



## INVESTIGATION UPON THE INTERACTIONS BETWEEN THE EDUCATIONALISTS AND THE CHILDREN IN THE GREEK KINDERGARTEN

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### Abstract:

Quality in the domain of education comprises a high-significance issue through the prism of socio-cultural and financial developments that are taking place on a national as well as global level. The improvement of educational quality could be achieved through the reinforcement of interaction between the students and the educationalists, showing not only short-term effects but long-term ones as well. In the present research, the views of 1204 primary, general, and special educationalists are explored, on a Pan-Hellenic extent, about the quality of education provided within the Greek Kindergartens. The educationalists who took part in the research were asked to evaluate the proposals regarding interactions that take place within the preschool domain. From the analysis of data, it became clear that the quality of interactions is affected by the gender of the educationalists, the years of teaching service, and the number of children in each Kindergarten class. Every educational institute, to provide a high-quality education ought to develop strategies that encourage interaction between the educationalists and the children, constantly urging them towards new, more creative steps.

**Keywords:** quality in education, interactions, kindergarten, Greece, primary education teachers

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## 1. Introduction

Quality in education has been troubling the educational community since the beginning of the 21st century (Rentzou & Sakellariou, 2014). A key structural feature of quality in education is the curriculum (Wan & Guo, 2022). Within the Greek Kindergarten, according to the respective curriculum, emphasis is given on exploratory, play-based, integrative, and collaborative learning (Penteri *et al.*, 2022a) which comes to life through the interaction of the educationalist with the children (Zisopoulou, 2019). Of vital importance is the integrative approach of learning for all, on the purpose of multi- as well as inter-cultural education. Interaction along with building positive relationships for pupils who come from different socio-cultural backgrounds with their educationalists, but also with each other, contributes to the development of critical thinking and democratic awareness (Zirkel, 2008).

A basic characteristic of modern curricula is the changes that accommodate the role the educationalists are due to play. The teacher must come up with ways of interacting with their pupils and, employing every means available, to meet the golden mean between the children's freedom of movement and their own active role in class (Fink, 2018). It is them who organise the content of teaching, work with the pupils, mediate, and make ways to facilitate the overall learning process. They are in charge of forming a learning environment that shall instill feelings of security and openness and shall offer each and every child a variety of stimuli for learning, in accordance with their abilities. The educationalist ought to also infuse children with the merits of virtues such as encouragement and love, teach them how to work in harmony, trust each other, and function as a team with their peers and the teacher.

Supplementally to the above, within the New Kindergarten Curriculum (Penteri *et al.*, 2022b) and the Kindergarten Teacher's Guide contained in it (Penteri *et al.*, 2022a) the multiple roles which the educationalist is due to hold within the 21st century school, are determined:

- a) *The Orchestrator of the learning procedure*, who caters for discerning among skills, acknowledges the needs of every pupil as well as adjusts the learning process towards the achievement of learning goals,
- b) *The Social educator*, providing support to pupils, so that they make the best of their abilities, creating a solid environment. Within an atmosphere of mutual respect, collaboration, and interactions, every child feels like being a significant member of the team stimulating this way their confidence and self-esteem.
- c) *The Mediator*, comprising the link between the child and their broader surroundings.
- d) *The Leader*, offering their pupils a high-quality education and constructing healthy interpersonal and professional relationships among colleagues.
- e) *The Explorer*, since they make the best of their educational experiences, so that they implement new, innovative learning and teaching strategies, hold control, and reshape the educational praxis, implementing pedagogical theories in action.

- f) *A critical friend but also a stochastic professional* who has the ability to confront difficulties and incidents during the educational process and, through collecting experiences, manage the interaction relationships with both, pupils and colleagues, thus contributing to an unbiased evaluation of all that takes place inside and out of the school classroom, promoting new ways of viewing and utilising the didactic approach.

Quality in preschool and school education is achieved through regulating mechanisms such as certification of the educationalists' expertise, professional experience, or the size of the class (Konstantopoulos & Chung, 2011). Therefore, in order for the level of quality of preschool education to be established, it is considered as highly important that the individual characteristics of the quality are examined, which can be categorised into: a) structural characteristics, size of the pupils' group, logistics, number of pupils in each class, teaching curriculum and didactic methods and b) procedural characteristics, the level of pupil-teacher interaction on the purpose of building a positive atmosphere during the educational process, the quality of the teaching curriculum as well as the quality of the school environment (Mitsi, 2020). The aforementioned features, when jointly examined, could be taken as an indicator of high quality on the educational field, taking on account that teacher-children interaction and the size of the group comprise fundamental elements of the guidelines that have been issued regarding quality in education (Rentzou & Sakellariou, 2010).

Children-teachers ratio is deemed as an important element for quality in education, since it allows the implementation of individualised teaching, assuring an intimate interaction and contributing to better satisfaction of the pupils' needs (Zeichner & Conklin, 2017). The size of the group, which is the number of pupils attending a certain class, is considered as a key factor for quality (Hannah, 2013). According to existing studies, when the number of pupils does not exceed twenty (20), higher academic achievement is reported (Monks & Schmidt, 2011). Downsizing the number of pupils in a class as well as working in clusters enhances the possibilities of academic success because the degree of interactions with the educationalists is increased (Department of Education, 2017). Within small classes, it is established that better pupil-teacher interaction takes place, along with the empowerment of social relations (Rentzou, 2015) as well as more positive developmental outcomes (Sittisom, 2020). Populous classes seem to disturb the work of educationalists since noise and fuss are aggravating factors that hold teacher-pupil interaction back (De Schipper *et al.*, 2007).

Interaction among pupils also that of the educationalists with the pupils, no less healthy and substantial social relations that form among them, contribute to the quality of the pedagogical connection and the development and evolution of both, the pupils and the educationalists (Altinyelken & Hoeksma, 2021; Wolf *et al.*, 2019). More on this, educator-pupil interaction is considered as a critical factor for the quality of an educational programme as it poses significant effects on the child's socio-emotional growth, contributes to their self-regulation, develops their personality in a wholesome manner, cultivates their cognitive and linguistic level and creates the conditions

appropriate for their well-tempered emotional and social adaptation (Rentzou, 2015). Building healthy interpersonal affairs makes an individual act with responsibility, obtain confidence empower their self-image and finally become an active member of the team who uneventfully works together with the rest of the team members (Díez *et al.*, 2020; Rentzou, 2015).

Also, important constructional features of the educational quality are the educationalists' expertise (Wolf, Aber & Behrman, 2018), the Curricula (Díez *et al.*, 2020; Wan & Guo, 2022) as well as the school atmosphere which poses a substantial contribution on the individual's personal development and improves their learning achievements (Decristan *et al.*, 2015). As it is characteristically claimed by Rentzou and Sakellariou (2014) the settings of the school, when the atmosphere is a positive one, could have a significant aftermath on the children's psychology and action. Within a context like this, children can interact with the school class environment to a higher degree, via their innate need to explore, wholesomely develop their personality, grow psychologically, emotionally, and physically as well as cultivate their cognitive and social level (Kopas-Vukašinović, 2014).

## 2. Material and Methods

### 2.1 Exploratory sample

For the hereunto research, the views of 1204 Educationalists of primary general and special education were explored on a Pan-Hellenic level, concerning the quality of the education provided within the country's Kindergartens. The educationalists taking part in the research were asked to evaluate upon the proposals relevant to the interactions that take place in the field of preschool education.

### 2.2 Demographics of the educationalists comprising the research population

Of the total of educationalists (N: 1204 individuals) women make the largest amount of participants, on a percentage of 96.0% (N: 1156 women), while male educationalists comprise only a 4.0% (N: 48 men) (Figure 1).

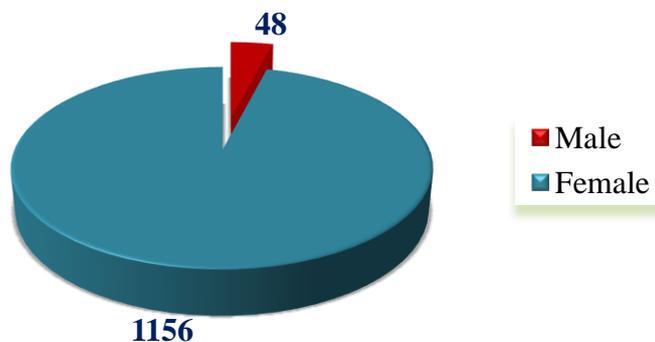
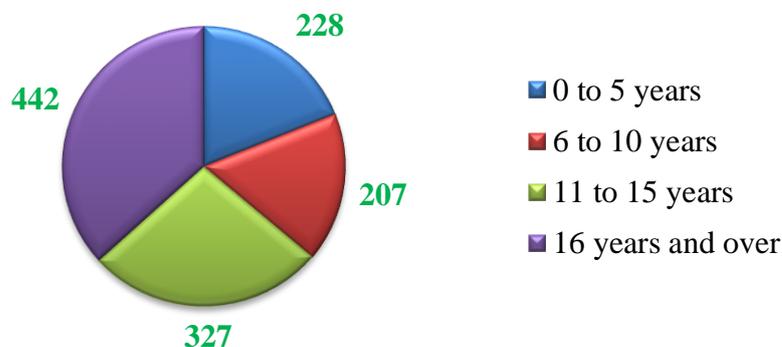


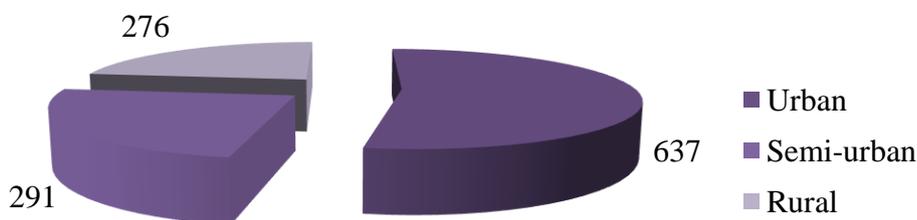
Figure 1: Sample of educationalists on a national level

The participant educationalists are of various levels of teaching experience (Figure 2). An 18,9% (N:228) of the sample have an 1 to 5 years of service, 17,2% (N:207) 6 to 10 years of service, 27,2% (N:327) have 11 to 15 years, while the largest percentage of educationalists (36,7%, N:442) have been teaching for more than 16 years.



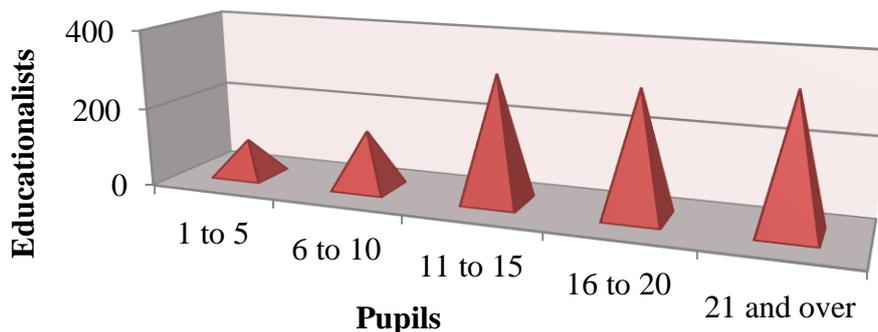
**Figure 2:** Years of professional experience of educationalists

Yet more, from the statistical processing of the sample, it emerges that the participants belong to different geographical regions (Figure 3), with their highest percentage to be working in urban areas (52,9%, N:637), followed by those in semi-urban (24,2%, N:291) and, finally, rural (22,9%, N:276) areas.



**Figure 3:** Geographical origin of educationalists

With relevance to the number of children who attend each class (Figure 4), it is observed that the percentages are distributed as follows: on 7,7% (N:93) attend 1 to 5 pupils, on 12,2% (N:147) attend 6 to 10 pupils, on 62,5% (N:319) attend 11 to 15 pupils, on 25,8% (N:311) attend 16 to 20 pupils and on 27,7% (N:334) attend 21 pupils and over.



**Figure 4:** Attending pupils per class

### 2.3 Purpose of the research

The purpose of the present research is to explore on whether Kindergarten teachers who work in general and special education facilities, special kindergartens, integration classes, and parallel support that is, implement the respective curricula or not as well as whether their choice affects the quality of the education received by toddlers with or without any kind of disability. The reason for which these two categories were chosen to comprise the sample is that all previous studies attend to general education teachers, while no research has been carried out concerning the implementation of the curricula into special kindergartens and other special education facilities, leaving this way, a great gap regarding special education in Kindergarten.

### 2.4 Exploratory Tool

Survey research via questionnaire was considered as the method most appropriate for collecting data with regards to the recording of the views from a representative sample of primary general and special education professionals, on issues that concern quality in education. After an in-depth study of the relevant literature, a questionnaire was formed, consisting of “open” as well as “closed” type questions.

## 3. Results

By analysing the data (Table 1) it is established that 50.8% report that interactions are a pleasant thing. A 49,0% deem that language is largely used for the exchange of information and social interaction. A 48,3% report the programme is organised in a way by which multiple positive interactions are promoted. A 45,9% believe that the educational personnel, to a high degree, set a good example towards social interaction. Finally, a 50,6% report that interaction, to a high level, meets every child’s disposition and needs. None of the participants believes that the educational personnel share their positive attention equally. By 47,8% they think, to a high degree, that the personnel show a compassionate response to children who are upset or angry. A 65,8% do not think that the educational personnel lack responsiveness and do not engage themselves with the

children. Furthermore, a 78,5% report that verbal as well as physical interaction of the educational personnel with the children is by no means a hard or violent one. By 48.3% they believe that the educational personnel's physical response towards children who are upset is very affectionate.

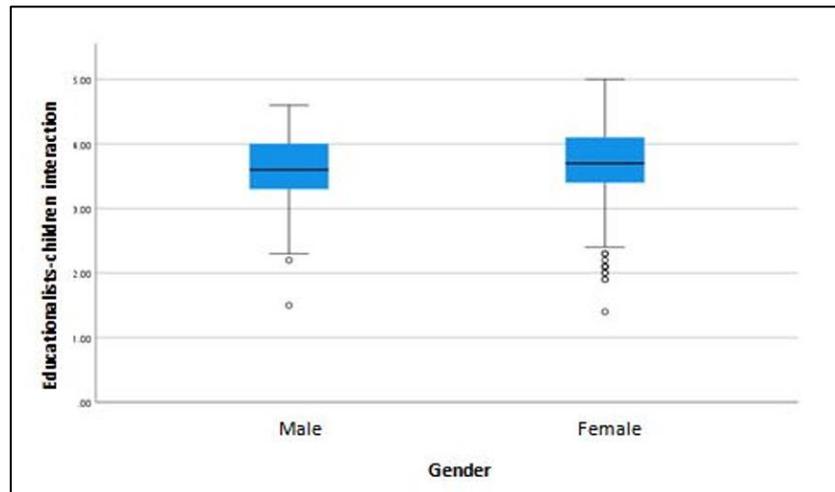
**Table 1:** Hypotheses that regard interactions within the domain of school

	Not at all	Slightly	Moderately	Very	Extremely
	N (%)				
Interactions are pleasant.	6 (0.5%)	11 (0.9%)	155 (12.9%)	612 (50.8%)	420 (34.9%)
Language is used for information sharing and social interaction.	1 (0.1%)	24 (2.0%)	95 (7.9%)	590 (49.0%)	494 (41.0%)
The programme is organised in a way that promotes positive interactions.	6 (0.5%)	11 (0.9%)	100 (8.3%)	581 (48.3%)	506 (42.0%)
The educational personnel set a good example for positive social interaction.	6 (0.5%)	21 (1.7%)	75 (6.2%)	553 (45.9%)	549 (45.6%)
Interaction responds to every child's mood and needs.	0 (0.0%)	23 (1.9%)	134 (11.1%)	609 (50.6%)	438 (36.4%)
The educational personnel provide children with an equal amount of positive interaction.	0 (0.0%)	19 (1.6%)	111 (9.2%)	537 (44.6%)	537 (44.6%)
The educational personnel respond with compassion to children who are upset or angry.	11 (0.9%)	29 (2.4%)	103 (8.6%)	576 (47.8%)	485 (40.3%)
The educational personnel are not responsive and do not involve themselves with the children.	792 (65.8%)	167 (13.9%)	115 (9.6%)	68 (5.6%)	62 (5.1%)
Verbal and physical interaction of the educationalist with the children is hard and violent.	945 (78.5%)	147 (12.2%)	40 (3.3%)	50 (4.2%)	22 (1.8%)
The physical response of the educational personnel towards upset children is affectionate.	14 (1.2%)	21 (1.7%)	107 (8.9%)	582 (48.3%)	480 (39.9%)

From the t-test that follows it seems statistically significant variations are located in the dimension "educationalists-children interaction" in account for the gender of the participants with a  $p=0.034$ . More specifically, one can observe that women (3.73) show statistically significantly higher values in comparison to men (3.54) with  $t(1202)=-2.772$ . The assessments are analytically displayed in Table 2 that follows, while the statistically significant variations are depicted in the comparative Boxplot 1 that comes next.

**Table 2:** Educationalists-children interaction in relation to educationalists' gender

	Gender	N	Mean value	Standard variation	Standard error Mean value	P
Educationalists-children interaction	Male	48	3.54	.60	.09	.034
	Female	1156	3.73	.46	.01	

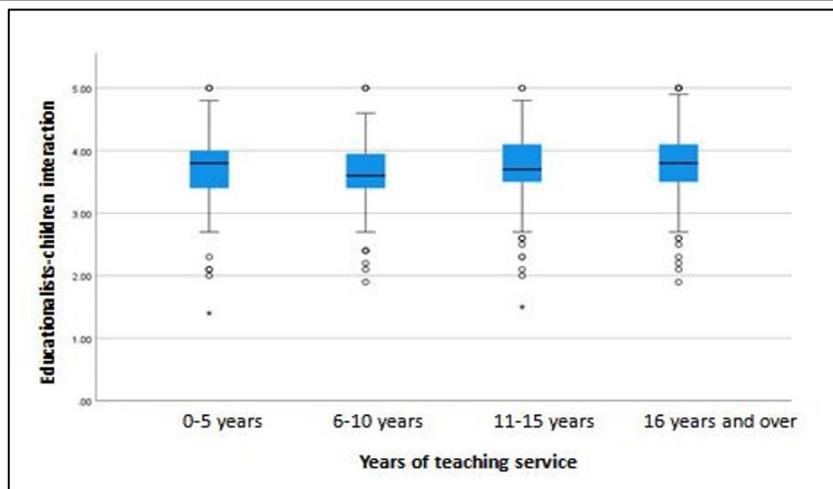


**Boxplot 1:** Educationalists-children interaction in relation to educationalists' gender

From the variance analysis that follows it seems that statistically significant variations are located with regards to the dimension “Educationalists-children interaction” in relation to the years of service, with a  $p=0.019$ . To specify, one can observe that  $F(3)= 3.316$  while regarding the category “16 years and over” (3.77) higher statistically significant values are predominant in comparison to the “6-10” years category (3.64), which means that the educationalists of 16 or more years in service have reported a higher degree of satisfaction concerning their interaction with the children, compared to the participants of 6 to 10 years of professional experience. The estimations are analytically demonstrated in Table 3 below, while the statistically significant variations are depicted in the subsequent comparative Boxplot 2.

**Table 3:** Educationalists-children interaction in relation to years of teaching experience

	N	Mean value	Standard variation	Standard error	95% C.I.		p
					Lower limit	Upper limit	
0-5 years	228	3.71	.50	.03	3.64	3.77	<b>.019</b>
6-10 years	207	3.64	.47	.03	3.58	3.71	
11-15 years	327	3.73	.47	.03	3.68	3.78	
16 years and over	442	3.77	.45	.02	3.72	3.81	
Total	1204	3.72	.47	.01	3.70	3.75	

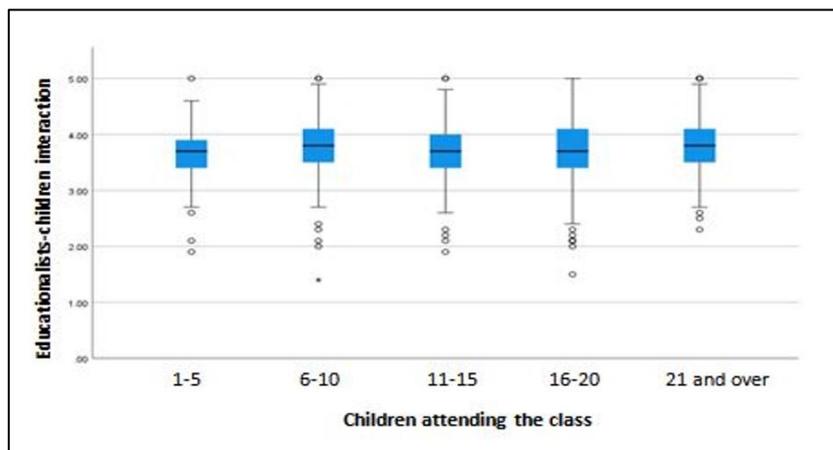


**Boxplot 2:** Educationalists-children interaction in relation to years of teaching experience

From the variance analysis that follows it seems that statistically significant variations are located with regards to the dimension “Educationalists-children interaction” in relation to the number of children attending the class, with a  $p= 0.035$ . More particularly, one can observe that  $F(4) = 2.596$  while in the category “21 and over” higher statistically significant values are predominant in comparison to the “1-5” category (3.62), which means that the participants whose class is of 21 or more children have reported a higher degree of satisfaction concerning their interaction with the children, compared to the participants whose class is of 1-5 children. The estimations are analytically demonstrated in Table 4 below, while the statistically significant variations are depicted in the subsequent comparative Boxplot 3.

**Table 4:** Educationalists-children interaction in relation to a number of children attending the class

	N	Mean value	Standard variation	Standard error	95% C.I.		p
					Lower limit	Upper limit	
1-5	93	3.62	.51	.05	3.52	3.73	.035
6-10	147	3.75	.52	.04	3.66	3.83	
11-15	319	3.71	.42	.02	3.67	3.76	
16-20	311	3.70	.51	.03	3.64	3.75	
21 and over	334	3.78	.43	.02	3.73	3.82	
Total	1204	3.72	.47	.01	3.70	3.75	



**Boxplot 3:** Educationalists-children interaction in relation to a number of children attending the class

From the variance analysis that follows it seems that no statistically significant variations are located with regards to the dimension “Educationalists-children interaction” in relation to the geographical location in which the school is situated, with a  $p=0.256$ . The estimations are analytically demonstrated in Table 5 below.

**Table 5:** Educationalists-children interaction in relation to the geographical location of school

	N	Mean value	Standard variation	Standard error	95% C.I.		p
					Lower limit	Upper limit	
Urban	637	3.72	.47	.02	3.68	3.76	.256
Semi-urban	291	3.69	.46	.03	3.64	3.75	
Rural	276	3.76	.47	.03	3.70	3.82	
Total	1204	3.72	.47	.01	3.70	3.75	

#### 4. Discussion of the Conclusions

General and special education kindergarten teachers who took part in the hereunto research have reported that among-peers interactions within the school unit are positive as well as pleasant. A vast majority of the educationalists stated that they do use language to share information with their pupils, aiming this way, towards the children’s development of social interaction, and agreed that the curriculum ought to be organised in a way that positive interaction is promoted. Furthermore, the majority of the responders stated that within the interactions taking place in school, every child’s mood and needs should be taken into account, while the teachers ought to give all children an equal amount of positive attention, without discrimination. Every educationalist, according to the responders, should approach children affectionately, especially when they are upset or angry, and in no case should they use hard or violent moves. The educationalists themselves are the ones to set a good example and become role models of

behaviour for their pupils; this is a datum to be evaluated as highly important. The aforementioned findings come in full convergence with those of other studies (Andika *et al.*, 2019; Mejah *et al.*, 2019; Pianta *et al.*, 2020; Sakellariou, Strati & Mitsi, 2020; Trang *et al.*, 2020).

From the statistical analysis of data, it surfaced that the quality of interactions within the Kindergarten is affected by the educationalists' gender, with women reporting feeling more pleasantly when interacting with their pupils (Egalite & Kisida, 2017; Solanki & Xu, 2018). Subsequently, it became obvious that interactions between the educationalists and the children are affected by the teachers' years of vocational experience since those who possess more than 16 years of service stated that they were more satisfied with the way they interact with children, which aligns with similar researches (Kutluca, 2021; Pianta *et al.*, 2020). In addition, it was discovered that the educationalists who have been posted in a class of more than 21 pupils experience more positive interactions compared to those who are in charge of less populous ones, a finding that diverges from respective results in other studies (Bondebjerg *et al.*, 2023; Li & Li, 2021; Wang & Calvano, 2022), while the geographical location in which the school facility headquarters does not pose any sort of impact on the quality of interactions.

### **Conflict of Interest Statement**

The authors declare no conflicts of interest.

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