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A teacher like me? Different approaches to examining personality similarity between teachers and students — Source link

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A Teacher Like Me?

Different Approaches to Examining Personality Similarity Between Teachers and Students

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Abstract

Research suggests that people tend to like others more if they are similar rather than dissimilar to themselves. Likewise, students may tend to prefer teachers with whom they share similar personality characteristics. To test this hypothesis, we examined the role of personality similarity between students and teachers in predicting how much students liked their teachers. Secondary school students ($N = 634$) provided self-reports and reported on their teachers' personality using a Big Five personality scale. Their teachers ($N = 31$) also provided self-reports. These reports were then used to compute three indices of similarity; i.e., perceptual similarity, actual similarity, and perceptual accuracy which were used to explain teacher liking. Multilevel linear models showed that perceptual similarity (computed as the profile agreement across student self- and teacher-ascribed Big Five traits) had the largest effect on teacher liking. Teachers described as more agreeable and conscientious were liked by their students more. Findings highlight the importance of considering students' perceptions of personality similarity with their teachers for understanding how students feel "connected" to their teachers and positively interact with them.

Keywords: personality similarity, teacher-student relationships, teacher liking, Big Five, profile agreement.

A Teacher Like Me?

Different Approaches to Examining Personality Similarity Between Teachers and Students

Cumulated research has shown that a positive and warm relationship between teachers and students is beneficial not only for students' school engagement and academic achievement (Cornelius-White, 2007; Košir & Tement, 2014; Roorda, Koomen, Spilt, & Oort, 2011), but also for teachers' well-being and work engagement (Hagenauer, Hascher, & Volet, 2015; Klassen et al., 2012; Spilt, Koomen, & Thijs, 2011). One approach to understanding what underlies the relationship between teachers and students is to pay attention to the way they connect (or not) with each other in terms of interests, values, and personal attributes (Gehlbach et al., 2016). Indeed, personality and social psychology research has suggested that individuals' similarity in moral attitudes, political views, and personality characteristics, among others, is associated with relationship constructs such as mutual attraction, affection, and liking (Collisson & Howell, 2014; Decuyper, De Bolle, & De Fruyt, 2011; Wrobel, Krolewiak, & Czarna, 2015). However, the strength of this association may depend on the perspective taken to address the similarity between two individuals. Traditionally, personality similarity indices have been derived from the self-description of an actor and her/his partner (i.e., actual similarity), but more recently research has explored other perspectives such as the actor's self-description and the description s/he makes of her/his partner's personality (i.e., perceptual similarity; Decuyper et al., 2011).

Based on the mentioned evidence, the present exploratory study addresses similarity between teachers' and students' personality taking into account both their self-descriptions as well as students' description of the personality of their teachers. In addition, it examines how these different perspectives of personality similarity are related to how much students like their teachers, and what are the perceived characteristics of teachers that are mostly associated with teacher liking.

Actual and Perceptual Similarity, and Perceptual Accuracy

The personal relationships literature (Decuyper, Gistelinck, Vergauwe, Pancorbo, & De Fruyt, 2016) distinguishes among three different approaches to describe personality similarities in dyads, namely actual similarity, perceptual similarity, and perceptual accuracy. First, *actual similarity* between two persons' personality profiles (partners, or student versus teacher) describes the agreement between their personality self-descriptions (A ↔ C; Fig. 1) or, in other words, how both actors in the dyad perceive themselves. Second, and in contrast, *perceptual similarity* (A ↔ B; Fig. 1), also known as "perceived similarity" (e.g., Strauss, Barrick, & Connerley, 2001) or "assumed similarity" (e.g., Thielmann, Hilbig, & Zettler, 2018), is operationalized as the agreement between a person's self-description and the description s/he makes of her/his partner (Decuyper et al., 2016). Finally, the third approach to look at personality resemblance, called *perceptual accuracy*, examines the accuracy of a person in describing the other's personality characteristics (B ↔ C; Fig. 1), i.e., the agreement between an individual's personality self-description and how s/he is described by his/her partner (Decuyper et al., 2016). Perceptual accuracy is hence, strictly speaking, a description agreement about a single individual, whereas actual and perceptual similarity are descriptions of the two persons in the dyad.

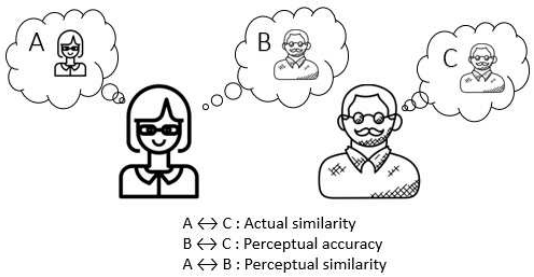

Figure 1. Representation of actual similarity, perceptual accuracy, and perceptual similarity[1].

[1] Icons were created by Creative Stall and dDara from the Noun Project.

From the mentioned approaches, perceptual similarity has received the strongest support in studies about personality judgement among well-acquainted and unacquainted individuals. On the one hand, in several studies, perceptual similarity in personality characteristics has been linked to interpersonal attraction or relationship quality in couples and friends (Acitelli, Douvan, & Veroff, 1993; Decuyper et al., 2011; Klohnen & Luo, 2003; Lee et al., 2009; Montoya, Horton, & Kirchner, 2008; Selfhout, Denissen, Branje, & Meeus, 2009; Tidwell, Eastwick, & Finkel, 2013; Weller & Watson, 2009). Findings in this area led some authors to suggest that similarity is more an *idealistic* than a realistic construction, relying on the individual's feelings or beliefs that s/he is similar to his/her partner (Murray, Holmes, & Griffin, 1996; Wortman, Wood, Furr, Fanciullo, & Harms, 2014). As stated by Murray et al. (1996) "… individuals' impressions of their partners [are] more a mirror of their self-images and ideals than a reflection of their partners' self-reported attributes" (p. 79). The authors claimed that individuals tend to project their own characteristics onto their partner's because it could be beneficial to them, either to keep a sense of predictability of the other's behavior or to affirm their own self-image by assuming that the other person is just like them (Murray et al., 1996). Among unacquainted individuals, on the other hand, studies have been less conclusive, although recent evidence suggests that complete strangers tend to perceive others as similar to themselves on fairness- and morality-related characteristics such as Honesty-Humility and Openness to Experience (i.e., HEXACO personality traits; Thielmann et al., 2018).

Different explanations have been suggested to explain why perceivers rate others as similar to themselves. First, some authors have suggested that perceptual similarity could fulfill a need of consistency between what individuals believe and what other people believe (i.e., "what I think is what others think, too"; Montoya et al., 2008). In addition, perceptual similarity can arise more frequently when there is less information about the personality of who is perceived (Decuyper et

al., 2011; Kenny & West, 2010). Nevertheless, other authors have suggested that individuals who are familiar with or hold a psychological bond with each other, may perceive that they are similar in their personality characteristics (Jowett & Clark-Carter, 2006; Selfhout et al., 2009; Weller & Watson, 2009). However, one of the main factors that may moderate perceptual similarity is the liking-similarity effect, explaining that people tend to perceive more similarity with likeable others than with dislikeable ones because they "assume that likeable others are similar to them and dislikeable others are dissimilar to them" (Collisson & Howell, 2014, p. 386). The liking-similarity effect has been frequently found in studies of perceptual personality similarity (e.g., Collisson & Howell, 2014; Montoya et al., 2008; Ng, Tong, & Kwek, 2017; Strauss et al., 2001; Wrobel et al., 2015). A study of Strauss et al. (2001), for example, found that liking mediated the relationship between perceptual personality similarity between supervisors and sales supervisees and performance ratings of the latter, but there was no such effect for actual personality similarity.

Personality Similarity between Teachers and Students

The examination of the similarity between teachers and students as a way to understand their interactions in classrooms has captured the attention of educational researchers for a long time. Already in 1977, Anderson and collaborators found that teacher-student similarities in empathy and excitement, and similarities in communication competence were related to higher levels of teachers' effectiveness as perceived by students (Anderson, Alpert, & Golden, 1977). Ensher and Murphy (1997) also focused on the importance of similarity and showed that protégés who perceived themselves to be more similar to their mentors were more satisfied and had a better relationship with them. Laughlin and Laughlin (1994) described analogous results showing that students and athletes who had similar perceptions of leadership behavior to those of their teachers and coaches evaluated them more favorably in terms of effectiveness. More recently, Gehlbach,

Brinkworth, and Harris (2012) reported that students who perceived themselves as more similar to their teachers over the course of a school year, also perceived to have a more positive relationship with them.

Teachers' and students' similarities have also been explored looking at shared personality characteristics as captured by the Five-Factor Model (FFM). The FFM describes differences in people's personality in terms of their positions on five broad dimensions of Openness to experience, Conscientiousness, Extraversion, Agreeableness and Neuroticism, also called Emotional Stability, captured by the acronym OCEAN (for a review: see John, Naumann, & Soto, 2008). Multiple studies have shown that students' preferred or most liked teachers are perceived as similar to themselves on different personality characteristics (Chamorro-Premuzic, Furnham, Christopher, Garwood, & Martin, 2008; Furnham & Chamorro-Premuzic, 2005; Kim & MacCann, 2016; Tan, Mansi, & Furnham, 2017). For example, university students' self-reports on Conscientiousness, Openness to Experience, Agreeableness and Extraversion positively predicted their preferred teachers' personality descriptions on the corresponding domains in the socially desirable direction, even more than demographic variables like age or gender (Chamorro-Premuzic et al., 2008; Furnham & Chamorro-Premuzic, 2005; Tan et al., 2017).

The previous examples make clear that the vast majority of research in this area explored the association between students' personality self-reports and their descriptions of the most preferred or ideal teachers (Chamorro-Premuzic et al., 2008; Furnham & Chamorro-Premuzic, 2005; Kim & MacCann, 2016; Tan et al., 2017). This approach relied almost exclusively on personality descriptions provided from the standpoint of students only, in other words, how students describe themselves and their preferred teachers. An alternative, though unexplored perspective is to examine similarities from the standpoints of both actors in the interaction, namely

students *and* teachers. Thus, in this study we examined the personality similarity between teachers and students taking into account both perspectives, and evaluated its relationship with the degree to which students like their teachers.

Examining the relationship between student-teacher personality similarity and teacher liking may be crucial to understand whether students may tend to prefer teachers with whom they share similar personality characteristics, and which personality similarity approach contributes the most to understand students' preferences for their teachers. Moreover, several studies have shown that liking the teacher is linked to positive outcomes such as students' academic achievement (e.g., Montalvo, Mansfield, & Miller, 2008) and social-emotional aspects of their performance like effort, persistence, positive affection, intrinsic motivation for learning, and self-regulation (Eryilmaz, 2015; Montalvo et al., 2008; Raufelder, Scherber, & Wood, 2016). It has also been suggested that liked teachers can have a positive impact on students because they may increase students' intrinsic motivation, promote a better classroom environment, have a better relationship with students, support and encourage learning, and pay more attention to students' individual needs and feelings (Fauth, Decristan, Rieser, Klieme, & Büttner, 2018; Montalvo et al., 2008; Raufelder et al., 2016).

Personality Characteristics of Liked Teachers

Given the importance of liking the teacher, it seems relevant to understand what are the personal characteristics of most preferred teachers. A group of studies have focused on students' perception of an ideal or a good teacher and have found that personality characteristics play an important role in pupils' descriptions (Albertini, 1997; Anton, Joan, & Rafael, 1999; Arnon & Reichel, 2007; Bakx, Koopman, de Kruijf, & den Brok, 2015; Beishuizen, Hof, Van Putten, Bouwmeester, & Asscher, 2001; Kim & MacCann, 2016). As such, primary school students

believe, for example, that a good teacher should be instructive (good explanation qualities), humorous, and kind (Bakx et al., 2015), while secondary students think he/she should be calm, optimistic and discipline-oriented (Beishuizen et al., 2001). In addition, a study by Kim and MacCann (2016) showed that psychology students believe that an ideal teacher should have high levels of all Big Five personality domains (Openness, Conscientiousness, Extraversion, Agreeableness, and Emotional Stability) with special emphasis on Conscientiousness and Emotional Stability characteristics.

Meanwhile, the perceived personality of *actual* teachers have also received attention due to their relationship with students' social-emotional skills and a positive learning environment (Eryilmaz, 2015; Reddy, Rhodes, & Mulhall, 2003; Sakiz, Pape, & Hoy, 2012; Tucker et al., 2002). Some studies have found, for example, that teachers' perceived affective support was related to increasing levels of students' sense of belonging, self-esteem, academic enjoyment, and self-efficacy beliefs, among others (Reddy et al., 2003; Sakiz et al., 2012). Hence, in this study we explored which are the personality characteristics perceived in classroom teachers that are mostly associated with the degree to which students like them.

The Present Study

Applying the three previously described personality similarity perspectives to the study of student-teacher interaction may considerably advance our understanding of how students 'connect' with and like their teachers (and vice versa). This exploratory study, therefore, collected personality self-reports of secondary school students and teachers as well as students' reports of their teacher's personality. Thus, our first objective was to calculate indices of perceptual accuracy, actual similarity, and perceptual similarity between personality profiles. The perceptual accuracy perspective will help us understand whether students are able to describe their teachers, relative to

how teachers describe themselves. The perceptual similarity and actual similarity perspectives will provide us with two different angles to judge the degree to which students see their teachers as similar to themselves or whether there is a match between both actors' descriptions, respectively.

Additionally, our second objective aimed to evaluate the degree to which perceptual accuracy, actual similarity, and perceptual similarity contribute to explaining teacher liking as an outcome variable. Relying on previous work by Murray et al. (1996) and Wortman et al. (2014) and the liking-similarity mechanism, it is expected that perceptual personality similarity will contribute the most to predict teacher liking.

Meanwhile, our third objective focused on the ascribed personality characteristics of liked teachers. Relying on the extant literature about personality characteristics of preferred and ideal teachers (Chamorro-Premuzic et al., 2008; Furnham & Chamorro-Premuzic, 2005; Kim & MacCann, 2016; Tan et al., 2017), we explored which personality characteristics ascribed to teachers contributed the most to explain the degree to which students liked their teachers. Additionally, we explored the contribution of teachers' gender to the model.

The above-mentioned objectives were not preregistered.

Method

Participants

Participants were 634 students from eight schools from the Federal District, capital of Brazil. Students (59% female) had a mean age of 16.30 years (*SD* = 1.21). The data has not been used in other paper and no data was excluded. The age range of participants was between 12 and 20 years old. From these, 37.4% of students belonged to the first, 30% to the second, and 28.2% to the third grade of secondary level of education. Around a fourth of the total number of students (26%) had age-grade distortion, which means they were more than one year behind the age

appropriate for their grade. This proportion is similar to the age-grade distortion of the Brazilian secondary school students population (28%; UNICEF, 2018).

The total sample included 31 classrooms, each of which had an average of 20 students (*SD* = 6.8, Min = 7; Max = 38). The number of classrooms and students was selected based on the availability of schools to participate in the study. According to Maas and Hox (2005), such number of groups in multilevel modeling might have a small negative influence for the standard errors of the fixed effect coefficients (around 6% for the intercept and regression coefficients), but a greater influence (9%) for the standard errors of the level-2 intercept and slope variances.

The teacher in charge of the classroom at the time of data collection functioned as the target to be rated by each student. These 31 teachers (54% female) had a mean age of 37.28 years (*SD* = 7.47 years). Thirty-five percent of them taught a science course (e.g., chemistry, mathematics, physics), and 65%, taught a course from humanities fields (e.g., arts, Portuguese, sociology, geography, Spanish, etc.).

Data collection took place in seven public and one private school located in different districts of the Brazilian capital of diverse socio-economic levels: Santa Maria (25.1%), Asa Norte (24.3%), Gama (24.3%), Riacho Fundo II (21.9%), and Lago Norte (4.4%).

Instruments

Student and teacher self-reports. Students and teachers provided self-reports on the Reduced Scale of Big Five Personality Factors (ER5FP - *Escala Reduzida de Cinco Fatores de Personalidade;* Passos & Laros, 2015). The ER5FP assesses the factors Openness to Experience, Conscientiousness, Extraversion, Agreeableness, and Emotional Stability using a semantic differential rating scale that is composed of 20 pairs of bipolar adjectives (4 per factor), with a 6-point Likert type response scale. Examples of item anchors (originally presented in Portuguese)

of semantic differentials are: 'Conventional' and 'Creative', 'Rigid' and 'Flexible' (Openness to Experience); 'Unmotivated' and 'Goal-oriented', and 'Give up easily' and 'Persistent' (Conscientiousness); 'Quiet' and 'Communicative', and 'Reserved' and 'Sociable' (Extraversion); 'Rude' and 'Kind', and 'Hostile' and 'Friendly' (Agreeableness); and, finally, 'Nervous' and 'Calm', and 'Impatient' and 'Patient' (Emotional Stability). The ER5FP was previously administered by Passos and Laros (2015) to a sample 365 adults (53.7% female; Mean age = 29.1; *SD* = 8.6). Confirmatory factor analysis indicated that the five-factor structure with 20 indicators had a satisfactory model fit (TLI = .94; CFI = .80; RMSEA = .05 [.04 - .06]; SRMR = .06). Reliability coefficients (Lambda 2 of Guttman) ranged from .71 to .85 (Passos & Laros, 2015). Meanwhile, Kim, Dar-Nimrod and MacCann (2018) found moderate evidences of convergent validity of the ER5FP with the Reduced Inventory of Big Five Personality Factors (IGFP-5R) in a Brazilian population of young and older adults.

As the ER5FP scale was not previously administered to an adolescent sample, we conducted a pilot study with a reduced sample of students to verify that they understood the language of instructions and items and the administration of the instruments. After making amendments to the questionnaire and collecting data from the total sample, we inspected the internal structure of students' self-reports using an Exploratory Structural Equation Modeling (ESEM) with Geomin rotation and Weighted Least Square parameter estimator (WLSMV) with Mplus 6.12 (Muthén & Muthén, 2012). We could recover four of the five factors the original scale included[2]. Its 16

[2] Results of the ESEM analysis indicated that items of Openness to Experience loaded onto the factor of Conscientiousness. The items of Openness to Experience were excluded from the final factor solution for two reasons. The first one concerns the validity of the measure. We had to decide whether to retain a factor with two dimensions, Openness and Conscientiousness, sharing the common variance or exclude the items of one of them to obtain a more clear internal structure. We decided to retain only the Conscientiousness items so that this factor could be clearly labelled and interpreted and to compare our results to other studies in the literature. Conscientiousness has demonstrated to be an important factor in several educational processes (Poropat, 2009), so we decided to focus on this set of items primarily. The second reason concerns the reliability of the scores. In preliminary analysis with the same sample, we observed that the scores of the dimension of Openness had the lowest reliability ($\alpha = .55$), while

indicators presented the best model fit indices (CFI = .99, TLI = .98, RMSEA = .05). Factor loadings ranged from .45 to .87 on Extraversion, from .45 to .77 on Conscientiousness, from .57 to .79 on Agreeableness, and from .66 to .73 on Emotional Stability. The reliability coefficients (Lambda 2 of Guttman - λ-2) were .81 for Extraversion, .77 Agreeableness, .74 for Emotional Stability, and .75 for Conscientiousness.

Students' ratings of teachers' personality. Students rated the personality of their teacher using a modified version of the ER5FP, adapted for observer reporting. The same 20 items with the 6-option semantic differential response scale were presented to students with the following instruction and an example to practice: "Below you will find two characteristics that are opposites [Example], which seek to describe the characteristics of your teacher who is in the classroom at this moment. Your task will be to mark an X closer to the characteristic that best describes your teacher […]".

An ESEM analysis with Geomin rotation and WLSMV estimator of students' reports of their teachers' personality indicated that a four-factor structure with 16 indicators presented the best model fit indices (CFI = .98, TLI = .96, RMSEA = .08). As in the case of students' self-reports, the indicators of Openness to Experience loaded on Conscientiousness, and were therefore excluded from the final factor solution. Factor loadings ranged from .70 to .88 on Extraversion, from .56 to .72 on Conscientiousness, from .61 to .84 on Emotional Stability, and from .56 to .72 on Agreeableness. The reliability coefficients (λ-2) were .84 for Agreeableness, .78 for

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the scores of Conscientiousness obtained a higher score (α = .73). Luo and Klohnen (2005) indicated that the reliability of the scale may impact the profile agreement estimates in the way that a scale with very low reliability could "inflate variance in ratings and thus may also inflate variance in profile correlations" (p. 310). Hence, excluding Openness' items from the factor structure of the scale seemed like a reasonable decision considering the mentioned detrimental effects of unreliable scores on profile agreement indices.

Extraversion, .82 for Emotional Stability, and .81 for Conscientiousness. The ESEM analysis was performed using Mplus 6.12 (Muthén & Muthén, 2012).

Teacher liking. On top of students rating the personality of their teachers, we also asked students to list the name of the teacher and the course s/he was teaching. Afterwards, students were asked to respond how much they liked this teacher. Likert scale response options ranged from 1 = "Nothing" to 5 = "Totally".

Procedure

The study was approved by the Ethics Committee of the Institute of Human Sciences of the University of Brasília (CAAE 38811314.6.0000.5540). Instructions and survey administration were evaluated in a pilot study. The data collection took place at the end of the academic year in order to ensure that teachers and students had sufficient time to become familiar with each other. Several secondary schools from different socio-economic areas of the Federal District were contacted to present the study and ask for permission to administer the instruments. A minimum of three classrooms per school were selected by the school principals to participate according to their availability at the moment of the collection of data. The administration of the questionnaires in the selected classrooms took place simultaneously. Ethical considerations and instructions were carefully explained to students and teachers. Instruments were administered collectively to those students who agreed to participate. Students in each classroom were instructed to complete all instruments, including the personality report of the teacher in charge of the classroom at the time of the data collection. Thus, each student only rated one teacher and did not complete the questionnaire more than once. Additionally, each teacher was evaluated only in one classroom. The teacher completed their personality self-report at the same time as the students. The test administrator supervised that students and teachers did not interact or talk to each other while

completing the instruments. After that, we verified whether students described the personality of the teacher present in the classroom and that each teacher was evaluated by one group by crosschecking the teachers' names, the codes of the classrooms, and course names written in the questionnaires. If this information was not correct, data were excluded.

Data Analysis

First, actual similarity, perceptual accuracy, and perceptual similarity were calculated for each pair of teacher-student reports and self-reports using the index of profile agreement (I_{pa}) and the derived coefficient of profile agreement (r_{pa}; McCrae, 1993). I_{pa} takes into account the difference between ratings on profile elements (e.g., Extraversion score of self-report minus the Extraversion score of the observer report) and the extremeness of their means (M): $I_{pa} = k + 2\Sigma M^2 - \Sigma d^2/(10k)^{1/2}$, where k is the number of profile elements (or personality factors; McCrae, 2008). The resulting profile agreement index reflects the similarity over the entire personality trait profile.

In order to compute the profile agreement indices, we used standardized personality scores or normed z-scores (T-scores/stanines transformed into zs) rather than raw scores to correct for stereotype effects (i.e., also known as normative-desirability confound; Wood & Furr, 2016). The stereotype effect captures the "extent to which a person's responses tend to match the profile of responses of other people in the sample" (Kenny & Acitelli, 1994, p. 419; see Dyrenforth, Kashy, Donnellan, & Lucas, 2010 for a detail explanation of this effect). According to Dyrenforth et al. (2010), standardization and mean deviation are the simplest recommended procedures to factor out stereotype effects.

Once I_{pa} was calculated for each of the personality similarity indices (i.e., perceptual similarity, perceptual accuracy, and actual similarity), they were converted to coefficients of profile agreement (r_{pa}) using the following formula: $r_{pa} = I_{pa} / [(k - 2) + I_{pa}^2]^{1/2}$. This coefficient is

similar to a Pearson correlation coefficient as it also ranges from -1 to +1, with -1 indicating perfect dissimilarity and +1 indicating perfect similarity. A value of zero represents an almost insignificant similarity (McCrae, 1993). The coefficients of profile agreement (r_{pa}) were used in the subsequent statistical analyses. Analyses were performed using SPSS 24.0.

It is noteworthy to mention that I_{pa} is similar to other approaches such as the one of Furr (2008) and Biesanz (2010) in the way that they all consider the dyad unit—perceptions of one actor to another—as the central level of analysis, examine agreement between profiles across attributes simultaneously, and take into account normativeness or stereotype effects in their calculations. Meanwhile, I_{pa} differs from Furr's approach in that the latter recommends standardization within the sample to assess normativeness, while I_{pa} uses published test norms. Likewise, the main difference between I_{pa} and Biesanz's approach is that the latter relies on multilevel regression models.

Due to the hierarchical nature of the data (i.e., students nested in classrooms), we used a multilevel linear model for a two-level data structure (i.e. lower level unit or students' level is nested within one higher-level unit or classroom level) to examine our objectives. The interclass correlation coefficient (ICC) was used to identify the percentage of variance in the outcome variables that could be attributed to differences between classrooms. Several models were tested following Hox' recommendations of bottom-up strategy of analysis. That is, start with a simple model and continue by adding parameters, comparing the deviance estimates to test whether each model fits better than the previous one (Hox, 2010, p. 56). The strategy started with the intercept-only model and we built, step-by-step, the fixed part and the random part, and the residual error remaining at the students and classroom level until obtaining the final model (Hox, 2010). Once we estimated the final models, we calculated Pratt indices with Mplus 6.12 (Muthén & Muthén,

2012) that indicate the relative importance of each predictor variable. In other words, the Pratt index "partitions the R-square [total variance of the outcome variable] and sums to one, which can provide us a criterion of how much each predictor contributes to the explained variance in the outcome variable orthogonally" (Liu, Zumbo, & Wu, 2014; p. 9. See Liu et al., 2014, for a full explanation on how to perform this analysis). The multilevel regression analyses were performed using MLwiN 2.32 (Rabash, Steele, Browne, & Goldstein, 2015).

Results

Descriptive Statistics

Table 1 shows the means and standard deviations of the variables of the study and the bivariate Pearson correlations disregarding the multilevel nature of the data. Teachers who were described by their students as more agreeable (r = .52; p < .01), conscientious (r = .39; p < .01), emotionally stable (r = .37; p < .01) and extraverted (r = .31; p < .01) were liked more. These findings were also in line with the FFM individual trait-based descriptions of similarity, as students who rated themselves as higher on Conscientiousness, Agreeableness, and Emotional Stability also rated their teachers as higher on these corresponding traits. In sum, discounting the multilevel nature of the data, it seems that: (a) teachers who were ascribed by their students as higher in Conscientiousness, Agreeableness, Emotional Stability, and Extraversion were more liked, and (b) student-ratings of teachers' personality were subject to a mirror effect (or self-based heuristic bias) for some personality characteristics, as demonstrated by the fact that students' self-reports were positively and moderately associated with the descriptions provided for their teachers in Conscientiousness, Agreeableness, and Emotional Stability. Inspection of columns 11 to 13 shows that teachers' personality self-reports were unrelated to teacher liking, except for a small negative association between liking and teachers' self-reported Extraversion. Students' reports of teachers'

traits corresponded with teachers' self-reports for Agreeableness and Emotional Stability, suggesting at least some accuracy in the students' perspective.

Table 1

Descriptive and Bivariate Correlations Between Study Variables.

		n	*M*	*SD*	1	2	3	4	5	6	7	8	9	10	11	12	13
1	Teacher Liking	634	3.58	.90		.05	.04	.05	.08	.39**	.52**	.37**	.31**	-.03	-.05	.01	-.10*
Student self-reported personality																	
2	Conscientiousness	611	4.77	.87			.51**	.16**	.36**	.26**	.11**	.11**	.17**	-.01	-.01	.06	-.01
3	Agreeableness	628	4.93	.89				.31**	.29**	.23**	.20**	.13**	.18**	-.05	.003	.05	-.01
4	Emotional Stability	622	3.67	1.37					.17**	.06	.18**	.23**	.08*	-.01	.01	-.08*	-.07
5	Extraversion	617	4.02	1.17						.01	.06	.04	.08*	-.05	-.02	.04	-.01
Student-reported teacher personality																	
6	Conscientiousness	611	4.97	.92							.51**	.36**	.51**	.01	-.04	-.02	-.04
7	Agreeableness	618	4.50	1.15								.66**	.42**	.04	.16**	.10*	-.05
8	Emotional Stability	614	4.34	1.17									.30**	.02	.13**	.15**	-.09*
9	Extraversion	625	5.11	1.03										.13**	-.002	.07	.04
Teacher self-reported personality																	
10	Conscientiousness	31	4.82	.69											.53**	-.08*	.42**
11	Agreeableness	31	4.74	.78												.33**	.31**
12	Emotional Stability	31	3.20	1.14													.03
13	Extraversion	31	4.36	1.17													

*$p < .05$. **$p < .01$.

The descriptive statistics of the r_{pa} indices for actual similarity, perceptual similarity, and perceptual accuracy are presented in Table 2. The FFM profile-based indices ranged from very low (-.99) to very high (.99). The mean of the perceptual similarity index was the highest (M = .20) relative to the other r_{pa} indices but small in magnitude. In contrast, the mean for actual similarity was the lowest (M = .02), showing that students' self-reported personality was not similar to the self-reported personality of their teachers considering the FFM profile index. The mean of perceptual accuracy was .12, suggesting that students' reports of teachers' personality somehow matched teachers' reports of their own personality.

Table 2

Descriptive Statistics and Bivariate Correlations between Profile Agreement Indices.

	r_{pa} Index	*N*	*M*	*SD*	*Mdn*	Min	Max	1	2	3
1	Actual similarity	580	.02	.50	.13	-.97	.91		.16**	.06
2	Perceptual accuracy	581	.12	.50	.23	-.97	.93			-.05
3	Perceptual similarity	560	.20	.49	.31	-.99	.99			

Note: Actual similarity: Agreement between student's self-report and teacher's self-report; Perceptual accuracy: Agreement between teacher's self- report and student report of the teacher; Perceptual similarity: Agreement between student's self-report and student's report of the teacher. *p < .05, **p < .01

Multilevel Analyses

An appropriate testing of our research questions required the use of multilevel models considering teacher liking at the student (i.e., level 1) and classroom (i.e., level 2) levels. Table 3 presents the Null model, without predictors, which provides variance estimations at each of the two levels. The ICC was .17, which means that 17% of the variance of how much students liked

their teacher can be attributed to the classroom level, while 83% can be attributed to the student level. This finding confirmed that teacher liking does indeed vary across individual teachers/classrooms. Overall, these results support the use of multilevel analyses to evaluate objectives 1 and 2.

In Model 1 (see Table 3), the control variables of students' age and gender were added to examine their effect on teacher liking. There was a significant improvement compared to the Null model ($\chi^2 = 7.15$, $df = 2$, $p < .05$), thus, we considered them in the next analyses. To examine our first objective, we included profile agreement indices as predictors in Model 2. After including these indices there was significant improvement ($\chi^2 = 238.36$, $df = 3$, $p < .01$) over the Null model. To determine if the relationship between perceptual similarity and teacher liking was different across teachers/classrooms, we added random slope effects for the profile agreement indices in Model 4, which significantly improved Model 3 ($\chi^2 = 40.32$, $df = 6$, $p < .01$). Finally, Pratt indices indicated that perceptual similarity accounted for the largest proportion of total explained variance (83%; $R^2 = .02$), followed by actual similarity (14%) and perceptual accuracy (1%).

Table 3
Multilevel Analysis Results of the Effect of Profile Agreement Indices and Perceived Personality of Teachers on Teacher Liking (Estimated parameters with standard errors of estimates in parenthesis).

Predictors	Null model	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Fixed part							
Intercept	3.59 (.08)	3.58 (.60)	3.28 (.06)	3.59 (.06)	3.57 (.07)	3.59 (.08)	3.48 (.57)
Control variables							
Student gender		.01 (.07)	.06 (.07)	.05 (.07)	.01 (.07)	.02 (.07)	.01 (.04)
Student age		.01 (.04)	-.01 (.04)	-.01 (.04)	-.01(.04)	.01 (.03)	.03 (.07)
Level 1							
Profile agreement							
Actual similarity			-.09 (.07)	-.01 (.07)			
Perceptual accuracy			.04 (.08)	.07 (.16)			
Perceptual similarity			.20 (.07)	.16 (.08)			
Level 2							
Perceived personality of teachers							
Conscientiousness					.33 (.19)	.32 (.19)	.45 (.21)
Agreeableness					.30 (.21)	.40 (.24)	.37 (.24)
Emotional Stability					-.01 (.17)	-.10 (.20)	-.13 (.21)
Extraversion					.08 (.17)	.01 (.24)	-.11 (.29)
Teacher gender						-.16 (.13)	-.18 (.14)
Random part							
Student level							
σ^2_e	.67 (.04)	.67 (.04)	.63 (.04)	.54 (.04)	.67 (.04)	.66 (.04)	.66 (.04)
Classroom level							
σ^2_{u0}	.14 (.05)	.14 (04)	.14 (.05)	.10 (.04)	.06 (.04)	.06 (.02)	.07 (.04)
σ^2_{u1} *actual similarity*				.00(.00)			
σ_{u01} *actual similarity*				.00 (.00)			
σ^2_{u2} *perceptual accuracy*				.54 (.19)			
σ_{u02} *perceptual accuracy*				-.02 (.06)			
σ^2_{u3} *perceptual similarity*				.03 (.04)			
σ_{u03} *perceptual similarity*				.03 (.03)			
$\sigma^2_{u1\ CO}$							.00 (.00)
$\sigma_{u01\ CO}$							.00 (00)
$\sigma^2_{u2\ AG}$							.00 (.00)
$\sigma_{u02\ AG}$							.00 (00)
$\sigma^2_{u3\ ES}$							.00 (.00)
$\sigma_{u03\ ES}$							.00 (00)
$\sigma^2_{u4\ EX}$							.38 (.51)
$\sigma_{u04\ EX}$							-.10 (.09)
σ^2_{u5} *teacher gender*							.00 (.00)
σ_{u05} *teacher gender*							.00 (.00)
Deviance	1596.99	1589.84	1351.48	1311.16	1571.21	1511.80	1511.16
χ^2		7.15	238.36	40.32	18.63	59.41	0
df		2	3	6	4	1	10
p-Value		$p < .05$	$p < .01$	$p < .01$	$p < .01$	$p < .01$	$p = 1.00$
Reference model		Model 0	Model 1	Model 2	Model 1	Model 4	Model 5
Variance explained							
Student level		0%	6%	3%	0%	1%	0%
Classroom level		0%	0%	28%	57%	57%	50%

Note. χ^2 = Chi-Square Test; *df* = Degrees of Freedom. *$p < .05$, **$p < .01$

To explore our second objective, we tested whether the scores of teachers' perceived Agreeableness, Conscientiousness, Emotional Stability, and Extraversion positively predicted teacher liking at the level of the student and classroom (Models 4-6 in Table 3). Before running the analyses, we tested whether students' ratings of teachers' personality are reliable indicators of group-level constructs by calculating the interclass correlation *ICC*(2) (Lüdtke, Robitzsch, Trautwein, & Kunter, 2009). The *ICC*(2) was .71 for Conscientiousness, .85 for Agreeableness, .89 for Emotional Stability, and .74 for Extraversion. These coefficients indicated adequate levels of reliability (values between .70 and .85 are considered acceptable; Lüdtke, Trautwein, Kunter, & Baumert, 2006) and, therefore, the aggregation of the variables and their inclusion as predictors at level 2 was justified.

Teachers' perceived personality ratings were entered as predictors in Model 4 (see Table 3). This model proved to be significantly better than the Null model ($\chi^2 = 18.63$, $df = 4$, $p < .001$). Moreover, 57% of the variance of teacher liking at the classroom level could be explained by the effects of students' personality ratings of their teachers. That is, perceived personality characteristics in teachers accounted for more than half of the variation among classrooms in teacher liking. In Model 5, we entered only the gender of teachers to explore its contribution to Model 4. Model 5 proved to be significantly better than Model 4 ($\chi^2 = 59.41$, $df = 1$, $p < .001$) and since the regression coefficient of teacher gender is -.16 and this variable is coded 0 = Female/1 = Male, then female teachers scored .16 points higher on teacher liking than male teachers. To examine whether the relationship between these variables was different across classrooms, we compared Model 5 with Model 6 that included random slope effects. Results showed that Model 6 was not significantly better than Model 5 ($\chi^2 = 0$, $df = 10$, $p = 1.00$), suggesting that the relationship between our predictor variables with teacher liking was invariant across classrooms.

Pratt indices revealed that perceived Agreeableness accounted for 54% of the total explained variance (R^2 = .57), followed by Conscientiousness (38%), Extraversion (8%), and Emotional Stability (1%).

Discussion

The goal of this study was to examine the personality similarity between teachers and students, taking both their self-descriptions and the description of students about teachers as different perspectives. Thus, we aimed to introduce alternative ways to conceptualize personality similarity (i.e., actual and perceptual similarity) in the investigation of teacher-student interactions, and examined whether students had an accurate representation of their teacher's personality through the investigation of perceptual accuracy. Additionally, we explored how these three different perspectives of personality similarity (i.e., perceptual and actual similarity, and perceptual accuracy) contributed to explaining how much students liked their teachers.

Variability in Teacher Liking and Similarity Indices

The first main finding was that 17% of the variance in teacher liking was situated at the classroom level, whereas 83% of the variance was located at the level of the students. In other words, there were substantive differences in liking of teachers between classrooms, but there was larger variability in liking among students. Similarly, Fauth et al. (2018) found that 15% of the variance in students' liking of the teacher was attributed to the classroom level. The authors concluded that the shared variance reflected teachers' popularity (i.e., agreement of students in the same class regarding how much they like their teacher), which has an effect on the development of students' interest in the subject matter.

Second, the inspection of the means and standard deviations of the different profile agreement indices showed a great variability in terms of actual similarity, with an average around

zero (.02), in line with expectations. When students and teachers have to describe their own personalities, one expects these to be largely unrelated on average because no explicit "matching algorithm" has been used to align students to teachers in classrooms. In contrast, when looking at perceptual similarity, computed as the comparison between students' self-described and teacher ascribed personality from the perspective of students, a higher mean (.20) was observed. This finding suggests that students' self-descriptions and teachers' descriptions by students are more similar, suggesting a self-based heuristic bias when students perceive the personality of their teacher. This moderate level of perceptual similarity is in line with prior research that showed that college students tend to describe their preferred or ideal teacher as similar to themselves on all Big Five personality domains (Chamorro-Premuzic et al., 2008; Furnham & Chamorro-Premuzic, 2005; Kim & MacCann, 2016). In our study, however, students described an actual, instead of the ideal teacher, so either when thinking about an ideal teacher or describing a real one, students' description of teachers' personality seemed to be colored or biased by how they perceived themselves.

Several, but not mutually exclusive, explanations can help understand why students perceive themselves as similar to the teacher (i.e., perceptual similarity effect). Decuyper et al. (2011), for example, postulated the “insufficient information hypothesis”, suggesting that raters do not always have sufficient information about a target, prompting perceivers to rely on their own characteristics when describing a target's personality. Indeed, although students and teachers in our sample spend on average three to five hours a week together in classrooms, this may have been insufficient for an elaborated view on teachers' personality. We suspect that most teachers do not work full-time and may hence are less involved in students' school life. Therefore, the interactions among students and teachers are time and context constrained, so it is plausible that students had

to rely on a limited set of interactions with teachers to report on their personalities. Alternatively, Montoya et al. (2008) argued that perceptual similarity might reflect false-consensus biases due to a need for consistency (see Ross, Greene, & House, 1977, for a review). Thus, students' descriptions of teachers' personality profiles might have been biased by students' belief that teachers resemble their personality characteristics. That is, their descriptions may be biased by their belief that “how I behave is how others, including the teacher, behave as well”.

Perceptual Personality Similarity explain Teacher Liking

Our first objective aimed to explore whether the different profile agreement indices— perceptual similarity, perceptual accuracy, and actual similarity— positively predicted teacher liking. Our results indicated that the three profile agreement indices contributed to explaining teacher liking. Furthermore, post hoc analyses revealed that perceptual similarity proved to be the most important predictor from the three similarity indices.

Different affective and cognitive processes could explain the positive relationship between perceptual personality similarity on the one hand and teacher liking on the other. The meta-analysis by Montoya and Horton (2013) on moderators of the tendency to be attracted by similar others showed that similarity was larger when there was more salient information about the target available before the attraction assessment. In our study, the salient and available information for students about teachers could have influenced their perceptions. Students might have remembered more their positive interactions with their teachers when describing their personality and reflecting on how much they liked them. As suggested by Kim and MacCann (2016), students might "remember more rewarding interactions with the instructors who are similar to them and so come to prefer them" (p. 197). But the association may also be explained the other way around, in a way that students who liked more their teacher may assume that s/he is similar to themselves.

Meanwhile, Gehlbach et al. (2012) interpreted that the perceptual similarity of students with their teachers may be a theoretical precursor of teacher-student relationships. The authors suggested that students may begin the relationship with their teachers by "reading" them in their first encounters and, by doing so, assessing which is the level of similarity between teachers and themselves. From this brief and most probably automatic evaluation, students may be inclined to have a more positive or negative relationship with their teachers. Moreover, we hypothesize that similar factors would contribute to explaining not only the perceptual personality similarity of secondary school students, as in our study, but also the one experienced by students of younger and older ages as suggested by previous studies with diverse samples (e.g., Chamorro-Premuzic et al., 2008; Furnham & Chamorro-Premuzic, 2005; Kim & MacCann, 2016; Montoya et al., 2008).

Liked Teachers are Perceived as Agreeable and Conscientious

Students' perception of teachers' personality characteristics, together with teachers' gender, positively predicted teacher liking. Moreover, Agreeableness and Conscientiousness were the most important predictors of all the reported personality characteristics. The final model accounted for more than a half of the total variance at the classroom level, while capturing none of the variance at the student level. This finding indicates that the model composed by students' gender and age, teachers' perceived personality characteristics, and teachers' gender largely explained differences between classrooms in teacher liking.

A particularly strong effect of teachers' perceived Agreeableness (i.e., the perception of teachers as loving, friendly and caring) was found on teacher liking. In line with our finding, several studies with samples of adolescents of different ages have found that perceived teacher affective support is particularly important for adolescents' learning and social-emotional outcomes such as sense of belonging, academic enjoyment and self-efficacy, intrinsic motivation (Arens &

Niepel, 2018; Bakadorova & Raufelder, 2014; Raufelder et al., 2016; Sakiz et al., 2012), decreased levels of depressive symptoms, and increased self-esteem (Reddy et al., 2003). Similarly, Chamorro-Premuzic et al. (2008) results showed that university students value teachers' friendliness, kindness and trustful characteristics more, and these are also expected competencies of educators in Brazil. Studies with samples of graduate and secondary school students in that context indicated that a "good teacher" has the capacity to establish a positive relationship with students in order to promote a favorable classroom environment for learning (Mesquita, 2018). Specifically, a "good teacher" shows empathy, care, respect, personal support, and concern for students (Cândido, Assis, Ferreira, & Souza, 2014; Mesquita, 2018; Souza & Paixão, 2015; Trombeta, 1997), all subsumed under the domain of Agreeableness.

Consistent with other research, Conscientiousness was also a preferred characteristic in teachers' personality (Chamorro-Premuzic et al., 2008; Furnham & Chamorro-Premuzic, 2005; Kim & MacCann, 2016). Kim and MacCann (2016) suggested that the importance of Conscientiousness could be due to its utility for students' educational attainment (Poropat, 2009; Smrtnik Vitulic & Zupancic, 2013) and various labor market outcomes (e.g., Almlund, Duckworth, Heckman, & Kautz, 2011). Indeed, organized teachers who set ambitious goals and get things done are modelling required behaviors for successful performance at school, but also at the labor market. Furthermore, research has shown that teachers' Conscientiousness-related traits are strong predictors of measures of teacher effectiveness, such as students' academic achievement (Duckworth, Quinn, & Seligman, 2009) and teacher academic support (Kim et al., 2018).

Extraversion and Emotional Stability, in contrast, did not contributed as much as the other two personality characteristics to explain students' preferences for their teachers. Various reasons may have contributed to this result. First, in contrast to most previous studies, we asked our

participants for a personality description of an actual instead of a hypothetical (i.e., ideal or most preferred) teacher. Second, our sample consisted of secondary school students, thus, younger than the university participants of the majority of previous studies. On the one hand, Emotional Stability may not have been the most salient quality that students could observe in their teachers because characteristics such as anxiety or stress tolerance, among others, are less visible to an external actor. Another plausible explanation is that adolescent students, compared to university students, might not value Emotional Stability or Extraversion characteristics as much as other qualities teachers display in classrooms. At both university and primary school level, researchers have found that the most preferred traits in their teachers were those associated with Agreeableness (Bakx et al., 2015; Chamorro-Premuzic et al., 2008; Eryilmaz, 2015). In that sense, we hypothetisize that students might have attributed commonly prefered teacher personality characteristics (i.e., being agreeable or conscientious) to teachers they already liked, consistent with the halo effect (Thorndike, 1920). This effect occurs "when a rater's opinion about one aspect of the teacher influences the remainder of that person's ratings" (Keeley, English, Irons, & Henslee, 2013; p. 441). Keeley et al.'s (2013) findings suggested, for example, that students' positive or negative opinion of a particular teacher's personality attribute influenced their overall positive or negative rating of that teacher's performance.

Limitations and Future Directions

Although different cognitive and affective biases have been discussed to explain why students described their teachers' personality in line with their self-descriptions, the current study did not provide evidence on the processes behind these perceptions. The core question whether liking a teacher leads to perception of greater similarity, or whether experiencing more similarity leads to stronger liking by students, remains unanswered. Thus, future studies should focus on

understanding the processes behind perceptual personality similarity, and how this is related to liking, attraction, and learning outcomes. For example, it would be interesting to understand the moderating role of teachers' and students' gender (or the interaction of both variables) in the relationship between perceptual personality similarity and teacher liking.

There are also a number of design and methodological challenges imposing constraints on our findings. First, a short measure of personality was used that failed to adequately capture the domain of Openness to Experience when factoring items, which is an important limitation given the relevance of this domain for educational outcomes (Poropat, 2014). Thus, only four factors could be retained to compute the similarity indices. It is, therefore, recommended to use a more stable short measure of the Big Five in future research. Second, this study focused only on a particular set of variables and primarily relied on students' perspectives. Teacher liking by students was considered as the prime outcome of interest, though future studies should also examine other factors that may be related to similarity perceptions such as learning engagement, academic achievement, or well-being at school. In addition, the perspectives on similarity could be broadened by incorporating teachers' perceptions of the personality of students. Such an additional angle could be particularly relevant for studying teachers' impact on students' social-emotional and identity development, which is considered a key 21st century skill (Abrahams et al., 2019).

Finally, data were collected from a convenience sample, hence selective, so the results may not be generalizable to a broader population of Brazilian teachers and students. Although we had a relatively large sample of participating students, the number of classrooms and teachers was limited. Future research should increase the sample size of classrooms and include other variables at this hierarchical level in order to explain the outcome variable considering level 2 predictors (e.g., teachers' characteristics and number of students in classroom) and improve the accuracy of

the estimates and their standard errors (Hox, 2010). In addition, a larger sample could further allow to look at classroom effects when rating multiple teachers instructing the same class.

Theoretical and Practical Implications

Despite its limitations, the current findings can provide promising avenues for both educational researchers and practitioners. First, the study shows a number of innovative ways to think about personality similarity in teacher-student dyads and how teachers are perceived in classrooms. The work is both theoretically and practically important because it points to the relevance of students' *perceptions* of similarity with their teachers, rather than their *actual* similarity with them, to explain teacher likability. Thus, this suggests that students may like teachers more when they are perceived to have certain characteristics that students also possess and value, or when teachers have characteristics that students believe are important in a teacher-student relationship. Therefore, on the one hand, it may be relevant for teachers to understand from their early interactions with their students how the students perceive their behaviors and what students value in their relationships with them. In effect, the teachers can then be aware of the students' perceptions, consider their expectations, and work together with the students to build more positive teacher-student relationships. On the other hand, practitioners should be aware that students' reports of teachers' characteristics might be influenced by how much they like their teachers (i.e., halo effect), thus, biasing the accuracy of their perceptions. Keeley et al. (2013) suggested that in order to reduce the halo effect, students should be educated on the importance of their ratings and the possible errors they may commit when providing reports about teachers' characteristics.

Second, this study extends findings from the personal relationships literature (e.g., Decuyper et al., 2011) to the teacher-student dyad by suggesting the presence of self-based

heuristic biases in students' ratings of teachers. The present work further illustrates that teachers' self-described personality profile was only slightly related to how students perceived this profile. Thus, it can be implied that students might have had little information about their teachers' personal characteristics or could only report on characteristics that were more observable in their teacher's performance in the classroom. It could have also been the case that students reported on desired personality characteristics of ideal or good teachers that did not correspond to how teachers described themselves. Thus, it might be important for educational researchers to take into account both perspectives (i.e., teachers' self-descriptions and students' descriptions of teachers) as they may complement each other to increase the accuracy of their ratings and provide different kinds of information regarding teachers' personality profiles.

Third, the current finding adds to the personality theory literature to suggest that being a likable teachers can be one who is conscientious and not only agreeable. The current observation that teacher liking by students was related to students' perception of their teachers as being agreeable and conscientious aligns with this claim and has important practical implications. Although it might not be surprising that being liked is related to perceptions of being loving, kind, friendly and sympathetic (i.e., high Agreeableness), the present findings also underscore that teachers who are perceived as more motivated, efficient and persistent (i.e., high Conscientiousness) are perceived as more likeable. Together, these findings portray that a likable teacher, from students' perspectives, is someone who shows respect, is friendly and kind, but is at the same time motivated, efficient and persistent. In other words, the present findings suggest that having high standards and demonstrating efficiency and persistence does not come at the cost of being perceived as boring or less liked. On the contrary, the perception of Agreeableness is important to instill a safe and encouraging learning climate, whereas the perception of

Conscientiousness is a key driver of performance standards and essential for development and learning. Additionally, these characteristics might reflect the affective and learning support teachers provide to their students, which are of particular importance to promote students' sense of belonging, academic enjoyment and self-efficacy, as well as intrinsic motivation, among others (Raufelder et al., 2016; Sakiz et al., 2012; Wentzel, 1997).

Conclusions

In conclusion, we examined the role of personality similarity between teachers and students for understanding how it can be useful in explaining how much a student may like their teacher. We additionally investigated alternative conceptualizations of personality similarity when considering the teacher-student dyad and their specific contribution to teacher liking. Our results suggest that students' perceptual personality similarity with their teacher is associated with increased teacher liking, whereby both Agreeableness and Conscientiousness are contributing traits. The current findings facilitate the promotion of more fine-grained and in-depth discussions on the importance of considering different conceptualizations of assessing personality similarity, most particularly the role of students' perceptual personality similarity with their teachers, in order to further understand how one can explain teacher-student interactions. With this study we aim to stimulate additional research on students' and teachers' characteristics that contribute to positive teacher-student relationships.

Data Accessibility Statement

The study materials, data and analysis scripts used for this article can be accessed at https://osf.io/zncmf/?view_only=7c9294e052f64f8c90de939ab3d56af5

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