing the psychological distance. Predominantly, immediacy behaviors of mentors have been shown to have positive effects on their students, both personally as well as academically. Similarly, mentor immediacy is associated with liking and positive feelings, and is linked to positive educational outcomes (Faranda, 2015). In the following, we will explore what is known about the effect of

mentor immediacy on students' tendency to talk to their mentors outside of class hours, thereby using them as a source of social support.

#### **Out-of-Class Communication in Mentoring Relationships**

Generally, out-of-class communication, OCC, can be characterized as student-initiated communication with their mentor, which takes place outside of regular class hours (Faranda, 2015). Overall, it is recognized that OCC is beneficial for students as well as for educational institutions and for the faculty (Nadler & Nadler, 2000). Focusing on students, evidence shows that OCC is positively associated with favorable educational outcomes and academic achievement indicators, such as student persistence or greater academic and cognitive development (as summarized by Faranda, 2015). Likewise, OCC has been positively linked to personal development, in terms of feelings of self-worth, affirmation, and confidence (Kuh, 1995) and the overall improvement of the university experience (Jaasma & Koper, 1999; Kuh, 1995). Importantly, OCC may also benefit students by giving them an opportunity to seek help from their mentors and using their social support, which could potentially ameliorate a student's well-being. In line, students who engage in OCC tend to have more interpersonal relationships with their mentors (Dobransky & Frymier, 2004).

Two components of OCC have been established, namely *Personal/Social-Career* OCC (OCC<sub>p</sub>) and *For Course Success* OCC (OCC<sub>cs</sub>) (Faranda, 2015). On the one hand, OCC<sub>p</sub> describes student's interest or willingness to learn more about their mentor, to ask them questions and to seek advice, either regarding personal concerns or career questions. OCC<sub>cs</sub>, on the other hand, relates to engaging in OCC for individual benefits regarding the course outcome, i.e., receiving a good grade (Faranda, 2015). The present study will focus on OCC<sub>p</sub>, as we are interested in exploring students' willingness to communicate with their mentor about personal concerns, such as transitioning to university life.

Looking at potential determinants of OCC, Jaasma and Koper (1999) argue that students assess whether a mentor is available for talks outside of class by assessing in-class

behaviors of the mentor, such as the mentor's communicative behaviors (Faranda, 2015; Myers et al., 2005; Nadler & Nadler, 2000). In line, mentor immediacy has been found to be positively linked to OCC (Fusiani, 1994; Jaasma & Koper, 1999; Khan et al., 2015). More specifically, immediacy was found to influence OCC<sub>p</sub> (Faranda, 2015), and likewise positively correlates to discussing personal and general academic matters in OCC, rather than class-related matters (Nadler & Nadler, 2000).

#### **Trust in Mentors**

Considering further elements that influence the occurrence of OCC<sub>p</sub>, one can look at the student's trust in the mentor. Rotter (1967) characterized trust as the "expectancy held by an individual (...) that the word, promise, verbal or written statement of another individual (...) can be relied upon" (p.651). An interpersonal and trusting student to mentor relationship has been suggested to benefit students as it facilitates communication and lets students confide in their mentor more (Frymier & Houser, 2000) as well as seek guidance.

Looking at the role of trust in our hypothesized model, it may underpin the effect of mentor immediacy on OCC<sub>p</sub> as trust has been found to be positively connected to both variables. Precisely, a positive association between immediacy and trust has been implied, so that communicative behaviors like mentor immediacy facilitate the development of a trusting interpersonal relationship and closeness between students and their mentor (Jaasma & Koper, 1999; Frymier & Houser, 2000). Also, trust has been found to be positively associated with OCC (Jaasma & Koper, 1999; Khan et al., 2015; Nadler & Nadler, 2001), especially OCC<sub>p</sub> as compared to OCC about academic matters (Faranda, 2015; Nadler & Nadler, 2000). Thus, since trust is especially important when students talk to their mentors about personal matters, this implies that trust is critical to see the mentor not only as an instructor but as a source of support (Faranda, 2015). As a trusting environment is established based on the mentor's immediate communication, a safe space is created for all kinds of questions, course related or personal (Frymier & Houser, 2000). Overall, one could therefore argue for a mediating

relationship in which mentor immediacy leads to a trusting relationship which then facilitates communication, OCC<sub>P</sub> (Dobransky & Frymier, 2004; Frymier & Houser, 2000).

#### **Identification with Mentors**

Further exploring the contributing factors in the suggested model, one can look at the student's identification with their mentor. Identifying with another individual can be conceptualized as recognizing oneself in someone else, seeing oneself as similar (i.e., perceiving overlap between oneself and the other person) and finding the other person likeable (Humberd & Rouse, 2016; Ybema & Buunk, 1995). Since identifying allows for greater empathy between mentor and mentee, it is seen as a crucial component in the development of a trusting relationship as well as the in development of mentoring relationships generally (Humberd & Rouse, 2016). When identifying highly, one should trust the mentor more than when identifying to a smaller extent. Arguably, identifying with one's mentor could modify how a mentor's immediacy behavior impacts trust in the mentor. Hence, looking at a potential interaction of mentor identification and mentor immediacy on trust, a highly immediate mentor could make identifying more likely, as they are more open and let you see what you could identify with, establishing a connection and trust. Therefore, we propose that identifying with a mentor might modify how a mentor's immediacy relates to a student's trust in their mentor.

Comparing the students' identification with faculty mentor versus peer mentor, one could argue that the peer mentor, especially, shares a common perspective with the student about the 'university student role' since they are both students. Hence, mentees can relate to and identify well with their peer mentor, as well as see them as their role model (Collier, 2017). With respect to faculty mentors, Humberd and Rouse (2016) suggest that when hierarchical differences are salient, it becomes more challenging to find commonalities and as such, to identify, because both parties are less likely to disclose personal information.

Therefore, the suggested moderation by mentor identification might vary for the different mentors.

#### The Hypothesized Model

Based on the reviewed literature, we suggest that trust in the mentor positively mediates the link between a mentor's immediacy and OCC<sub>p</sub> since it has been found to be positively correlated to both variables (Faranda, 2015; Nadler & Nadler, 2000). Furthermore, the degree of identification with the mentor could moderate the link between a mentor's immediacy and how much students trust them. For a visualization of the hypothesized moderated mediation model, see Figure 1. Lastly, due to their different roles, we suspect distinct findings comparing the faculty mentor model versus the peer mentor model. The hypotheses are suggested as follows:

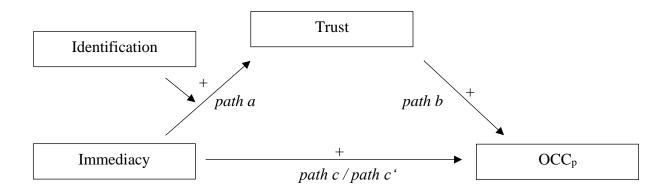
 $\mathbf{H1}$ : For both faculty mentor and peer mentor, the relationship between the mentor's immediacy and student initiated OCC<sub>p</sub> with their mentor is positively mediated by trust in the mentor.

H1a: This mediation differs for faculty mentor and peer mentor.

**H2**: For both faculty mentor and peer mentor, identifying with one's mentor moderates the relation between mentor immediacy and trust in the mentor.

**H2a**: This moderation differs for faculty mentor and peer mentor.

**Figure 1**The Hypothesized Moderated Mediation Model



#### Method

#### **Participants**

After removing invalid or missing cases, the participants consisted of 288 first-year university students of the Bachelor Psychology program of the University of Groningen who are currently completing the course *Academic Skills*, the class where mentoring takes place. Of these participants, 212 identified as female, 72 as male, and four as other. The age ranged from 16 to 31 with a mean of 20.06 years. The majority of participants, 57.4%, was Dutch, followed by 19.8% German. Other nationalities, such as Romanian, Slovak, American, and Irish, made up 22.8% of the participants. All participants were fluent in English at least at B2 level. We used convenience sampling via the recruiting system Sona (Sona systems, n.d.), offering study credits to the participants.

#### **Study Design and Procedure**

This study used a cross-sectional design to examine the proposed moderated mediation model. Students were invited to participate in the research on the Sona system (Sona systems, n.d.), followed by data collection via an online survey hosted by Qualtrics (Qualtrics, Provo, UT). This study was correlational in nature, as the mentor's immediacy behavior was not directly manipulated or altered by the study design. This study was part of a larger bachelor thesis project and was approved by the Faculty Ethics Committee.

The questionnaire was in English and took about 15-20 minutes to complete. First, participants had to confirm that they were a first-year psychology student enrolled in the course *Academic Skills*, which was the main admission criterion. A study introduction describing objectives and procedures was provided, followed by an informed consent form. After actively agreeing to participate, all respondents completed the same questionnaire in a fixed order. Participants were given as much time as needed to complete the questionnaire and had the option to cancel at any time. If participants chose to discontinue, their data were

excluded from the study. After completing the survey, the participant received .8 Sona credits.

#### **Instruments**

The study included eight scales in total, however, this paper only considers four of them (see Appendix), as the overall study was part of a larger project. Students were asked to fill in each scale twice, once for their faculty mentor and once for their peer mentor. Sum scores per variable were calculated for each type of mentor.

#### **Immediacy**

To measure immediacy behaviors, Kwitonda's (2017) verbal and non-verbal immediacy scales were merged into one immediacy scale. The students were asked to rate the frequency of the teacher's immediacy behaviors in the target class using a 5-point Likert scale ranging from *never* (1) to *always* (5). This adapted version consisted of 23 items (e.g., "The faculty mentor/ peer mentor smiles at individual students in the class."). Item four as well as item 22 were reverse-coded. The internal consistency of the scale, Cronbach's alpha, was computed to be very good with  $\alpha$ = .85 for the faculty mentor measure and  $\alpha$ =.84 for the peer mentor measure.

#### Student Trust in Faculty

The Student Trust in Faculty Scale (STF; Forsyth et al., 2012), a 13-item scale, was used to assess the degree of trust students have in their academic mentors (e.g., "My faculty mentor/ peer mentor is always ready to help me".). The scale utilizes a 4-point Likert scale, ranging from *strongly disagree* (1) to *strongly agree* (4). Item ten was reverse-coded. The instrument's internal consistency was excellent for both mentors' measures ( $\alpha$ = .92).

#### Out of Class Communication Scale

Student-initiated OCC with their mentor was measured using the Out-of-Class Communication Scale (Faranda, 2015). The scale assesses the frequency and quality of communication between mentors and mentees outside of formal mentoring sessions and

consists of 13 items. On a scale of *strongly disagree* (1) to *strongly agree* (7), participants indicated whether they would personally engage in specific OCC activities (e.g., "I would have no problem seeking career advice from this professor,"). This study focuses on OCC<sub>p</sub>, i.e., items one to ten of the scale. The internal consistency of OCC<sub>p</sub> was excellent ( $\alpha$  = .91) for both mentors.

#### Identification

To measure a student's identification with their mentor, the Identification Scale by Ybema & Buunk (1995) was used, adapted to the current study. The scale consisted of four items including statements such as "I recognize something of myself in my faculty mentor/ peer mentor". The responses were scored on a 7-point Likert scale, ranging from *strongly disagree* (1) to *strongly agree* (7). The internal consistency was very good for the faculty mentor ( $\alpha = .82$ ) and for the peer mentor ( $\alpha = .83$ ).

#### **Data Analysis**

The data was analyzed using IBM SPSS software (version 27). Hayes' PROCESS macro for modeling mediation was then applied to the current data (Hayes, 2013), employing Model 4, a simple mediation analysis, and Model 7, a moderated mediation analysis. The models are based on regression analysis and their assumptions, in turn using a 5000 samples bootstrapping approach to avoid possible violations of the normality assumption. As per the model, the mediating variable was examined independently, followed by a moderated mediation analysis. The analyses used a 95% confidence interval to determine the significance of the results. When the confidence interval included non-zero values, the variable was statistically significant. The variables used in the model were immediacy as the independent variable, OCC<sub>p</sub> as the outcome variable, trust as the mediating variable, and identification as the moderating variable.

#### **Data Preparation**

Originally, 336 students signed up to be part of the study. However, 47 of them had to be excluded from the sample, as they either did not fill out all questions or failed to finish the questionnaire. Furthermore, an outlier was found, as one participant answered yes to every question, thus this case was also removed. In the end, 288 students made up the final sample.

#### **Ethical Considerations**

Participants were declared that participation in the study was entirely voluntary and withholding consent would not have had any adverse consequences. Also, the participants had the freedom of discontinuing the study at any time. Since all responses were treated with confidentiality and were anonymous, the results and by that the personal opinions of students on their mentors cannot be linked to specific people. By using gender neutral pronouns, we ensured that the questionnaire did not contain any discriminatory terms. Lastly, participants were given the thesis supervisor's contact information if they would have any concerns regarding the research project.

#### **Results**

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

#### **Correlational Analysis**

In the tables below, the bivariate Pearson's correlations between the measured variables are displayed, once for faculty mentor and once for peer mentor. As expected, all variables significantly positively correlated with each other for faculty mentor (see Table 1) and for peer mentor (see Table 2). Moreover, OCC<sub>p</sub> is significantly higher for peer mentor than for faculty mentor (t(287) = -5.59, p < .01).

**Table 1**Faculty Mentor Model: Correlations and Descriptives of the Measured Variables.

	1	2	3	4	M	SD
1. Immediacy	-				79.43	11.93
2. OCC <sub>p</sub>	.60**	-			41.32	11.53
3. Trust	.63**	.60**	-		39.22	6.90
4. Identification	.42**	.75**	.54**	-	15.28	4.86

*Note.* Unstandardized correlation coefficients are reported, \*\*p < .01.

 Table 2

 Peer Mentor Model: Correlations and Descriptives of the Measured Variables.

	1	2	3	4	M	SD
1. Immediacy	-				81.94	11.16
2. OCC <sub>p</sub>	.56**	-			45.88	11.17
3. Trust	.52**	.53**	-		40.33	6.50
4. Identification	.52**	.67**	.49**	-	18.23	4.77

*Note.* Unstandardized correlation coefficients are reported, \*\*p < .01.

#### **Mediation Analysis**

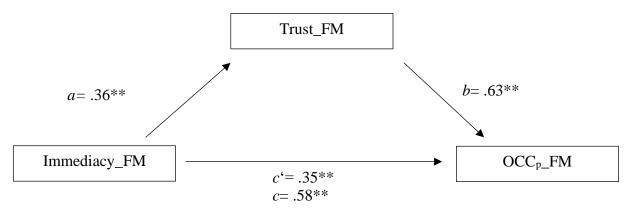
Looking at the suggested mediation of immediacy on OCC<sub>p</sub> via trust, all direct paths of the model were found significant for both mentors. For a visualization, see Figure 2 for faculty mentor and Figure 3 for peer mentor. Analyzing the indirect effect of mentor immediacy on OCC<sub>p</sub> via trust, the overall mediation model was found significant for both faculty mentor (F(2, 285) = 113.30, p < .01) and peer mentor (F(2, 285) = 90.79, p < .01). Specifically, a significant positive mediating relationship ( $path\ ab$ ) was found for both faculty mentor ( $b = .23, SE = .05, 95\%\ CI = [.14; .32]$ ) and peer mentor ( $b = .17, SE = .05, 95\%\ CI = [.09; .28]$ ). Hence, trust partially mediates the link between immediacy and OCC<sub>p</sub> for both faculty mentor and peer mentor, supporting H1.

Looking at the difference of the mediating relationship for faculty mentor versus peer mentor, the overall model explains more variance for the faculty mentor ( $R^2$ = .44) than for the peer mentor ( $R^2$ = .39). In line, the indirect effect seems larger for the faculty mentor

compared to the peer mentor, which supports H1a, hypothesizing a difference in the mediation for the two mentors.

Figure 2

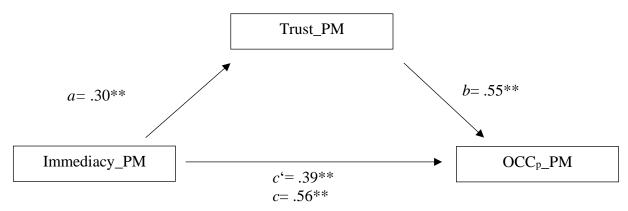
Faculty Mentor: Mediation Model - Effects for Each Pathway



*Note*:  $R^2 = .44$ , \*\*p < .01.

Figure 3

Peer Mentor: Mediation Model - Effects for Each Pathway



*Note*:  $R^2 = .39, **p < .01$ .

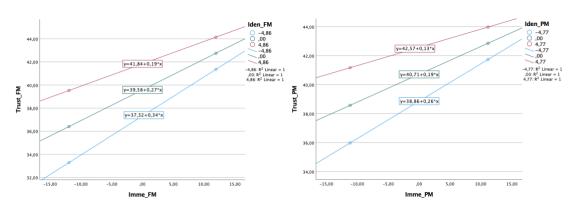
#### **Moderated Mediation Analysis**

Looking at the moderation of the *a path*, identification significantly moderates the relationship between immediacy and trust for both the faculty mentor (F(3, 284) = 98.16, p <.01) and for the peer mentor (F(3, 284) = 51.33, p <.01). Both simple slopes analyses (see Figure 4 and Figure 5) show that trust is highest when immediacy as well as identification are

highest. However, with increasing identification, the effect of immediacy on trust becomes weaker.

Figure 4 Figure 5

Faculty Mentor: Simple Slopes Peer Mentor: Simple Slopes

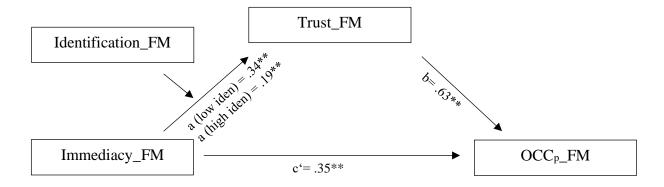


Analyzing the overall suggested moderated mediation model, the results show that also the overall mediation is significantly moderated by identification since the index of moderated mediation is significant for both faculty mentor (b = -.01, SE = .003, t(3) = -3.03, 95% CI = [-.016, -.004]) and for peer mentor (b = -.01, SE = .003, t(3) = -2.57, 95% CI = [-.014, -.003]), supporting H2. In line, the conditional indirect effects of immediacy on OCC<sub>p</sub> through trust were found to be significant and positive (yet diminishing) across increasing levels of identification, for both mentors. Specifically for faculty mentor, the conditional indirect effect was found significant at low levels of the moderator (-1SD: b=.21; SE=.04.; 95% CI=[.14; .30]), at average levels of the moderator (Mean: b=.17; SE=.03; 95% CI= [.11; .24) and at high levels of the moderator (+1SD: b=.12; SE=.03; 95% CI=[.07;.19). The same holds true for the peer mentor, the conditional indirect effect was found significant at low levels of the moderator (-1SD: b=.14; SE=.04; 95% CI=[.07;.24]), at average levels of the moderator (Mean: b=.11; SE=.04; 95% CI=[.05;.19) and at high levels of the moderator (+1SD: b=.07; SE=.03; 95% CI=[.02; .14). Additionally, the moderating effect of identification seems to be stronger for the faculty mentor than for the peer mentor, which supports H2a, proposing a difference in the moderation for the two mentors. For a

visualization of the moderated mediation models, see Figure 6 for faculty mentor and Figure 7 for peer mentor. Summarizing, for both mentors, trust partially mediates the link between immediacy and OCC<sub>p</sub> across increasing levels of identification, supporting H1 and H2.

Figure 6

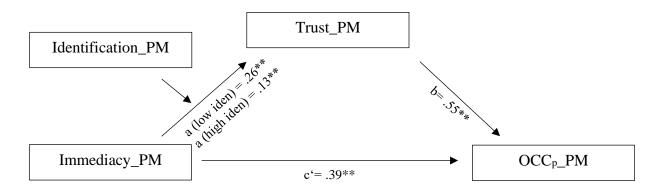
Faculty Mentor: Moderated Mediation Model - Effects for Each Pathway



*Note.*  $R^2$ = .44. *Low iden* relates to -1SD of identification, *high iden* relates to +1SD of identification.\*\*p <.01.

Figure 7

Peer Mentor: Moderated Mediation Model - Effects for Each Pathway



*Note.*  $R^2$ = .39. *Low iden* relates to -1SD of identification, *high iden* relates to +1SD of identification. \*\*p <.01.

#### Discussion

This study tested whether trusting one's mentor mediates the relationship between a mentor's immediacy and a student's communication with their mentor outside of class about

personal concerns. Furthermore, it was assessed whether this relationship is moderated by one's identification with the mentor. We found support for the moderated mediation model for both faculty mentor and peer mentor and see differences between type of mentor. The findings will be discussed below, together with their implications.

#### **Theoretical Implications**

Looking at Hypothesis 1, we see a positive direct relationship between immediacy and OCC<sub>p</sub>, which is in line with previous research (Faranda, 2015; Fusiani, 1994; Jaasma & Koper, 1999; Khan et al., 2015). Nuancing this relationship, trust in the mentor seems to underpin the occurrence of OCC<sub>p</sub> when a mentor is immediate, though it does not fully explain this relationship. Previous research had already established direct positive links between the examined variables; we found that trust seems to connect immediacy and OCC<sub>p</sub>, which brings new insight. Arguably, the more immediate the mentor, the more trust is established, the more the student confides in their mentor.

Differentiating between faculty mentor and peer mentor with regards to Hypothesis 1a, all effects seem to be higher for the faculty mentor, specifically the effect of immediacy on trust, of trust on OCC<sub>p</sub>, as well as the indirect relationship of immediacy on OCC<sub>p</sub> through trust. For the faculty mentor, a larger part of the relationship between immediacy and OCC<sub>p</sub> is explained by mentor trust than for the peer mentor. Overall, these findings indicate that immediate communication skills are especially important for the faculty mentor to establish a trusting environment. It also appears that one needs to trust one's faculty mentor more than one's peer mentor to be willing to engage in OCC<sub>p</sub>, as this person has more hierarchical differences (Humberd & Rouse, 2016) and is therefore at a larger distance to the student than the peer mentor.

Regarding Hypothesis 2, identifying with one's mentor modifies and further refines the link between immediacy and trust. Even though immediacy positively influences trust across all identification levels, immediacy has a stronger positive effect on trust when

identification with the mentor is low. Hence, as identification increases, the positive impact of immediacy on trust weakens. Overall, identification also seems to weaken the indirect effect of immediacy on OCC<sub>p</sub> through trust.

When identification is low, immediacy appears to highly contribute to building a trusting environment. As identification increases, however, the impact of immediacy on trust is not as strong. Arguably, when identification already forms trust, as it has been suggested by Humberd and Rouse (2016), less immediacy is necessary to establish trust. Seemingly, when identification is higher, trust might be implicit, making explicitly trusting someone less necessary. Moreover, when highly identifying with the mentor, factors beyond situational mentor immediacy may become more influential in determining trust, especially profound identification-related factors, such as group membership or common interests. Looking at this interaction from another perspective, when immediacy is high, the impact of identifying with a mentor on trust is relatively low, compared to when immediacy is low. Thus, when immediacy already highly impacts trust, identification is not needed as much to establish trust. Arguably, either immediacy (Frymier & Houser, 2000; Jaasma & Koper, 1999) or identification (Humberd & Rouse, 2016) is necessary to establish trust. Still, having a highly immediate mentor who one highly identifies with is the best combination for forming a trusting student-to-mentor relationship.

Moreover, there seems to be a difference between faculty mentor and peer mentor concerning the moderation. It becomes visible that the impact of identification is stronger for the faculty mentor, so that it seems to have a larger influence on the association between immediacy and trust. Hence, this signals that for the faculty mentor, identification seems to play a more important role in the development of trust, compared to the peer mentor. Also, the overall impact of immediacy on OCC<sub>p</sub> is more strongly affected by identification for faculty mentor than for peer mentor. These findings imply the more central role of identifying with one's faculty mentor compared to one's peer mentor, possibly because identification with

one's peer mentor is generally high and implicit. This aligns with Collier's (2017) view, arguing that identification with a peer mentor should be easier due to a shared perspective, both mentor and mentee being students.

#### **Practical Implications**

Overall, it becomes clear that the immediacy behaviors of mentors are crucial in establishing a safe environment for students. This environment can potentially help students to open up and to tackle unique personal challenges especially in their first year of university when using their mentors as a resource to talk to. As immediacy seems to be a crucial ingredient to forming trusting relationships that can be cultivated on campus, immediacy behaviors should be taught to mentors as a soft skill and should be seen as an important part of their role. Also, one could educate mentors, especially faculty mentors, further in a way that they express their similarities with their students more often so that students can identify with them more. Eventually, together with immediacy behaviors of the mentors, a highly trusting student-to-mentor relationship can be established. This can ultimately help students with their transition to university as well as other personal issues since they are more likely to engage in OCC<sub>p</sub> with their mentors and use them as a source of social support in times of change.

#### Limitations

As a convenience sample of first year psychology students at the University of Groningen was used to investigate the hypotheses of the current study, the results might only be significant for this specific university and might also differ for other study programs. Thus, this sampling method provides limited generalizability of the findings. Future research could tackle this issue by using a more rigorous research design. For this, one could try to reach more students from different universities as well as from more study programs, all of which make use of a combination of faculty mentors and peer mentors. This could reduce the potential bias that might be present because just one research university was looked at.

Furthermore, as the study was conducted in a Western sample, the results might not apply to other groups. When comparing a Chinese and a US sample, Zhang (2006) has found crucial cultural differences regarding OCC and its link to immediacy, which might apply to our model too. Therefore, one needs to test whether the found effects are also present in culturally different samples.

Another limitation is that this study was conducted as an online survey. Even though we looked at the data for response sets and other biases, some participants might still have not filled out the survey in a serious manner or might have simply randomly selected an answer, as they were not observed while completing the survey. Nevertheless, the large sample size of the study buffers against such biases. Furthermore, the correlational design of the study does not let us draw any causal conclusions of the relationships between the variables involved. Therefore, support can only be found for a positive relation between the variables but not for an actual influence of one variable on the other. However, as the findings indicate a mediation which can suggest causality, and the variance explained by the variables is quite large, one can still assume that the found associations are meaningful. To prevent the limitations resulting from a correlational as well as the online survey design, future research could set up an experiment, manipulating the immediacy behaviors of mentors and testing its effect on student trust as well as OCC, allowing for causal conclusions.

#### **Future Research**

Future research could investigate the effect of other factors that might come into play when talking to one's mentor outside of class, such as additional mentor characteristics like the mentor's gender (Jaasma & Koper, 2002; Nadler & Nadler, 2001), the mentor's empathy (Nadler & Nadler, 2001), or a mentor's self-disclosure (Cayanus & Martin, 2004), which all have been found to be linked to OCC. Specifically, self-disclosure by a mentor indicates that they are open for personal talk and could potentially trigger a reciprocal reaction from the students, also confiding in their mentor.

It has also been suggested that the communicative traits of students, such as cognitive flexibility or communication apprehension influence their OCC with an instructor (Martin & Myers, 2006). Similarly, Mansson et al. (2012) found that student's argumentativeness as well as assertiveness positively correlate to their engagement in OCC. Furthermore, other student characteristics, such as the student's personality, might influence whether they engage in OCC, considering that extroverted students might be more likely to open up to mentors than introverted students. This shows that not only the behavior and traits of the mentor need to be looked at for potential explanatory factors of OCC, but also characteristics of the student, which is another possibility for future research to expand upon.

Lastly, looking at differences between faculty and peer mentors in general, future research could consider more factors that might explain why students still confide more in their peer mentor compared to their faculty mentor. Specifically, one could look at the perceived power distance, possibly influencing one's OCC with a mentor. As a peer mentor is not perceived to be at a large distance, they may be trusted and therefore confided in more. Moreover, peer mentors might be confided in more as they share more mutual experiences with the peer mentor compared to their faculty mentor. Furthermore, contact to the peer mentor might generally be seen as more informal since they are more accessible, especially if they for example have a group chat where students can text them any time. Overall, a more sophisticated model regarding the predictors of OCC is needed, so that it can be promoted even more across campuses. Further investigating factors that may distinguish the occurrence of OCC with faculty mentors compared to with peer mentors is crucial so that the different mentors can aid students in the most effective way.

#### Conclusion

The present research brings novel insight regarding the underlying factors of the relationship between mentor immediacy and OCC, strengthening the argument that immediacy behaviors of a mentor influence trust in the mentor which in turn influences a

student's OCC with their mentor. This reinforces the notion that mentors' communicative behaviors (i.e., being immediate) are essential to promoting at trusting relationship between student and mentor, as they signal the mentor's availability for personal talks outside of class. Moreover, identifying with a mentor and perceiving them as similar further helps students to trust their mentors and makes personal conversation more likely. Specifically, identifying with one's mentor seems to be especially important for establishing a trusting student-to-mentor relationship when the mentor does not show many immediacy behaviors. Lastly, looking at insights regarding the differences between faculty and peer mentors, faculty mentors need to afford more immediate communication behaviors to establish the same connection to their students compared to the peer mentor.

Overall, our findings suggest that a mentor's immediacy behaviors in class and mentor identification can help promote a trusting and interpersonal student-to-mentor relationship.

This can encourage students to confide in their mentor more as they feel more comfortable, ultimately helping a student navigate ongoing challenges and transition to university.

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### Appendix

Figure 1

Verbal and Nonverbal Immediacy Scale (Kwitonda, 2017)

Please answer the following questions regarding your faculty mentor

	(1) Never	(2) Sometimes	(3) About half the time	(4) Most of the time	(5) Always
1. Asks questions or encourages students to talk	0	0	0	0	0
2. Smiles at the class while talking	0	0	0	0	0
Asks how students feel about the class (assignment, due date or discussion topics)	0	0	0	0	0
4. Uses monotone/dull voice when talking to the class	0	0	0	0	0
5. Praises students' work, actions or comments	0	0	0	0	0
6. Asks questions that solicit viewpoints or opinions	0	0	0	0	0
7. Refers to class as 'our' class or what 'we' are doing	0	0	0	0	0
8. Smiles at individual students in the class	0	0	0	0	0
9. Has a very relaxed body position while talking to the class	0	0	0	0	0
10. Addresses students by name	0	0	0	0	0
11. Invites students to telephone or meet with him/her outside of class if they have questions or want to discuss something	0	0	0	0	0
12. Uses a variety of vocal expressions when talking to the class	0	0	0	0	0
13. Uses humor in class	0	0	0	0	0
14. Stands behind the podium or desk while teaching	0	0	0	0	0
15. Looks at board or notes while talking	0	0	0	0	0
16. Moves around the classroom while teaching	0	0	0	0	0
17. Provides feedback on my individual work through comments on papers, oral discussions, etc	0	0	0	0	0
18. Gets into discussions based on something a student brings up even when this doesn't seem to be part of his/her lecture plan	0	0	0	0	0
19. Gestures while talking	0	0	0	0	0
20. Sits on a table or chair while talking	0	0	0	0	0
21. Gets into conversations with individual students before or after class	0	0	0	0	0
22. Refers to class as 'my' class or what 'l' am doing	0	0	0	0	0
23. Smiles at individual students in the class	0	0	0	0	0

Figure 2
Student Trust in Faculty Scale (STF; Forsyth et al., 2012)

On the scales below, indicate your feelings about your faculty mentor

	(1) Strongly disagree	(2) Somewhat disagree	(2) Somewhat agree	(3) Strongly agree
1. My faculty mentor is always ready to help me	0	0	0	0
2. My faculty mentor is easy to talk to	0	0	0	0
3. I feel well cared for by my faculty mentor	0	0	0	0
My faculty mentor always does what they are supposed to do	0	0	0	0
5. My faculty mentor really listens to me and my fellow students	0	0	0	0
6. My faculty mentor is always honest with me	0	0	0	0
7. My faculty mentor does a fantastic job	0	0	0	0
8. My faculty mentor is good at teaching	0	0	0	0
9. My faculty mentor has high expectations for me	0	0	0	0
10. My faculty mentor does NOT care about me	0	0	0	0
11. I learn a lot from my faculty mentor	0	0	0	0
12. I can depend on my faculty mentor	0	0	0	0

Figure 3

Out of Class Communication Scale (Faranda, 2015)

Please answer the following questions regarding your faculty mentor

	(1) Strongly disagree	(2) Disagree	(3) Somewhat disagree	(4) Neither agree nor disagree	(5) Somewhat agree	(6) Agree	(7) Strongly agree
Talking to my faculty mentor outside of class is enjoyable.	0	0	0	0	0	0	0
When I see my faculty mentor outside of the classroom, I do not hesitate to engage them in conversation.	0	0	0	0	0	0	0
3. I would have no problem seeking career advice from my faculty mentor.	0	0	0	0	0	0	0
4. I enjoy learning more about my faculty mentor	0	0	0	0	0	0	0
5. After the course ends, I will make it a point to stay in touch with my faculty mentor.	0	0	0	0	0	0	0
6. I would like to get to know my faculty mentor better.	0	0	0	0	0	0	0
If needed, I feel comfortable asking my faculty mentor for a letter of recommendation or to serve as a reference.	0	0	0	0	0	0	0
8. I find it helpful to talk to my faculty mentor outside of the classroom.	0	0	0	0	0	0	0
9. When I have a question, I do not hesitate to contact my faculty mentor.	0	0	0	0	0	0	0
10. I seek personal advice from my faculty mentor.	0	0	0	0	0	0	0
11. Getting to know my faculty mentor is critical to my success in their class.	0	0	0	0	0	0	0
12. Getting to know my faculty mentor will result in a better grade.	0	0	0	0	0	0	0
13. I made it a point to stop by my faculty mentor's office early in the semester.	0	0	0	0	0	0	0

# Figure 4 Identification Scale, adapted (Ybema & Buunk, 1995)

On the scale below, please indicate your feelings about your faculty mentor.

	(1) Strongly disagree	(2) Disagree	(3) Somewhat disagree	(4) Neither agree nor disagree	(5) Somewhat agree	(6) Agree	(7) Strongly agree
1) I find my faculty mentor likeable.	0	0	0	0	0	0	0
<ol><li>I would like to spend time with my faculty mentor outside of class.</li></ol>	0	0	0	0	0	0	0
<ol><li>I recognize something of myself in my faculty mentor.</li></ol>	0	0	0	0	0	0	0
4) I think I am similar in some ways to my faculty mentor.	0	0	0	0	0	0	0