

**The Role of Mentors' Immediacy Behaviors in Mentees' Sense of Belonging and  
Well-Being**

Nives Mandić

S4273761

Department of Psychology, University of Groningen

PSB3E-BT15: Bachelor Thesis

Group number: 2324\_2a\_14

Supervisor: dr. S.M. Donofrio

Second evaluator: prof. dr. R.R. Meijer

In collaboration with: Sasha Correa, Maximillian Gebauer, Luisa Staege, Katrine Stokke, and

Ale Siebert

June 30<sup>th</sup> 2024

*A thesis is an aptitude test for students. The approval of the thesis is proof that the student has sufficient research and reporting skills to graduate, but does not guarantee the quality of the research and the results of the research as such, and the thesis is therefore not necessarily suitable to be used as an academic source to refer to. If you would like to know more about the research discussed in this thesis and any publications based on it, to which you could refer, please contact the supervisor mentioned.*

### **Abstract**

There is a scarcity of literature comparing how the classroom approaches of different mentor types affect student soft outcomes, leaving it unclear whether certain mentor types have a more positive impact on mentees. The current study addressed this gap by examining the dynamics between mentor immediacy and students' sense of belonging and emotional well-being within a university course, contrasting peer mentors with faculty mentors. A total of 180 undergraduate psychology students participated, providing their perceptions of faculty and peer mentors' immediacy, as well as reporting their own sense of belonging and well-being in their classes. We predicted and found that mentor immediacy significantly correlates with a higher sense of belonging and well-being among mentees. Upon further inspection, peer mentor immediacy emerged as the stronger predictor for both outcomes, whereas faculty mentor immediacy had only a significant but slightly weaker association with mentees' well-being. Our findings align with Self-Determination Theory, which posits that a supportive and secure environment is essential for attaining a sense of belonging and well-being. Moreover, the results underscore that immediacy is an important component of the mentoring toolbox that should be prioritized in mentor training, and highlight the complementary roles of immediate peer and faculty mentors, emphasizing the need for their collaboration.

*Keywords:* immediacy, sense of belonging, well-being, faculty mentors, peer mentors

## **The Role of Mentors' Immediacy Behaviors in Mentees' Sense of Belonging and Well-Being**

According to Self-Determination Theory, well-being is achieved through the fulfillment of the needs for autonomy, competence, and relatedness (Ryan & Deci, 2000). While the university experience provides a prime opportunity for young adults to develop a sense of independence and mastery, the pursuit of higher education extends beyond academic achievements and obligations. Specifically, the university experience is further enriched by the relationships and social opportunities formed within the academic context, offering significant potential for students to fulfill their need for relatedness and ultimately achieve overall well-being.

Across certain universities, relationships within the academic context might be further fostered through a mentoring program, wherein closer collaborations between students and staff members are formed. In higher education, mentorship can be defined as a union where mentors, typically more experienced and knowledgeable individuals, provide academic assistance, emotional support, and guidance to their less experienced, yet eager to learn and develop, mentees (Niehoff, 2006). Although mentors typically hold various ranks within educational institutions and encompass a wide range of roles, this project will specifically investigate the impacts of faculty and peer mentors.

While both mentor types are committed to enhancing mentees' performance and academic growth over an extended period, they do so through different lenses. Peer mentors (PMs) draw from their current, senior, and more advanced student status (Bulte et al., 2007). In contrast, faculty mentors (FMs) utilize their expertise as professors, researchers, doctoral students, or other faculty members whose knowledge is more extensive and often specialized in a

certain field (Cronan-Hillix et al., 1986). The notion that mentors are there to guide, support, and advise their mentees is not unidirectional. In the eyes of mentees, FMs are perceived as counselors, exemplars, and idea providers (Dimitriadis et al., 2012). Conversely, PMs are viewed as educational guides, positive examples to peers, and connectors linking students with campus resources and information (Colvin & Ashman, 2010).

Numerous studies have identified key characteristics of desirable mentors. Good mentors are described as being people-oriented (Allen & Poteet, 1999; Heeralal, 2014; McKimm et al., 2003) and possessing interpersonal skills evident in their ability to create a safe and comfortable environment (Das et al., 1996), where support and guidance are readily available (Sambunjak et al., 2009). Moreover, mentors are valued for their positive attitude (Gorham & Cristophel, 1992; Huybrecht et al., 2011), sincerity (Heeralal, 2014; McKimm et al., 2003; Sambunjak et al., 2009), approachability and warmth (McKimm et al., 2003), willingness to accommodate and respond to mentees' needs (Heeralal, 2014; McKimm et al., 2003; Sambunjak et al., 2009), and ability to incorporate humor into interactions (Cronan-Hillix et al., 1986; Das et al., 1996).

Thus, beyond the confines of lecture halls and textbooks, students navigate a complex system where a friendly smile, genuine interest in their progress, and warm demeanor of mentors collectively offer more positive educational experience to students. Many of these positive mentor attributes align closely with the concept known as immediacy, which will be further explored in the next section.

### **Immediacy**

Mehrabian (1971) was among the pioneers in investigating immediacy, which eventually came to be defined as a collection of verbal and nonverbal behaviors that convey warmth,

approachability, and engagement, ultimately shaping positive interpersonal interactions. Within the realm of mentorship, mentors exemplify verbal immediacy by soliciting mentees' opinions and needs, encouraging dialogue, interacting with mentees both inside and outside the classroom, acknowledging mentees' accomplishments and contributions, and incorporating humor and personal experiences in their interactions (Gorham et al., 1988). Nonverbal immediacy, though more subtle, is equally crucial and is achieved through maintaining appropriate eye contact, adopting open body language while facing students, moving around the classroom, using gestures, employing varied intonation, and smiling at individuals they mentor (Gorham et al., 1988).

The importance of immediacy lies in the notion that adopting such a proactive approach, centering mentors' time and effort around relationship and rapport building with their mentees, contributes to the development of mentor-mentee relationships (McMahon, 2020). Ultimately, the established quality of the mentor-mentee relationship is what most reliably predicts various student outcomes (McClain et al., 2021; Solomon et al., 1996). Indeed, according to Self-Determination Theory (Ryan & Deci, 2000), the quality of and fit to one's social context are vital for optimal functioning. Therefore, it can be argued that a mentor who demonstrates immediacy might have a potential to positively influence students' sense of belonging, and subsequently, boost their well-being (Ryan & Deci, 2000; Hausmann et al., 2009).

### **Sense of Belonging**

Belonging is a fundamental human need, defined as the sense of being valued, acknowledged, and respected within a community (Baumeister & Leary, 1995). In an educational context, belonging translates into feeling a sense of fit, affiliation, and integration within the chosen university (Hausmann et al., 2009). Mentorship in higher education has been

shown to nourish this need, resulting in a stronger sense of belonging among mentored students compared to those without mentors (Graham & McClain, 2019), particularly during the transition from secondary to higher education (Allen et al., 1999). A viable argument explaining the strengthened sense of belonging is that FMs and PMs provide social support, facilitate access to resources, and promote campus involvement (Collier, 2017; Dimitriadis et al., 2012). This support enables students to navigate academic and social opportunities more effectively, empowering them to seek assistance, become more resourceful, and feel assured in their mentor's support (Colvin & Ashman, 2010; Liu et al., 2022). Perhaps as a result, mentored students often report stronger emotional ties to their university (Sanchez et al., 2006), a more robust support network, and greater integration into university culture (Colvin & Ashman, 2010; Yomtov et al., 2017). This connection, which may begin with one's mentor, can extend to feelings of classroom connectedness or a broader sense of belonging at the university level (Graham et al., 2022).

It is noteworthy that certain mentors' behaviors and characteristics have been identified as protective factors in facilitating student belongingness. Mentors' behaviors, such as, demonstrating warmth and encouraging student participation (Freeman et al., 2007), as well as fostering collaborative classroom dynamics, were the verbal and nonverbal immediacy behaviors most strongly associated with mentees' sense of belonging (Solomon et al., 1996). Additionally, mentors' intentional availability, inclusive behaviors and language, and welcoming demeanor helped mentees feel more acknowledged, valued, and respected, thereby strengthening their sense of fit within the academic community (Levett-Jones et al., 2009). Similarly, mentors' approachability and availability to discuss personal and academic matters significantly contributed to mentees' sense of belonging (Graham & McClain, 2019). Yomtov et al. (2017) found that mentors described as helpful, friendly, and approachable have been linked to a

significantly improved integration and connectedness among mentees. Finally, students guided by immediate mentors have been shown to be more inclined to seek assistance from mentors and faculty staff outside of class hours (Faranda, 2015), thereby sustaining and nurturing their sense of belonging and potentially expanding their social network.

### **Well-Being**

Well-being is a multifaceted concept, encompassing various aspects of one's current and overall state, including positive affect, fulfillment, meaning, and life satisfaction (Orsini, 2023). Applying this to the university context, student well-being can be defined as a combination of “positive mood and attitude, resilience, and satisfaction with self, relationships and experiences at school” (Noble et al., 2008, p.66). Various positive well-being outcomes among students have been found in relation to mentors' immediacy.

Academically, faculty and peer mentoring have been correlated with heightened student motivation (Colvin & Ashman, 2010; Furlich, 2016; Liu, 2021), with research showing that as mentors amplify their immediacy, students' motivation rises gradually (Christensen & Menzel, 1998; Christophel, 1990). Additionally, student in-class engagement and participation have been connected to mentors' use of verbal (Menzel & Carrell, 1999) and nonverbal immediacy (Zheng, 2021), with behaviors such as warmth, self-disclosure, open body language, and humor being strong predictors (Roberts & Friedman, 2013; Voelkl, 1995). Immediate mentorship has also been associated with greater student initiative, improved mastery of the material, and more positive classroom attitudes (Christensen & Menzel, 1998; Christophel, 1990; Gorham, 1988; Witt et al., 2004). Consequently, faculty and peer mentoring have been linked to better academic performance, higher grade point averages, increased persistence rates (Campbell & Campbell,



1997; Colvin & Ashman, 2010; Graham et al., 2022), increased interest in course content, and stronger determination to complete the program (Liu et al., 2022).

On a more personal front, mentors' immediacy has been connected to increased positive affect (Baker, 2004). Mentors' behaviors such as showing affection, providing support, and actively engaging in students' progress have been shown to contribute to greater happiness and enthusiasm (Skinner & Belmont, 1993) as well as greater satisfaction with and enjoyment of their chosen program and university (Cronan-Hillix et al., 1986; Graham et al., 2022; Sanchez et al., 2006). Additionally, psychology students who received mentoring experienced a significant decrease in negative affect compared to their self-guided peers (Collings et al., 2014). Specifically, mentors' immediacy appeared to lessen mentees' emotional and mental exhaustion (Raymond & Sheppard, 2017), increase resilience to stress (Gholamrezaee & Ghanizadeh, 2018), and reduce student distress and anxiety, particularly during stressful periods like examinations (Snowden & Hardy, 2013). Given these benefits, it is not surprising that mentoring has been associated with maintaining mentees' self-esteem (Collings et al., 2014; Gholamrezaee & Ghanizadeh, 2018), strengthening their confidence (Liu et al., 2022), and enhancing their sense of efficacy (Colvin & Ashman, 2010; Raymond & Sheppard, 2017). In fact, employed immediacy has been linked to mentees' reports of a heightened sense of competence, purpose, and meaningfulness (Cakir, 2015), as well as an increased ability to feel and perform closer to their full potential (Gholamrezaee & Ghanizadeh, 2018).

### **Tying It All Together – Immediacy, Sense of Belonging, and Well-Being**

While a significant body of research has investigated the effects of mentor immediacy on various mentee outcomes, much of the existing literature has primarily examined the individual impacts of either peer or faculty mentoring. There remains a paucity of studies exploring and

comparing the effects of both immediate FMs and PMs on the same class of students, with a few exceptions. Vaughan & Macfarlane (2015) investigated the impact of peer and faculty mentoring in a practical class, finding no significant differences between the two mentor types in terms of their instructional and group guidance abilities. The study highlighted that both FMs and PMs demonstrated comparable teaching quality, particularly regarding their ability to express interest in students, communicate effectively with groups and individuals, and maintain approachability and availability for addressing inquiries and concerns. Other studies have similarly shown that mentees acquire skills and knowledge equally effectively from both PMs and FMs (Rees et al., 2016).

While limited literature suggests no significant difference in the impact of PMs and FMs on *teaching quality* or *mentees' academic progress*, PMs possess certain characteristics that distinguish them from FMs and connect them with their mentees, such as shared experiences, identity, and perspective. Such commonalities might instill a sense of closeness, relatability, and trustworthiness among mentees (Bulte et al., 2007; Collier, 2017). Combined with the warmth, approachability, and engagement conveyed through immediacy, this raises the question of whether the influence of immediate PMs might outweigh that of immediate FMs on mentees' *personal outcomes*, such as belonging and well-being.

### **The Current Study**

Taken together, existing evidence suggests that both PMs' and FMs' immediacy are linked to a heightened sense of belonging and improved well-being among mentees. However, these conclusions primarily originate from distinct studies that separately investigated the effects of FM and PM immediacy on these outcomes. This study offers a unique perspective by enabling a direct comparison of the effects of both PMs' and FMs' immediacy on students' perceived

belonging and well-being within a single sample, allowing exploration of how immediacy from different mentors contributes to the classroom environment and fulfillment of universal student needs. Given the anticipated positive associations with the outcome variables, we propose the following hypotheses:

**Hypothesis 1.** Mentor immediacy will positively relate to mentees' sense of belonging.

**Hypothesis 2.** Mentor immediacy will positively relate to mentees' well-being.

While we expect positive relationships among the examined constructs, we also anticipate variations in the strength of these effects. Given the literature suggesting greater similarity and closeness between PMs and mentees, we hypothesize that PM immediacy will have a stronger impact on the outcome variables than FM immediacy. Therefore, we propose the following:

**Hypothesis 3.** PM immediacy will be more strongly associated with mentees' sense of belonging compared to FM immediacy.

**Hypothesis 4.** PM immediacy will be more strongly associated with mentees' well-being compared to FM immediacy.

## **Methods**

### **Participants**

To be eligible, participants had to be bachelor's psychology students at the University of Groningen, enrolled in Academic Skills – a first-year practical course focused on acquiring research and academic writing skills, run in small groups and led by both a PM and FM. A total of 224 students participated, with 44 excluded upon closer inspection: 21 did not complete the

survey, 13 did not allocate sufficient time to complete the survey (i.e., less than 500 seconds), seven did not meet the inclusion criteria, and two were previews submitted by the research team. The final sample comprised 180 participants whose responses were included in the analyses. Of these participants, 127 identified as female, 47 as male, two as other, and four preferred not to disclose this information. The participants' ages ranged from 17 to 35 years ( $M = 19.77$ ,  $SD = 1.96$ ). Additionally, participants were asked to share their nationalities: 65% were Dutch, 9.4% were German, and the remaining 25.6% were from other countries (e.g., Romania, Slovakia, Poland).

### **Study Design and Procedure**

This study was part of a larger bachelor's thesis project on the impact of FMs and PMs on student outcomes and was conducted under the supervision of the project's coordinator. The present study employed a cross-sectional, correlational design to examine the proposed relationship between FM/PM immediacy and students' sense of belonging and well-being. Since the mentors' immediacy was not directly manipulated or altered by the study design, it can be inferred that the study was observational in nature.

Prior to data collection, the study received approval from the Faculty Ethics Committee. Data were subsequently collected via an online Qualtrics survey (Qualtrics, Provo, UT), which was available to students both directly and through the SONA program (Sona Systems, n.d.), a platform allowing students to participate in research in exchange for course credits. Initially, convenience sampling was employed, and students were recruited via the SONA platform. To reach the desired sample size, the team also employed snowball sampling, sharing the Qualtrics link with groups of students who met the inclusion criteria. Participation in the study was

voluntary and there was no monetary compensation. The only remuneration involved was course credits for students who accessed the survey through SONA.

To participate, students had to meet the prerequisite of being bachelor's psychology students enrolled in the aforementioned course. Those who met this requirement could proceed, while others were redirected to the end of the survey. Before commencing the questionnaire, participants were informed about the research aim to investigate students' perceptions of mentoring experiences and personal values. They were also informed that their participation was voluntary and anonymous and were assured of their right to withhold consent or withdraw from the study at any time without repercussion. Participants were provided with the thesis supervisor's contact information for any questions regarding the research project. Subsequently, participants' consent was obtained. Upon consenting, participants were asked to provide demographic information, including gender, nationality, and age. Following this, students were instructed to complete a series of questionnaires. The questionnaire evaluating immediacy was presented first, with items repeated to allow separate evaluations of PMs' and FMs' immediacy. This was followed by a questionnaire assessing students' perceptions of their well-being in the context of their Academic Skills classroom and another questionnaire evaluating their sense of belonging to the same class. Each participant completed the same questionnaire in a fixed order, and the estimated completion time was approximately 20 minutes. At the end of the questionnaire, participants were thanked for their time and participation.

### **Materials**

For a comprehensive overview of the items evaluating mentors' immediacy as well as mentees' sense of belonging and well-being, readers can consult the Appendix.

### ***Immediacy***

To assess students' perceptions of immediacy behaviors exhibited by both FM and PM immediacy, Kwitonda's (2017) verbal and non-verbal immediacy scales were integrated into a single instrument. Originally, the scale comprised 23 items, however, nine items were excluded due to item similarity determined on the basis of face validity. The final instrument comprised 14 items, with six focusing on nonverbal immediacy and the remainder on verbal immediacy behaviors. Examples of items from the nonverbal immediacy subscale included statements such as "Has a very relaxed body position while talking to the class," while items from the verbal immediacy subscale included statements such as "Gets into conversations with individual students before or after class". Each item was presented twice, separately assessing FMs' and PMs' immediacy behaviors. Responses were recorded using a 5-point Likert scale ranging from *never* to *always*. Overall, the instrument is a standard questionnaire for assessing immediacy in educational settings and has previously demonstrated validity and reliability (Kwitonda, 2017), yielding a good reliability coefficient of 0.72 in this project.

### ***Sense of Belonging***

To gauge students' sense of belonging within their class, we utilized the Classroom Community Scale (CCS), adopted from Rovai (2002). We focused exclusively on the Connectedness subscale of this instrument, consisting of 10 items designed to evaluate students' sense of connection with others in their class, such as "I feel confident that others will support me." Each item was rated using a 5-point Likert scale, ranging from *strongly disagree* to *strongly agree*. Overall, the CCS is recognized for its reliability in measuring students' sense of belonging (Ahmady et al., 2018), as evidenced by a Cronbach's alpha coefficient of 0.86 in this project, indicating strong internal consistency.

### ***Well-Being***

To assess students' sense of well-being, we employed an adapted version of the PANAS scale (Watson et al., 1988). Specifically, we utilized the Positive Affect (PA) subscale, as our primary interest was based on evaluating students' perceptions of positive mood within the classroom environment. The PA subscale consisted of 10 items, each measuring the extent to which participants experience various positive emotions in their classroom context. These emotions were captured through adjectives such as *interested*, *determined*, and *enthusiastic*, and each was rated on a 5-point Likert scale, spanning from *very slightly or not at all* to *extremely*. The PA subscale has consistently demonstrated strong reliability as a measure of well-being (Crawford & Henry, 2004), demonstrating strong reliability ( $\alpha = 0.88$ ) in this study.

### **Results**

To test the hypotheses and analyze the data, IBM SPSS Statistics software (version 28) was utilized. Simple linear and stepwise regression were employed as the primary analysis methods, with FM immediacy and PM immediacy as independent variables, and students' sense of belonging and well-being as dependent variables.

### **Data Preparation and Preliminary Analyses**

Prior to the main inferential testing, preliminary analyses were conducted. First, invalid or missing cases were removed as previously described. Second, to ensure accurate measurement and analyses, reverse coding was applied to both immediacy variables and the sense of belonging variable to account for negatively phrased items in the respective questionnaires. Subsequently, reverse-coded items were combined with the remaining positive items to create composite variables for each variable of interest. Third, the assumptions of simple linear regression – independence, normality, linearity, and homoscedasticity – were assessed to verify the

appropriateness of this analytical method. All assumptions were met, confirming the validity of the chosen analysis.

### Descriptive Statistics

Means, standard deviations, and Pearson's correlations for PM immediacy, FM immediacy, students' sense of belonging, and well-being are presented in Table 1.

**Table 1**

*Sense of Belonging, Well-Being, Peer and Faculty Mentor Immediacy: Pearson's Correlations and Descriptive Statistics*

	1	2	3	4	M	SD
1. Sense of Belonging	-				32.71	5.99
2. Well-Being	.38**	-			28.70	7.13
3. PM immediacy	.39**	.29**	-		52.36	6.23
4. FM immediacy	.07	.27**	.41**	-	48.98	8.21

*Note:* Unstandardized correlation coefficients are reported, \*\* $p < .001$ ,  $N = 177$  for Sense of Belonging and  $N = 180$  for Well-Being

### Regression Analyses

To test Hypotheses 1 and 2, two separate linear regressions were conducted. The first regression analyzed the relationship between collective immediacy and students' sense of belonging, while the second regression assessed the relationship between collective immediacy and students' well-being.

Overall, with both FM and PM immediacy included in the regression model, the two independent variables collectively accounted for a significant portion of the variance in students' sense of belonging ( $R^2 = .17$ ,  $F(2, 174) = 17.25$ ,  $p < .001$ ), indicating that immediacy is a significant predictor of students' sense of belonging.



Similarly, when both FM and PM immediacy were included in the regression model, these two independent variables jointly explained a significant portion of variance in students' well-being ( $R^2 = .12$ ,  $F(2, 177) = 11.49$ ,  $p < .001$ ), suggesting that immediacy is a significant predictor of students' well-being.

To examine *Hypothesis 3* and *4*, and thus assess the association between immediacy from different mentor types and students' sense of belonging and well-being, we conducted two separate stepwise regression analyses. In these analyses, we progressively added PM immediacy and FM immediacy to the models predicting sense of belonging and well-being, respectively. This approach allowed us to assess each predictor's unique contribution, model fit, and explanatory power for the outcome variables.

The regression analysis revealed that a model including PM immediacy as the sole predictor was statistically significant ( $F(1, 175) = 31.85$ ,  $p < .001$ ), explaining 15.4% of the variance in students' sense of belonging. Adding FM immediacy to the model resulted in a small and nonsignificant increase in the explained variance ( $F(1, 174) = 2.39$ ,  $p = .124$ ), suggesting that FM immediacy does not significantly contribute to predicting students' sense of belonging beyond PM immediacy. More concretely, the analysis showed that PM immediacy is a statistically significant predictor of students' sense of belonging ( $\beta = .39$ ,  $t = 5.64$ ,  $p < .001$ ), a significance that persists even after accounting for FM immediacy ( $\beta = .44$ ,  $t = 5.79$ ,  $p < .001$ ). Conversely, FM immediacy did not significantly predict sense of belonging ( $\beta = -.12$ ,  $t = -1.55$ ,  $p = .124$ ) in the presence of PM immediacy. These findings highlight that PM immediacy as a sole predictor has a robust and significant relationship with and is a stronger predictor of sense of belonging compared to FM immediacy.

Similarly, incorporating PM immediacy alone into the model significantly predicted students' well-being ( $F(1, 178) = 17.28, p < .001$ ), accounting for 8.9% of the variance. The addition of FM immediacy to the model resulted in a significant increase in the explained variance ( $F(1, 177) = 5.27, p = .023$ ), indicating that both independent variables were important for prediction of well-being. Specifically, PM immediacy was found to be a statistically significant predictor of students' well-being ( $\beta = .34, t = 4.16, p < .001$ ), a significance that persisted even after accounting for FM immediacy ( $\beta = .26, t = 2.90, p = .004$ ). Moreover, FM immediacy was found to be a significant predictor of students' well-being as well ( $\beta = .16, t = 2.29, p = .023$ ). These findings suggest that the optimal model predicting students' well-being includes both PM and FM immediacy, where PM immediacy must be acknowledged as the stronger predictor.

**Table 2**

*Models Comparing Peer Mentor (PM) and Faculty Mentor (FM) Immediacy Predictors for Sense of Belonging and Well-Being*

	Model	R Square	Adjusted R Square	R Square Change	F Change	df	Sig. F Change
Sense of Belonging	1	.154	.149	.154	31.845	1, 175	< .001
	2	.165	.156	.011	2.393	1, 174	.124
Well-Being	1	.297	.083	.089	17.284	1, 178	< .001
	2	.339	.105	.026	5.272	1, 177	.023

*Note:* In Model 1, Peer Mentor (PM) immediacy was the sole predictor for both Sense of Belonging and Well-Being. In Model 2, both Peer Mentor (PM) and Faculty Mentor (FM) immediacy were included as predictors for Sense of Belonging and Well-Being.

### **Discussion**

The present study investigated the impact of FM and PM immediacy on mentees' sense of belonging and well-being in their classes. We proposed significant positive correlations between immediacy and students' sense of belonging (Hypothesis 1) and well-being (Hypothesis 2). Additionally, given our sample allowed direct comparisons between PM and FM immediacy, we hypothesized that PM immediacy would more strongly predict sense of belonging (Hypothesis 3) and well-being (Hypothesis 4) compared to FM immediacy.

#### **General Impact of Immediacy**

The research findings lent support to the first hypothesis, demonstrating that the combined immediacy was significantly associated with higher levels of mentees' sense of belonging to their classes. Therefore, the current finding suggests that in response to mentors' verbal and nonverbal immediacy – such as promoting inclusive atmosphere, using engaging body language and voice features, and encouraging and praising student participation – these psychology undergraduates reported increased belonging to their class, evident in their perceptions of community spirit and confidence to rely on and receive support from their trusted community.

Similarly, the findings indicated a significant link between collective immediacy and increased mentees' well-being in their class, validating the second hypothesis. This discovery suggests that mentees who perceived their mentors as employing immediate approaches – such as taking time to address individual inquiries, using humor, and encouraging expression and involvement – also reported better psychological and emotional states during their class, reflected in reported improvements in their positive affect.

Overall, these findings indicate that immediacy is associated with a more positive and interconnected classroom environment. The notion that mentored students perceive a sense of fit, connectedness, and integration within the academic community in response to mentors' verbal and nonverbal immediacy is well-supported by existing literature (Freeman et al., 2007; Graham & McClain, 2019; Levett-Jones et al., 2009; Yomtov et al., 2017), and is evident across classes led by FMs and PMs. Similarly, our findings align with previous literature exploring the link between immediacy and well-being, demonstrating that immediate mentoring is associated with mentees' enhanced engagement (Roberts & Friedman, 2013; Zheng, 2021), enthusiasm (Skinner & Belmont, 1993), interest (Liu et al., 2022), and satisfaction (Graham et al., 2022; Sanchez et al., 2006), among other outcomes. Given that the instrument used to measure mentees' well-being in the present study assessed various dimensions of positive affect, it can be argued that our findings effectively encapsulate previously studied concepts, showing that mentees report experiencing heightened well-being in response to an immediate approach.

### **PM Immediacy as a Stronger Predictor**

Looking more closely, it was found that PM immediacy significantly and more strongly predicted mentees' sense of belonging compared to FM immediacy, thereby corroborating the third hypothesis. Specifically, when examining the impact on sense of belonging, PM immediacy emerged as the sole significant predictor, whereas FM immediacy did not contribute significantly to the prediction. This finding suggests that PMs who exhibited immediacy in their interactions were perceived as more effective than immediate FMs in fostering an environment that nurtures the need to belong among mentees.

Lastly, both PM and FM immediacy were found to significantly predict students' well-being, with PM immediacy emerging as the stronger predictor, thus substantiating the fourth

hypothesis. The finding further suggests that while FM immediacy is strongly linked to positive well-being outcomes, PM immediacy has a more pronounced effect. These results illustrate that the potential for mentees' well-being improvement is greater when a class is supported by both an FM and PM who demonstrate immediacy in their approach.

Taken together, the discussed findings corroborate the proposed idea that differences exist in the effects of FM and PM immediacy, indicating that immediate PMs seem to foster a stronger sense of connectedness and well-being. While this study is the first one to directly compare the effects of FM versus PM immediacy on soft student outcomes, several potential explanations can be considered for the observed effects.

One possible explanation is that mentees tend to connect better and are more receptive to hierarchically closer faculty staff (Collier, 2017). As senior students, PMs have a unique opportunity to leverage their current student status and recent first-year university experience, enabling them to more effectively guide new students through their new academic roles and impart advice, resources, and support that proved to be most valuable during PMs' own early university experiences (Bulte et al., 2007). Additionally, having recently been in a comparable position and successfully navigating comparable challenges might instill a sense of closeness and relatability among mentees (Collier, 2017). Therefore, unlike FMs, PMs' distinct knowledge and experience might enable them to develop mentoring relationships that may extend beyond academic matters, potentially enhancing bonding and positive outcomes for mentees. When this combination of relevant experience and shared perspective is coupled with an immediate demeanor conveying warmth, approachability, and genuine interest, mentees may experience a stronger sense of belonging and positive affect in classes where PMs are present.

Another explanation for these findings could be attributed to the differing levels of mentoring experience and training among PMs and FMs. In our study, PMs were mainly novice mentors who voluntarily applied for the position and received specialized training through a mandatory mentoring course focused specifically on learning how to foster an engaging environment and collaborative learning. FMs, on the other hand, may be assigned mentoring duties while having to balance other responsibilities such as research or clinical work. Additionally, FMs have varying levels of mentoring experience and typically do not receive the same specialized training as PMs. Given their intrinsic motivation, fresh enthusiasm, and specialized training, PMs might have given their best efforts and been better equipped to employ immediate approaches. This readiness could have enabled them to cultivate learning environments more oriented around building a sense of connectedness and well-being among class members.

### **Theoretical Implications**

The discussed findings and the wealth of past research highlight the notion that mentor immediacy makes a positive impact and underscore the importance of the quality of students' social context, aligning with the principles of Self-Determination Theory (Ryan & Deci, 2000). According to this theory, being in an environment that has a capacity for addressing, strengthening, and ultimately fulfilling the need to belong is a prerequisite for attaining psychological and emotional well-being. As such, immediacy can be seen as a powerful classroom tool that provides essential ingredients needed for mentees to benefit from a perceived sense of connectedness and improved well-being within their academic community.

### **Practical Implications**

Given the strong connections between immediacy and fundamental student needs, the potential of immediacy is noteworthy, prompting several recommendations. First, higher education institutions should consider raising awareness among teaching staff regarding the positive effects of an immediate approach on student outcomes. Therefore, as prerequisites for attaining mentoring positions, universities should consider organizing training sessions, workshops, or mandatory courses that should focus on teaching immediacy and its role in fostering a collaborative and positive classroom atmosphere. Moreover, institutions should recognize the importance of immediacy during mentor recruitment. By selecting mentors who are people-oriented, warm, approachable, and genuine, institutions could ensure the creation of high-quality mentoring relationships (Heeralal, 2014; McKimm et al., 2003; Sambunjak et al., 2009). This dual approach of education and careful selection could maximize the benefits of mentor immediacy on student outcomes.

Furthermore, the findings highlight the importance of classroom design that integrates both immediate FMs and PMs to maximize their respective strengths. On one hand, FMs support development of hard skills among mentees through their expertise and experienced guidance (Dimitriadis et al., 2012), while their immediate approach appears to boost positive affect among students. On the other hand, through their role of peer leaders and trusted confidants (Colvin & Ashman, 2010), PMs appear to complement the efforts of FMs and assist them in creating a welcoming academic environment that addresses mentees' need for belonging, which is vital for their psychological well-being. This synergy between FMs and PMs has a potential to optimize classroom outcomes, underscoring the importance for universities to prioritize the recruitment of PMs and their assignment to classes led by FMs.

### **Strengths and Limitations**

The current project presents several significant strengths. Firstly, the sample size was sufficiently large, providing robust statistical power, reducing the risk of type I or II errors, and thereby instilling greater confidence in our conclusions. Secondly, the project yielded significant findings that align with existing literature and current assumptions, confirming the notion that immediate mentorship approaches can have psychological and social benefits for mentees, ultimately offering practical implications for higher education institutions. Thirdly, while previous research on mentoring and immediacy has been informative, this study explored under-researched areas within the university context in greater depth. Owing to the unique context of our participants, all enrolled in a practical course led by both FMs and PMs, it was possible to conduct a direct comparison of the immediacy from both types of mentors on the outcome variables, ultimately determining which mentor's immediacy more strongly predicts these outcomes. To our knowledge, no previous studies have explored this aspect, making this study the first to draw such conclusions.

Like all studies, the present study faced certain limitations. Firstly, the study utilized self-reports to measure the variables of interest. Reliance on self-reports introduces the risk of participants being influenced by factors such as mood, motivation, misunderstandings, or social desirability, which can yield less accurate findings. Secondly, participants received course credits as compensation upon survey completion. Consequently, it is plausible that some participants were merely extrinsically motivated to participate which might have led to rushed or insufficiently attentive engagement. Thirdly, the study's correlational nature prevented us from drawing any causal conclusions, leaving uncertainty regarding whether immediacy *leads to* mentees' sense of belonging and well-being. Fourthly, the generalizability might be limited as



our sample mainly comprised WEIRD (Western, Educated, Industrialized, Rich, Democratic) individuals, with more than half originating from the Netherlands.

### **Future Research**

As noted, there are areas for improvement in the current project that future studies could address. Firstly, future research could overcome the limitations of a correlational design and self-reporting nature of the study. Considering that manipulating mentor immediacy in real life would be ethically challenging and experimental manipulation might create artificial conditions, a mixed-methods approach combining self-reported quantitative data with qualitative research could offer a more comprehensive strategy. This combined approach could provide nuanced insights into the reasons behind mentees' positive perceptions of immediacy and clarify why PM immediacy emerges as a stronger predictor of the outcome variables.

Secondly, our study focused exclusively on mentees' sense of belonging and well-being within a specific class. Considering that previous literature proposed the potential of class belonging to spread further (Graham et al., 2022), it would be valuable to explore how these perceptions extend beyond the classroom to campus-wide or broader levels of connectedness and psychological and emotional wellness. Additionally, future studies could operationalize well-being differently or more comprehensively, allowing for a deeper examination of aspects such as mentees' satisfaction or sense of meaningfulness and purpose, thereby offering deeper insight into how immediacy is connected to dimensions of well-being other than positive affect.

Finally, recognizing the significance of belongingness to overall well-being, as highlighted by Ryan and Deci (2000), future investigations could employ mediation or moderation analyses to deepen our understanding of the interplay between immediacy, sense of

belonging, and well-being. This approach could aid in validating theoretical frameworks and exploring whether belongingness serves as a prerequisite for well-being or amplifies the connection between immediacy and well-being.

### **Conclusion**

This study revealed the powerful impact of mentors' immediacy within classroom settings. The findings indicate that while PM immediacy more strongly contributes to mentees' belonging and well-being in the class, both immediate FMs and PMs offer an overlapping benefit, namely, an increase in perceived well-being. Overall, these results suggest that mentees benefit most emotionally, socially, and psychologically when their classes are led by both an immediate FM and PM, advocating for a combined mentor approach. Furthermore, the research underscores the importance of creating a supportive and engaging environment through immediacy in mentoring, suggesting that institutions should prioritize mentor training in immediacy, and strategically assign PMs to classes led by FMs. Implementing these practices could enhance students' educational experiences, fostering greater social, emotional, and psychological benefits.

### References

- Ahmady, S., Kohan, N., Bagherzadeh, R., Rakshhani, T., & Shahabi, M. (2018). Validity testing of classroom community scale in virtual environment learning: A cross-sectional study. *Annals of Medicine and Surgery, 36*, 256–260.  
<https://doi.org/10.1016/j.amsu.2018.08.021>
- Allen, T. D., Russell, J. E. A., & McManus, S. E. (1999). Newcomer Socialization and Stress: Formal Peer Relationships as a Source of Support. *Journal of Vocational Behavior, 54*(3), 453–470. <https://doi.org/10.1006/jvbe.1998.1674>
- Allen, T. D., & Poteet, M. L. (1999). Developing Effective Mentoring Relationships: Strategies from the Mentor's Viewpoint. *Career Development Quarterly, 48*(1), 59–73.  
<https://doi.org/10.1002/J.2161-0045.1999.TB00275.X>
- Baker, J. D. (2004). An Investigation of Relationships among Instructor Immediacy and Affective and Cognitive Learning in the Online Classroom. *Internet and Higher Education, 7*(1), 1–13. <https://doi.org/10.1016/j.iheduc.2003.11.006>
- Baumeister, R. F., & Leary, M. R. (1995). The need to belong: desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin, 117*(3), 497–529. <https://doi.org/10.1037/0033-2909.117.3.497>
- Bulte, C., Betts, A., Garner, K., & Durning, S. (2007). Student teaching: views of student near-peer teachers and learners. *Medical Teacher, 29*(6), 583–590.  
<https://doi.org/10.1080/01421590701583824>

- Campbell, T. A., & Campbell, D. E. (1997). Faculty/Student Mentor Program: Effects on Academic Performance and Retention. *Research in Higher Education: Journal of the Association for Institutional Research*, 38(6), 727–742.  
<https://doi.org/10.1023/A:1024911904627>
- Cakir, S. G. (2015). The effects of teacher immediacy and student burnout on empowerment and resistance among Turkish pre-service teachers. *Learning and Individual Differences*, 40, 170–175. <https://doi.org/10.1016/j.lindif.2015.05.002>
- Christensen, L. J., & Menzel, K. E. (1998). The linear relationship between student reports of teacher immediacy behaviors and perceptions of state motivation, and of cognitive, affective, and behavioral learning. *Communication Education*, 47(1), 82–90.  
<https://doi.org/10.1080/03634529809379112>
- Christophel, D. M. (1990). The Relationships among Teacher Immediacy Behaviors, Student Motivation, and Learning. *Communication Education*, 39(4), 323–340.  
<https://doi.org/10.1080/03634529009378813>
- Collier, P. (2017). Why peer mentoring is an effective approach for promoting college student success. *Metropolitan Universities*, 28(3), 9-19. <https://doi.org/10.18060/21539>
- Collings, R., Swanson, V., & Watkins, R. (2014). The impact of peer mentoring on levels of student wellbeing, integration and retention: a controlled comparative evaluation of residential students in UK higher education. *Higher Education*, 68, 927-942.  
<https://doi.org/10.1007/S10734-014-9752-Y>

- Colvin, J. W., & Ashman, M. (2010). Roles, Risks, and Benefits of Peer Mentoring Relationships in Higher Education. *Mentoring & Tutoring: Partnership in Learning, 18*(2), 121–134. <https://doi.org/10.1080/13611261003678879>
- Crawford, J. R., & Henry, J. D. (2004). The positive and negative affect schedule (PANAS): construct validity, measurement properties and normative data in a large non-clinical sample. *The British Journal of Clinical Psychology, 43*(3), 245–265. <https://doi.org/10.1348/0144665031752934>
- Cronan-Hillix, T., Gensheimer, L. K., Cronan-Hillix, W. A., & Davidson, W. S. (1986). Students' Views of Mentors in Psychology Graduate Training. *Teaching of Psychology, 13*(3), 123–127. [https://doi.org/10.1207/s15328023top1303\\_5](https://doi.org/10.1207/s15328023top1303_5)
- Das, M., El-Sabban, F., & Bener, A. (1996). Student and faculty perceptions of the characteristics of an ideal teacher in a classroom setting. *Medical Teacher, 18*(2), 141–146. <https://doi.org/10.3109/01421599609034149>.
- Dimitriadis, K., von der Borch, P., Störmann, S., Meinel, F. G., Moder, S., Reincke, M., & Fischer, M. R. (2012). Characteristics of mentoring relationships formed by medical students and faculty. *Medical Education Online, 17*(1). <https://doi.org/10.3402/meo.v17i0.17242>
- Faranda, W. T. (2015). The Effects of Instructor Service Performance, Immediacy, and Trust on Student-Faculty Out-of-Class Communication. *Marketing Education Review, 25*(2), 83–97. <https://doi.org/10.1080/10528008.2015.1029853>
- Freeman, T. M., Anderman, L. H., & Jensen, J. M. (2007). Sense of Belonging in College Freshmen at the Classroom and Campus Levels. *The Journal of Experimental Education, 75*(3), 203–220. <https://doi.org/10.3200/JEXE.75.3.203-220>

- Furlich, S. A. (2016). Understanding Instructor Nonverbal Immediacy, Verbal Immediacy, and Student Motivation at a Small Liberal Arts University. *Journal of the Scholarship of Teaching and Learning*, 16(3), 11–22. <https://doi.org/10.14434/josotl.v16i3.19284>
- Gholamrezaee, S., & Ghanizadeh, A. (2018). EFL Teachers' Verbal and Nonverbal Immediacy: A Study of its Impact on Students' Emotional States, Cognitive Learning, and Burnout. *Psychological Studies*, 63(4), 398–409. <https://doi.org/m5t2>
- Gorham, J. (1988). The relationship between verbal teacher immediacy behaviors and student learning. *Communication Education*, 37(1), 40–53. <https://doi.org/10.1080/03634528809378702>
- Gorham, J., & Christophel, D. (1992). Students' perceptions of teacher behaviors as motivating and demotivating factors in college classes. *Communication Quarterly*, 40(3), 239-252. <https://doi.org/10.1080/01463379209369839>.
- Graham, J., & McClain, S. (2019). A Canonical Correlational Analysis Examining The Relationship Between Peer Mentorship, Belongingness, Impostor Feelings, and Black Collegians' Academic and Psychosocial Outcomes. *American Educational Research Journal*, 56(6), 2333-2367. <https://doi.org/10.3102/0002831219842571>
- Graham, M., Wayne, I., Persutte-Manning, S., Pergantis, S., & Vaughan, A. (2022). Enhancing student outcomes: Peer mentors and student transition. *International Journal of Teaching and Learning in Higher Education*, 22(1), 1-6.
- Hausmann, L. R. M., Ye, F., Schofield, J. W., & Woods, R. L. (2009). Sense of Belonging and Persistence in White and African American First-Year Students. *Research in Higher*

*Education: Journal of the Association for Institutional Research*, 50(7), 649–669.

<https://doi.org/10.1007/s11162-009-9137-8>

Heeralal, P. (2014). Student Teachers' Perspectives of Qualities of Good Mentor Teachers. *The Anthropologist*, 17(1), 243-249. <https://doi.org/10.1080/09720073.2014.11891434>.

Huybrecht, S., Loeckx, W., Quaeyhaegens, Y., De Tobel, D., & Mistiaen, W. (2011). Mentoring in nursing education: Perceived characteristics of mentors and the consequences of mentorship. *Nurse Education Today*, 31(3), 274–278.

<https://doi.org/10.1016/j.nedt.2010.10.022>

Kwitonda, J. C. (2017). Foundational aspects of classroom relations: associations between teachers' immediacy behaviours, classroom democracy, class identification and learning. *Learning Environments Research: An International Journal*, 20(3), 383–401.

<https://doi.org/10.1007/s10984-017-9231-3>

Levett-Jones, T., Lathlean, J., Higgins, I., & McMillan, M. (2009). Staff - student relationships and their impact on nursing students' belongingness and learning. *Journal of Advanced Nursing*, 65(2), 316–324. <https://doi.org/10.1111/j.1365-2648.2008.04865.x>

Liu, T., Chen, Y., Hamilton, M., & Harris, K. (2022). Peer Mentoring to Enhance Graduate Students' Sense of Belonging and Academic Success. *Kinesiology Review*, 11(4), 285–296. <https://doi.org/10.1123/kr.2022-0019>

Liu, W. (2021). Does Teacher Immediacy Affect Students? A Systematic Review of the Association Between Teacher Verbal and Non-verbal Immediacy and Student Motivation. *Frontiers in Psychology*, 12, 1-13.

<https://doi.org/10.3389/fpsyg.2021.713978>

- McClain, C. M., Kelner, W. C., & Elledge, L. C. (2021). Youth Mentoring Relationships and College Social and Academic Functioning: The Role of Mentoring Relationship Quality, Duration, and Type. *American Journal of Community Psychology*, 68(3-4), 340–357. <https://doi.org/10.1002/ajcp.12539>
- McKimm J, Jollie C, Hatter M (2003). *Mentoring: Theory and Practice*. NHSE/Imperial College School of Medicine.
- McMahon, S. (2020). *Creating a culture of informal mentoring at community colleges: Conditions that strengthen and weaken relationships and students' structural resiliency* [Doctoral dissertation, Old Dominion University]. Educational Foundations & Leadership. [https://digitalcommons.odu.edu/efl\\_etds/253](https://digitalcommons.odu.edu/efl_etds/253)
- Mehrabian, A. (1971). *Silent messages*. Wadsworth.
- Menzel, K. E., & Carrell, L. J. (1999). The impact of gender and immediacy on willingness to talk and perceived learning. *Communication Education*, 48(1), 31–40. <https://doi.org/10.1080/03634529909379150>
- Niehoff, B. P. (2006). Personality predictors of participation as a mentor. *Career Development International*, 11(4), 321–333. <https://doi.org/10.1108/13620430610672531>
- Noble, T., McGrath, H., Roffey, S., & Rowling, L. (2008). *A scoping study on student well-being*. Department of Education, Employment & Workplace Relations.
- Orsini, J. (2023). Mentoring and Well-Being in Higher Education. *Journal of Leadership Studies*, 17(3), 74–80. <https://doi.org/10.1002/jls.21865>



Rovai, A. P. (n.d.). Development of an instrument to measure classroom community. *The Internet and Higher Education*, 5(3), 197–211. [https://doi.org/10.1016/S1096-7516\(02\)00102-1](https://doi.org/10.1016/S1096-7516(02)00102-1)

Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *The American Psychologist*, 55(1), 68–78. <https://doi.org/10.1037/110003-066X.55.1.68>

Qualtrics. (2024). *Qualtrics* (Version June 2024). Qualtrics, Provo, UT, USA.  
<http://www.qualtrics.com>

Raymond, J., & Sheppard, K. (2017). Effects of peer mentoring on nursing students' perceived stress, sense of belonging, self-efficacy and loneliness. *Journal of Nursing Education and Practice*, 8(1), 16-23. <https://doi.org/10.5430/JNEP.V8N1P16>

Rees, E. L., Quinn, P. J., Davies, B., & Fotheringham, V. (2016). How does peer teaching compare to faculty teaching? A systematic review and meta-analysis. *Medical Teacher*, 38(8), 829–837. <https://doi.org/10.3109/0142159X.2015.1112888>

Roberts, A., & Friedman, D. (2013). The Impact of Teacher Immediacy on Student Participation: An Objective Cross-Disciplinary Examination. *The International Journal of Teaching and Learning in Higher Education*, 25(1), 38-46.

Sambunjak, D., Straus, S. E., & Marusic, A. (2010). A Systematic Review of Qualitative Research on the Meaning and Characteristics of Mentoring in Academic Medicine. *Journal of General Internal Medicine*, 25(1), 72–78.  
<https://doi.org/10.1007/s11606-009-1165-8>

- Sanchez, R. J., Bauer, T. N., & Paronto, M. E. (2006). Peer-Mentoring Freshmen: Implications for Satisfaction, Commitment and Retention to Graduation. *Academy of Management Learning & Education*, 5(1), 25–37.
- Snowden, M., & Hardy, T. (2013). Peer mentorship and positive effects on student mentor and mentee retention and academic success. *Widening participation and lifelong learning*, 14, 76-92. <https://doi.org/10.5456/WPLL.14.S.76>
- Solomon, D., Battistich, V., Kim, D.-I., & Watson, M. (1996). Teacher practices associated with students' sense of the classroom as a community. *Social Psychology of Education: An International Journal*, 1(3), 235–267. <https://doi.org/10.1007/BF02339892>
- Sona Systems (n.d.). Sona Systems: Cloud-based Participant Management Software [Computer software]. Sona Systems, Ltd. <https://www.sona-systems.com/>
- Vaughan, B., & Macfarlane, C. (2015). Perceived teaching quality between near-peer and academic tutors in an osteopathic practical skills class. *International Journal of Osteopathic Medicine*, 18(3), 219–229. <https://doi.org/10.1016/j.ijosm.2015.04.013>
- Voelkl, K. E. (1995). School Warmth, Student Participation, and Achievement. *The Journal of Experimental Education*, 63(2), 127–138. <https://doi.org/10.1080/00220973.1995.9943817>
- Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: the PANAS scales. *Journal of Personality and Social Psychology*, 54(6), 1063–1070.

Witt, P., Wheelless, L., & Allen, M. (2004). A meta-analytical review of the relationship between teacher immediacy and student learning. *Communication Monographs*, 71(2), 184–207.

<https://doi.org/10.1080/036452042000228054>

Yomtov, D., Plunkett, S. W., Efrat, R., & Marin, A. G. (2017). Can Peer Mentors Improve First-Year Experiences of University Students? *Journal of College Student Retention:*

*Research, Theory & Practice*, 19(1), 25–44. <https://doi.org/10.1177/1521025115611398>

Zheng, J. (2021). A Functional Review of Research on Clarity, Immediacy, and Credibility of

Teachers and Their Impacts on Motivation and Engagement of Students. *Frontiers in*

*Psychology*, 12. <https://doi.org/10.3389/fpsyg.2021.712419>

## Appendix

### Figure 1

#### *Modified version of the Verbal and Non-Verbal Immediacy Scales (Kwitonda, 2017)*

Please answer these questions regarding your **faculty mentor**

	Never	Sometimes	About half the time	Most of the time	Always
Smiles at the class while talking.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Uses a monotone/dull voice when talking to the class.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Has a very relaxed body position while talking to the class.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Stands behind the podium or desk while teaching.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Looks at board or notes while talking	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Moves around the classroom while teaching.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Asks questions or encourages students to talk.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Praises students' work, actions, or comments.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Asks questions that solicit viewpoints or opinions.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Refers to class as "our" class or what "we" are doing.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Addresses students by name.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Uses humor in class.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Gets into conversations with individual students before or after class.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Refers to class as "my" class or what "I" am doing.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

*Note:* Items 1 – 6 measure non-verbal immediacy, while items 7 – 14 measure verbal immediacy.

Items 2, 4, 5, and 14 were reverse coded.

**Figure 2***Connectedness Subscale, adopted from Classroom Community 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"/>

*Note:* Items 3, 5, and 9 were reverse coded.**Figure 3***Positive Affect Subscale, adopted from PANAS (Watson et al., 1988)*

	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"/>