Filipino Public-School Teachers' Empathy: A Cross-Sectional, Descriptive Study

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Abstract This cross-sectional study describes Filipino public school teachers' empathy levels and whether these levels are affected by attributes such as age, sex at birth, educational attainment, years of service, and grade level taught. One hundred forty-six public school teachers agreed to participate in a survey conducted during inservice training. Teacher participants reported aboveaverage levels of affective, cognitive, and overall empathy. Among the attributes, years of service were found to have significant results from non-parametric analysis. Teachers teaching for 1-5 years had significantly higher affective and overall empathy than those teaching for 16-20 years. No such differences were observed for cognitive empathy. The implications of this decreasing trend in affective empathy, but not cognitive empathy, to length of service were discussed. Recommendations were also provided to address the possible varied effects of cognitive and affective empathy on teachers' well-being and empathy as a risk or protective factor.

Keywords: empathic concern, empathy, Filipino teachers, perspective-taking, teaching experience

Introduction

UNESCO challenges education systems to pursue social and emotional learning (SEL) as a way to achieve human flourishing, which in turn is critical for the attainment of the Sustainable Development Goals (SDGs) (Asah & Singh, 2019). Teachers play a crucial role in effectively implementing SEL programs in schools and classrooms (Schonert-Reichl, 2017), and the success of SEL depends on their social-emotional competence (Greenberg, 2023).

Empathy is one component of teachers' social-emotional characteristics that is particularly relevant to the quality of interactions and relationships they will form with students (Aldrup et al., 2022). Empathy was also included in Filipino teachers' concept of *competence*, where it is regarded as a core construct to manifest positive relationships with others (Abulon & Balagtas, 2015). The centrality of empathy in interpersonal relations was even magnified by the complex challenges brought by the COVID-19 pandemic. Social disconnection is regarded as the central disruption brought by the pandemic (Collaborative for Academic, Social, and Emotional Learning [CASEL], 2020). Teachers must seek ways to connect meaningfully with their students and help them reconnect with their peers.

Along with other components of social and emotional competence, the cultivation of empathy has been given little attention in both preservice teacher education (Schonert-Reichl et al., 2015) and in-service programs for teachers (Jennings & Frank, 2015).

The Philippines, described as still at a beginning stage in terms of its educational system's ability to develop socioemotional skills (Acosta et al., 2017), will greatly benefit from stronger bridges between research, policies, and

practice related to social and emotional skills development. The present study, thus, aims to contribute to the literature that emphasizes the teachers' social and emotional competencies by providing descriptive information on the levels of empathy among Filipino teachers. How the levels of empathy differed when teachers were grouped based on characteristics such as sex at birth, age, educational attainment, years of service, and grade level taught on levels of empathy were also determined. Results from this study have important implications for developing programs to foster social-emotional skills and well-being in both preservice and in-service teacher development programs.

Affective and Cognitive Aspects of Empathy

Empathy is an important skill to interact effectively in this social world. It allows us to be attuned to others may be feeling or thinking (Hudnall & Kopecky, 2020; Lishner et al., 2017). Past researchers have focused on two approaches to empathy – affective and cognitive.

The affective approach defines empathy as an "observer's emotional response to the affective state of another" (Baron-Cohen & Wheelwright, 2004, p. 164). These emotional responses may vary. It can either match that of the other person (Eisenberg & Miller, 1987) or not exactly match the other person's emotional state but still be appropriate to it (Stotland, 1969). It may also be a response of concern or compassion to another's distress (Batson et al., 1991). While the emotional responses to another's affective state may not always be straightforward, these responses should always be appropriate (Maibom, 2017).

On the other hand, the cognitive approach emphasizes that empathy involves understanding the other's feelings (Baron-Cohen & Wheelwright, 2004). In the Piagetian tradition, this is known as *decentration* or perspective-

taking – knowing or imagining another person's internal state (Batson et al., 2002; Davis, 1983). This understanding of another's mental state is followed by an inference and a prediction of their likely behavior or attitude (Spaulding, 2017). The cognitive approach is also closely associated with emotional intelligence, where one can perceive, appraise, and express emotions accurately and adaptively and regulate emotions in oneself and others (Kämpf et al., 2023).

Currently, some conceptualizations of empathy involve integrating the affective and cognitive components. This integration allows for a more comprehensive understanding of empathy – the affective component explains why we care for people in need. In contrast, the cognitive component explains why we can know and name our feelings and that of others (Aldrup et al., 2022). Still, some conceptualizations argue the need to assess the cognitive and affective components separately (Thompson et al., 2022). Concerning emotion regulation, for instance, greater cognitive empathy was associated with improved emotion regulation. In contrast, greater affective empathy was linked to increased difficulties in the regulation of emotion (Thompson et al., 2022).

Teachers' Empathy

Students experience various emotions in academic settings (Pekrun et al., 2002). Teachers are confronted with these emotions. Their sensitivity to these emotional signals and their capacity to attend appropriately are vital to forming positive teacher-student relationships and enhancing student learning (Meyers et al., 2019).

Studies on teacher empathy found that this skill is associated with many positive educational outcomes (Aldrup et al., 2022). When teachers can empathize with the perspectives of students and their life experiences, they are

found to be able to manage students' problematic behaviors better and come up with more effective problem-solving strategies. This leads to better relationships with students and lower levels of job burnout (Wink et al., 2021). Regarding job burnout, Sova and Turcan (2016) reported that empathy is a professional value that makes teachers more resistant to occupational stress. This, in turn, can promote teachers' well-being. Empathy is also associated with teachers' fair behavior and is considered a key educational resource for achieving *social justice* (Bullough, 2019; Hong et al., 2022).

However, empathy as an important interpersonal skill was also regarded as a "risky strength," especially when present at extreme levels or in combination with certain individual characteristics or contexts (Tone & Tully, 2014). Several studies found links between empathy and burnout (Kim, 2018) and empathy and mental health problems such as depression and anxiety (Gambin & Sharp, 2018; Tone & Tully, 2014). Affective empathy, in particular, was found to be positively related to anxiety dimensions (Gambin & Sharp, 2018).

Predictors of Empathy

Several studies investigated the factors that may be contributing to the development of this skill. Although feelings of empathy are considered *transitory* states, many researchers believe that some people are more likely to experience these states than others or experience these states to a greater extent (Lishner et al., 2017). Teachers' self-efficacy, or their belief in their ability to handle teaching-related tasks, was found to contribute to empathy in teachers (Aparicio-Flores et al., 2020; Goroshit & Hen, 2016). This relationship was also demonstrated in an earlier study – more specifically, higher levels of perspective-taking (cognitive empathy) were associated with higher self-efficacy (Davis,

1983). A strong sense of professional identity, or having the attitudes, values, knowledge, beliefs, and skills shared within a professional group, was also related to empathy. In a study with pre-service teachers, those with strong professional identities showed higher levels of empathy than those with weak professional identities (Zhu et al., 2019).

Among studies with health professionals, students, and teachers, certain attributes were also found to contribute to levels of empathy. For example, in a review of various studies, Maximiano-Barreto et al. (2020) found that females demonstrate higher levels of empathy than males; having children and siblings can contribute positively to greater empathy and socio-emotional development; and married professionals tend to have higher empathy levels than single individuals. Increased empathy was also observed based on length of professional experience, amount of training or education received, grade levels taught, or whether they teach in mainstream or non-mainstream (special education) classrooms (Philips, 2020). In addition to reported higher levels of empathy, teachers with 10 or more years of experience and those teaching in primary schools were found to have greater intention to implement related programs such as social-emotional learning (SEL) and gender and respectful relationships (G&RR) (Molina et al., 2021).

Some studies also examined the differences in levels of empathy's affective and cognitive components and found that gender, age, and educational level may account for changes in one empathy component without significantly impacting another (Yaghoubi et al., 2021).

The Present Study

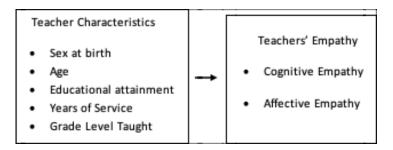
This study subscribes to conceptualizing empathy as a learnable skill (Hudnall & Kopecky, 2020) and a crucial component of individuals' social-emotional competence (Aldrup et

al., 2022; CASEL, 2020). Empathy can also be understood as consisting of two distinct but related dimensions – the affective and the cognitive (Baron-Cohen & Wheelwright, 2004). Teaching, as a human service profession, inevitably requires teachers to empathize. However, the construct has been given little attention in research on teacher training (Aldrup et al., 2022; Schonert-Reichl et al., 2015). Studies on empathy among teachers in the Philippines called for more research in this area as our educational systems, recovering from the effects of the COVID-19 pandemic, would benefit from a more empathetic learning environment (De Luna & Canet, 2021; Jocson, 2022).

The study thus aims to provide baseline information by determining the profile of Filipino public school teachers in terms of empathy. Specifically, it extricates levels of empathy based on cognitive and affective components. Separating the components allows for more insights regarding the possible benefits and risks of empathy to teachers (Aldrup et al., 2022; Thompson et al., 2022; Tone & Tully, 2014; Wink et al., 2021). The study also identifies differences in teachers' cognitive, affective, and overall empathy levels based on characteristics such as sex at birth, age, educational attainment, years of service, and grade level taught. These characteristics were chosen because previous studies demonstrated their association with levels of empathy (Maximiano-Barreto et al., 2020; Molina et al., 2021; Philips, 2020). Also, in future development programs related to empathy, these demographic characteristics may be used to differentiate the program offerings. The hypothesized relationship among these variables in the study is depicted in Figure 1. Teachers' cognitive and affective dimensions of empathy are the dependent variables. The independent variables are the various teacher characteristics, which served as bases for grouping.

Figure 1

Conceptual Framework of the Study



This research was conducted as a needs assessment that may be used in designing programs to develop teachers' empathy and other social and emotional competencies. Insights gathered from the study can also help identify potential areas within the social and emotional learning field that need additional research.

Methodology

Research Design

A cross-sectional survey research design was used in this study to address the research objectives. Survey research design was used to systematically describe teachers' self-reported levels of affective, cognitive, and overall empathy. The design also allows for comparing two or more groups (of teachers) in terms of the said variables (Creswell, 2012).

Research Participants

The research participants were 146 public school teachers from one Batangas division and one Pampanga division. Participants were determined via non-probability sampling – they were attendees in a webinar conducted as part of their

Table 1Profile of Research Participants

Characteristic		Frequency (Percentage)
Sex at birth	Male	15 (10.3)
	Female	131 (89.7)
	Total	146 (100)
Age	20 to 25	22 (15.1)
	26 to 30	33 (22.6)
	31 to 45	27 (18.5)
	36 to 40	19 (13.0)
	41 to 45	20 (13.7)
	46 to 50	17 (11.6)
	51 to 55	8 (5.5)
	Total	146 (100)
Educational	Bachelor's Degree	45 (30.8)
Attainment	Master's units	76 (52.1)
	Master's Degree	21 (14.4)
	Doctoral units	4 (2.7)
	Total	146 (100)
Years of Service	1 to 5	71 (48.6)
	6 to 10	37 (25.3)
	11 to 15	16 (11.0)
	16 to 20	10 (6.8)
	21 above	12 (8.2)
	Total	146 (100)
Grade Level Taught	Preschool	14 (9.6)
	Elementary	76 (52.1)
	Junio High School	45 (30.8)
	Senior High School	11 (7.5)
	Total	146 (100.0)

in-service training. These are premier divisions of Region IV-A and Region III, catering to the educational needs of several districts in Batangas and Pampanga (Department

of Education Division of Batangas, 2017; Department of Education Region 3 - Central Luzon, 2023). These divisions were chosen because their in-service training conducted in 2022 was part of the various initiatives to improve teachers' well-being, and a related research study may be particularly useful for their future program development plans.

Table 1 provides a summary of the profile of the research participants. The majority of the teachers who participated were females (89.7%). In terms of age, they are well-distributed, but in terms of years of service, almost half (48.6%) are within the 1 to 5 years and may be considered novice teachers. The majority (69.2%) have acquired graduate degrees (with master's or doctoral units or master's degrees). A higher percentage of them teach in elementary (52.1%) and junior high school (30.8%) levels.

Research Instrument

The Interpersonal Reactivity Index (IRI) by Davis (1983) was used in this study to measure the teachers' level of empathy. Empathy is described in this measure in terms of reactivity, or the reactions of one's individual to the observed experiences of another (Davis, 1983). The instrument is a 28-item self-report measure consisting of four seven-item subscales corresponding to four separate aspects of empathy: perspective-taking, fantasy, empathic concern, and personal distress. For the study, however, only two of the subscales were used, perspective taking (PT) and empathic concern (EC), as the other two subscales (fantasy and personal distress) may measure processes broader than empathy (Baron-Cohen & Wheelwright, 2004). The subscales 'internal consistency (alpha) coefficients based on recent psychometric evaluations were found to be .71 and .77 for PT and EC subscales, respectively (Gilet et al., 2013), indicating that the scales are reliable

Perspective Taking. Items under this subscale assess the tendency to adopt the psychological point of view of another. This subscale was highly correlated with measures of cognitive empathy (Davis, 1983).

Empathic Concern. This subscale focuses on "other-oriented" feelings such as sympathy and concern for the misfortunes of others. The items are most correlated with measures of emotionality and non-selfish concern for other people (Davis, 1983).

Each item was answered on a 5-point Likert scale ranging from "Does not describe me well" (1) to "Describes me very well" (5).

Data Collection and Analysis

Data were collected in August 2022 in a webinar attended by the teachers as part of their in-service training. They responded to the survey synchronously during a particular point in the webinar where a discussion about empathy was about to be given. The first part of the questionnaire asked the participants about their sex at birth, age, educational attainment, years of service, and grade level taught. The second part of the form was the IRI. All data were gathered via Google Forms, downloaded as a Microsoft Excel Sheet file, and coded. The names of the schools and all other identifying information were held confidential.

Participants' responses to the IRI were added per subscale, PT and EC, to obtain specific cognitive and affective empathy levels, respectively. The combined scores were also obtained to describe the overall levels of empathy. Nonparametric statistics were used to compare the levels of empathy when respondents were grouped according to different attributes or characteristics. The non-parametric alternatives were utilized because the study used non-probability sampling, and some of the assumptions for parametric analysis (no significant outliers and data are normally distributed) weren't satisfied. The specific non-parametric tests used were the Mann-Whitney U test (for the variable sex at birth) and the Kruskal-Wallis H test (for age, educational attainment, years of service, and grade level taught). All statistical tests were done through SPSS version 23.

Ethical Considerations

Permission to conduct research was obtained first from the program organizers, and the study plan was explained. Permission was also sought from the teachers themselves. Although the survey was conducted during a webinar, voluntary participation in answering the survey was emphasized. Their participation or non-participation did not affect obtaining a certificate or any credits during the training. An informed consent form was filled out electronically; the form contains the study's objectives, assurances of confidentiality, and the option to withdraw at any time.

Results and Discussion

The results of the quantitative data analyses are given below.

Levels of Affective, Cognitive, and Overall Empathy among Public School Teachers

Table 2 presents a summary of the empathy scores. Public school teachers' empathic concern (M=27.61, SD=3.57) and perspective-taking (M=26.66, SD=3.04) tend to cluster within the above-average range. The same can be said of the total empathy scores (M=54.26, SD=5.37).

 Table 2

 Levels of Empathy of Teachers in the Sample

	N	Mean	Std. Deviation	Descriptive Interpretation
Empathic Concern	146	27.6027	3.57478	Above Average
Perspective Taking	146	26.6575	3.04323	Above Average
Total/Overall Empathy	146	54.2603	5.72840	Above Average

Public school teachers reported higher scores on empathic concern (affective empathy) between the two dimensions of empathy. Furthermore, while the scores are within the above-average range, a higher range of scores ("very high") can still be attained in the IRI. This finding implies that the empathy scores may still be improved. A high level of empathy among teachers has important implications for student learning and well-being. Teachers' high level of empathy is associated with high learner engagement (Zhang, 2022) and positive teacher-student relationships, which in turn lessens teachers' feelings of burnout and stress (Wink et al., 2021; Sova & Turcan, 2016).

Differences in Levels of Teachers' Empathy Based on Individual Characteristics

A comparison of the levels of empathic concern, perspectivetaking, and total empathy of the teachers in the sample based on sex at birth, age, educational attainment, years of service, and grade level taught is given in Table 3.

Table 3

Non-Parametric Analysis Comparing Teachers' Empathy Levels when Grouped According to Sex at Birth, Age, Educational Attainment, Years of Service, and Grade Level Taught

Characteristics	Em	Empathic Concern	ern	Per	Perspective Taking	king	Ó	Overall Empathy	thy
		(EC)			(PT)			(OE)	
	Test	Jþ	p-value	Test	дþ	p-value	Test	Jþ	p-value
	statistic			statistic			statistic		
	(U/H)			(U/H)			(U/H)		
Sex at Birth	1,125.5		.355	946		.828	1,069		.577
Age	3.914	9	889.	6.463	9	.373	6.581	9	.361
Educational	4.642	3	.200	5.253	3	.154	6.833	3	720.
Attainment									
Years of Service	15.811	4	.003ª	7.023	4	.135	13.875	4	.008ª
Grade Level	2.260	3	.520	1.940	3	.585	3.146	3	.370
Taught									

a Scores are significantly different at the .05 level

Table 3 presents no significant differences in teachers' EC, PT, and overall empathy levels when grouped according to sex at birth, age, educational attainment, and grade level taught. This contrasts with what was reported in some studies. For example, females tend to display greater levels of empathy than males (Maximiano-Barreto et al., 2020). Previous studies also pointed out that teachers at the primary level tend to express greater concern for their student's social and emotional learning (Molina et al., 2021), but that was not evident in the results from this sample.

Regarding years of service as a teacher, a statistically significant difference in levels of empathic concern was determined from the Kruskal-Wallis test, H(4) = 15.811, p=.003. Pairwise comparisons were performed using Dunn's (1964) procedure with a Bonferroni correction for multiple comparisons. This post-hoc analysis revealed statistically significant differences in EC scores between teachers teaching for 16-20 years (mean rank = 35.20) and those teaching for 1-5 years (mean rank = 83.23) (p = .007). There is also a statistically significant difference between the levels when grouped according to the teacher's years of service, H(4)= 13.875, p=.008). Post-hoc analysis revealed that teachers who have rendered 1-5 years of service (mean rank = 83.77) have significantly higher levels of total empathy compared to those who have rendered 16-20 years of service (mean rank = 36.85), (p=.010). There was no significant difference in levels of perspective-taking among teachers of varying years of service, H(4)=1.940, p=.585.

Teaching experience, as indicated by years of service in the teaching profession, was the variable found in this sample to have significant effects on empathy. While no significant differences were observed in the levels of perspective-taking when teachers were grouped according to length of service, significant differences were observed

for empathic concern and overall empathy. Those teachers who are relatively *new* in the teaching profession (1-5 years in service) reported higher levels of empathic concern and overall empathy than those who have been in the profession for longer (16-20 years).

Although it was expected that empathy levels should increase as one gains more experience in teaching, there is also support from the literature of the tendency for empathy to have a decreasing trend concerning years of service (Huang et al., 2020). The decrease in trend seems to connect with protective factors related to maintaining one's mental health. Empathic concern, which is regarded as the emotional aspect of empathy, was found to play a risk role in mental health problems and was found to be more correlated with burnout and anxiety compared to the cognitive dimension of empathy (Dekel et al., 2018; Tone & Tully, 2014). Furthermore, this changing pattern of empathy may be explained by mechanisms such as dehumanization and detachment (Haslam & Loughnan, 2014). It may be possible for teachers who have been exposed to children's emotions for a longer period to have decreased sensitivity to emotional cues, thereby protecting themselves from emotional exhaustion and burnout (Wróbel, 2013). These findings offer possible reasons why teachers with longer years of service tend to have lower levels of empathic concern than new teachers.

On the other hand, no significant differences were observed in this study for teachers' reported levels of perspective-taking. This cognitive dimension of empathy remained high regardless of years of teaching experience. This gives an insight into the possibly more positive effect of cognitive empathy, compared with affective empathy, for teachers. For example, higher levels of perspective-taking were associated with higher self-efficacy (Davis, 1983). Literature supporting the protective effect of empathy in

mental health was also found to be focused on its cognitive, rather than the emotional, dimension (Dekel et al., 2018).

These two dimensions of empathy also involve different mental activities. The arousal process influences the affective reaction or the "automatic discrimination of a stimulus – or features of a stimulus – as desirable or aversive, pleasant or unpleasant, threatening or nurturing" (Decety, 2010, p. 257). On the other hand, the cognitive response involves the process of *appraisal*, where some evaluation of a situation's meaning is done, for a change in the person's emotional response to the situation will ensue (Gross, 2008). This capacity for emotion regulation is associated with greater cognitive empathy, while higher affective empathy is associated with increased difficulties with emotion regulation (Thompson et al., 2022).

Conclusion and Recommendations

The study sought to describe the levels of empathy (cognitive, affective, and overall empathy) among public school teachers in the Philippines. The effect of teacher attributes such as sex at birth, age, educational attainment, years of service, and grade level taught on levels of affective, cognitive, and overall empathy was also determined. Teachers in the sample reported above-average levels of empathic concerns (affective empathy), perspective-taking (cognitive empathy), and overall empathy. Among the teacher attributes investigated, years of service was the only variable significantly affecting teachers' empathy. Teachers in the sample with fewer years of experience report higher levels of affective and overall empathy than those teaching for longer. No significant differences were observed for cognitive empathy.

The study results have important practical implications, particularly in designing professional

development programs targeting empathy and other social-emotional skills. First, a consideration of the multidimensional nature of empathy is important. The complex interactions among empathy's cognitive and affective aspects and their possibly different effects on teachers' well-being and efficacy should be considered in designing intervention or professional development programs. Perspective-taking (cognitive empathy) includes an effort aimed at understanding the experiences of others while keeping a certain affective distance. Empathic concern (affective empathy), on the other hand, involves sharing in others' suffering. As demonstrated in this study, cognitive empathy may have a possibly more positive effect on teachers' well-being. Given this, teachers may benefit from training on emotion regulation, where cognitive change or reappraisal is one of the most beneficial strategies. Teaching is regarded as 'emotional labor,' i.e., expressing appropriate emotions is a job requirement. Interventions must, therefore, be developed to prevent emotional exhaustion while teachers perform this kind of labor.

Second, programs should be provided *differentially* for teachers at different career stages. As the present study has demonstrated, in-service teachers would have different social and emotional needs in different career stages. They would, therefore, benefit from programs tailor-fitted to these needs. It is recommended that teacher training programs should incorporate strategies to maintain and enhance empathy levels among teachers, particularly those who have been teaching for a longer time. Additionally, mentorship programs and support systems may be implemented to help new teachers adjust and maintain their empathy levels throughout their careers. Deliberate teaching of social and emotional skills, including empathy, should also be emphasized in programs for preservice teachers.

This study has several limitations. First, the small sample included only public school teachers in particular divisions (Pampanga and Batangas). Research can be extended to other divisions in the Philippines to improve the generalizability of the results, as regionality and culture may affect the results. Second, the study used a crosssectional design, and the data were collected during teachers' vacations. Hence, their responses may not account for situations when they are interacting with their students and colleagues, especially considering that the feeling of empathy is considered a transitory state. Future studies may consider the timing of the survey or, if possible, a longitudinal research design. Third, the study results came from a self-report questionnaire and may thus suffer from social desirability bias. Other measures, such as objective assessments or direct observation, may be considered in future research. Finally, this study has provided limited insight into the complex interaction between empathy's cognitive and affective aspects and their relationship with mental health and well-being. It is recommended that more studies on empathy among Filipino teachers be implemented to establish statistical trends in such relationships and investigate how aspects unique to the Filipino culture may affect these interactions.

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