

Kindergarten teachers' locus of control and their attitude towards disability

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Abstract

Locus of control is an indicator on the basis of which the individual distinguishes whether the way he acts or the situations he experiences are the result of his own efforts or are influenced by external factors. "Attitude" is considered the individual's tendency to manifest positive or negative attitudes towards people or situations or objects. The purpose of this research was to investigate the relationship between kindergarten teachers' locus of control and their attitudes towards disability. The results of the research showed firstly that teachers' locus of control exerts a significant influence on their attitude towards disability, secondly that the locus of control is influenced by gender and thirdly that teachers' attitude towards disability is influenced by individual characteristics, specifically gender and previous work experience in Special Education.

Keywords: locus of control, disability attitudes, Kindergarten teachers

Introduction

Locus of control is considered in the literature as one of the most important variables of the individual's personality, as it significantly influences his decisions and actions. Rotter (1966) first argued that the "locus of control" refers to the belief held by the individual that he can influence the events that take place in his life (Hosseini et al., 2016). This person's belief has a significant effect on the rewards he can get from his actions, but also on the negative consequences they may bring (Hoffmann et al., 2022). It is, essentially, an indicator that measures the degree to which the individual exerts a decisive influence on the events that occur in his life and on the situations he experiences (Arakeri & Sunagar, 2017; Arkorful & Hilton, 2021). Locus of control can be regulated either internally, that is, through the actions and general behavior of the individual, or externally, where external factors, such as luck or destiny, play a decisive role (Sagone & De Caroli, 2014; Dinçyürek et al., 2012). Locus of control is divided into internal locus of control and external locus of control (Rotter, 1990). A criterion for distinguishing the two types is considered the degree to which the individual believes that the positive or negative results of an event or situation are due to his behavior or to external factors (Khan, 2011). Therefore, individuals who believe that the results of their actions are due to their own strengths and abilities have an internal locus of control, while those who believe that the positive or negative results of what happens around them are due to the interventions of other individuals or factors such as God, are considered to have an external locus of control (Van Wijk, 2013; Zaidi & Mohsin, 2013). Critical factors for the formation of locus of control are considered, among others, gender, as it has been found that women have a stronger internal locus of control compared to men, where the external locus of control

prevails (Maadal, 2020; Uysal et al., 2022), but also age, as while the person gets older the internal locus of control seems to strengthen and the external locus of control seems to be limited (Achhnani & Amareliya, 2020).

Individuals with a stronger internal locus of control take full responsibility for their actions (Aguiar et al., 2021) and do not hesitate to account for them (Arakeri & Sunagar, 2017). By nature, these individuals rarely face developments passively and fatalistically (Churchill & Smyth, 2021), while they face life with a positive outlook and self-confidence (Achhnani & Amareliya, 2020). On a personal level, "introverts" build healthy interpersonal relationships, while their emotional life is characterized by calmness and normality (Dinçyürek et al., 2012). In the professional domain, introverts perform better in occupations that require self-confidence and initiative (Hoang et al., 2022; Huizing, 2015). They distinguish themselves in positions of organization, supervision and processing of complex information, while they find attractive the prospect of acquiring technical skills or specialization (Beukman, 2005). In addition, they tend to spend time on educational activities (Dinçyürek et al., 2012; Shepherd et al., 2006).

At the opposite end are individuals with a stronger external locus of control, who believe that the positive outcomes of their life events are due to successful timing (Aguiar et al., 2021; Churchill & Smyth, 2021), while the negative outcomes they result from the interventions of third parties and they themselves are unable to control or influence what is happening (Cascio et al., 2014). They observe developments as passive spectators, feeling powerless to intervene, thus maintaining an attitude of life based on their belief that they do not have the necessary skills and knowledge to change the course of events (Arakeri & Sunagar, 2017). Cornerstones of the external locus of control are the factors "luck" and "fate". More specifically, individuals with an external locus of control believe that one's luck and destiny determine the course of events rather than their personal effort (Zaidi & Mohsin, 2013). These individuals often do not hesitate to set goals that exceed their abilities and use luck or the interventions of "powerful others" as an alibi in case they fail (Basim et al., 2010; Nießen et al., 2022). Characteristic features of people with an external locus of control are low self-confidence, increased levels of anxiety and stress, the manifestation of depressive behavior (Cascio et al., 2014) and aggressive tendencies (Vijayashree & Jagdishchandrab, 2011). Usually, they come from lower social and economic strata and passively obey the dictates of power (Huizing, 2015). They prefer occupations whose main feature is organization and routine, while they dislike and avoid changes in their environment (De Beckker et al., 2020).

Attitudes are a particularly important topic in social psychology and have been widely studied (Freer & Kaefer, 2021). The term "attitude" refers to a system of positive or negative evaluations or tendencies that the person shapes towards people, objects and ideas, which usually does not change, but can cause variations in the emotional and mental state of the person, as well as in his behavior (Ajzen & Cote, 2008; Hein et al., 2011; Kunz et al., 2021). A person's attitudes can be reshaped or completely changed (Bossart et al., 2011), while a large percentage of people when asked about sensitive issues, choose to formulate socially acceptable and politically correct attitudes, which significantly affects their investigation (Yazdani et al., 2016). More specifically, the attitude about an issue determines the way, positive or negative, in which the person thinks, expresses his opinions and ideas and acts (Sarantaki et al., 2021). Attitudes are considered to have very important effects on shaping the individual's environment and interpersonal relationships, resulting in the creation of prejudices and stereotypes (Álvarez-Delgado et al., 2020). According to Darawsheh (2022), attitudes do not only refer to the individual's daily life and interpersonal relationships, but also extend to more complex issues such as political ideology. In addition, in pedagogic science the attitude of teachers towards students with disabilities can have a significant effect on the integration and inclusion of these students in the general classroom (Desombre et al., 2019; Dessemontet et al., 2014; Hind et al., 2019; Jury et al., 2021; Longley & Craigo, 2021; McGregor

& Campbell, 2001; van Steen & Wilson, 2020). Gender is considered a factor that can influence the quality of attitudes towards disability (Babik & Gardner, 2021; Schwab et al., 2021; Wang et al., 2021). For example, in their research, Sharma, Shaukat and Furlonger (2014) concluded that male teachers maintain a more positive attitude towards people with some kind of disability, compared to women, and they more easily accept the institution of integrating these people into the general school. The quality of teachers' attitudes towards disability affects their students' (De Boer et al., 2012). Knowledge about the nature and types of disability, according to research, can significantly influence the formation of a positive or negative attitude towards disability (Mirete et al., 2022; Shahif et al., 2019), while in the case of teachers, according to Zoniou-Sideri and Vlachou (2006), reservations were expressed about the real benefits of inclusion of students with disabilities in general education. Living with people who have some kind of disability has been shown to affect the formation of attitudes (Alnahbi, 2019; Mirete et al., 2022; Ocete et al., 2022) and in particular in preschool education, findings showed that teachers who had a person with a disability in their immediate environment, had a more positive attitude towards students with a disability (Dias & Cadime, 2015; Ahmmed et al., 2012). On the contrary, many teachers, despite the fact that they had teaching experience with people with disabilities, viewed their inclusion in general education with a negative perspective (Dias & Cadime, 2015).

The locus of control of General and Special Education Kindergarten teachers is an important factor in their behavior and exerts significant effects on their operation, but also on their relationships with students. Managing the issue of disability in the Kindergarten classroom is a challenge, as at this sensitive age children have difficulty understanding diversity and may act harshly or even reject their classmates with some form of disability. The problem that the present research is called to investigate is how the teachers' locus of control affects their attitude towards people with disabilities and what are the factors that influence its formation. The research focuses on the study of the opinions of teachers who work in General and Special Education structures in Kindergarten both for their locus of control and for the attitude they maintain towards people with disabilities. The participants are Kindergarten teachers due to a lack of research on this specific level of education, while there is no definition of the types of disability.

The purpose of this research was to investigate the relationship between Kindergarten teachers' locus of control, who work in general and special education structures, with the attitude they have towards people with any form or type of disability. More specifically, three research questions were asked:

- Is the locus of control of Kindergarten teachers (general and special education) related to their attitude towards people with any type of disability?
- Does the locus of control of Kindergarten teachers (general and special education) differ according to their gender?
- Does the attitude of Kindergarten teachers (general and special education) towards people with disabilities differ according to their individual characteristics (gender, age, marital status, number of children, specialty, studies, years of service, years of service in the Integration Department, number of children they work with, employment relationship)?

Research methodology

This research was carried out in order to investigate the relationship between the locus of control of General and Special Education Kindergarten teachers and the attitude they maintain towards people with any type of disability. 206 active Kindergarten teachers took part in the present research, and more specifically 103 Kindergarten teachers working in General Education and 103 Special Education Kindergarten teachers. The participants came from various regions of Greece.

During the data collection process, we contacted the school units by phone in order to attract the interest of the teachers to participate in the research. After consultation, we distributed the survey questionnaire to a few schools and teachers filled it in on the spot or were given a window of 2-4 days to complete it. However, the face-to-face meetings were difficult, as it was not possible to find common days and times to meet with the teachers, while the operating requirements of the kindergarten and the needs of the preschool children did not allow the questionnaire to be completed on the spot. In addition, it was considered constructive for the needs of the research not to have a geographical limitation, in order to increase the number of participants. For the above reasons, the questionnaire was distributed in an electronic format (Google Forms), offering the possibility for the participants to freely fill in the questionnaire and to promote it to colleagues. The questionnaires, both in paper and electronic form, ensured the anonymity of the participants, while the possibility of continuous communication with the researchers (by phone or e-mail) was given to resolve questions or to give clarifications.

The teachers who took part in the research amounted to 206 and came from various regions of Greece. The 103 worked in Special Education structures and in particular in special schools, in Integration Departments, which operate within general schools and finally as Parallel Support teachers, who are called to support the student with special educational needs in the general classroom. In addition, another 103 General Education teachers, who worked in general schools and were also the control group of the research sample, participated in the research.

Two (2) weighted questionnaire-scales were used to conduct the research:

- The scale "Measurement of Teachers' Beliefs in their Control over Student Outcome" by Rose and Medway (1981), which was translated into Greek by Kalyva (2007) and used in research (Kalyva et al., 2007). Purpose of the scale is to investigate the extent to which the teacher feels in control of what unfolds in the classroom. It consists of 28 questions, in which the participant states whether he agrees with their content or disagrees. The score ranges from 0 to 28 points, with a high score indicating a strong external locus of control and a low one indicating a strong internal locus of control. This scale was chosen for the needs of the research, as there is no other research tool for the investigation of the locus of control of teachers in the Greek language, while the scale has been weighted and the internal consistency reliability for all the propositions of the questionnaire amounts to $\alpha=0.79$, while the semicluseter reliability is at $\alpha=0.78$.
- The "Attitudes towards Disabled Persons [ATDP]" scale, by Yuker et al. (1986), which was translated and adapted into the Greek language by Matziou et al. (2002). The purpose of the scale is to measure the attitudes and perceptions held by young people towards children with disabilities. It consists of 20 sentences and the rating is of the Likert type (+3=Strongly agree to -3=Strongly disagree). A high score indicates a positive attitude, while a low score indicates a negative attitude. The original version of the questionnaire shows satisfactory levels of conceptual and criterion validity. Regarding reliability, the scale has been translated into more than 12 languages and has been a research tool in a number of studies. It is a means of objective assessment oriented towards the acceptance of disability by society as a whole.

It is worth noting that the two (2) scales used to create the questionnaire of this research underwent all the necessary modifications, in order to correspond to the environment and the content of the Kindergarten.

The SPSS version 20.0 program was used for the statistical processing of the data of this research. The Pearson r test was used to test the correlations between the variables included in the survey. Then, in order to check and establish the differences between the averages of the variables, the ANOVA test was used.

Research results

- Is the locus of control of Kindergarten teachers (general and special education) related to their attitude towards people with any type of disability?

Carrying out a correlation test between the scales of Kindergarten teachers' locus of control and their attitude towards people with disabilities, a statistically significant negative small correlation is shown between them ($r = -0.326, p = 0.000 < \alpha = 0.05$). From the statistical analysis of the data, it is concluded that the scale of the Kindergarten teachers' locus of control is negatively correlated to a small extent with the scale of their attitude towards people with disabilities. Therefore, the higher a Kindergarten teacher's score on the locus of control scale is, the lower his score on the attitude towards people with disabilities scale is. Therefore, Kindergarten teachers' locus of control seems to negatively affect their attitude towards people with disabilities, even if to a low degree, and therefore the research correlation is confirmed.

Table 1. Correlations between Locus of control and attitude towards people with disabilities

Correlations		
		Attitude towards people with disabilities scale
Locus of control scale	r	-,326**
	p (2-tailed)	,000
	N	204

** . Correlation is significant at the 0.01 level (2-tailed).

- Does the locus of control of Kindergarten teachers (general and special education) differ according to their gender?

Table 2 presents the results of the correlation between Kindergarten teachers' locus of control and gender (male - female). Specifically, it was examined whether male or female Kindergarten teachers have a stronger external locus of control. According to the results, the mean score on the locus of control scale of male Kindergarten teachers (N = 22) is 38.73 and of female Kindergarten teachers (N = 184) is 40.92.

Then, in order to determine if there is a statistically significant difference between the scores of the two scales, we proceeded to an ANOVA test. It is observed that there is a statistically significant difference ($F = 4.368, p = 0.038 < \alpha = 0.05$) between the locus of control scale scores of male and female Kindergarten teachers. Therefore, according to the above result, the research correlation is confirmed that female Kindergarten teachers have a stronger external locus of control compared to their male colleagues.

Table 2. Descriptives of locus of control

	Descriptives					
	Locus of control scale					
	N	Mean	Std. Deviation	Std. Error	F	p
Male	22	38,73	4,90	1,04	4,368	,038
Female	184	40,92	4,62	,34		
Total	206	40,68	4,69	,33		

- Does the attitude of Kindergarten teachers (general and special education) towards people with disabilities differ according to their individual characteristics (gender, age, marital status, number of children, specialty, studies, years of service, years of service in the Integration Department, number of children they work with, employment relationship)?

As can be seen in the tables below (Table 3), it was examined whether there are statistically significant differences between the attitude towards people with disabilities of Kindergarten teachers and their individual characteristics (gender, age, marital status, number of children, specialty, studies, years of service, years of service in the Integration Department, number of children they work with, employment relationship).

Table 3 presents the results of the correlation between the scale of attitudes towards people with disabilities and the Kindergarten teachers' gender. It is observed that the average score on the scale of attitudes towards people with disabilities of male Kindergarten teachers (N=22) is 83.50 and of female Kindergarten teachers (N=182) is 78.01.

Proceeding to the ANOVA test, statistically significant differences ($F=7.153$, $p=0.008 < \alpha=0.05$) appear between the two genders of Kindergarten teachers. Therefore, the research correlation that gender affects the attitude of Kindergarten teachers towards people with disabilities is confirmed, as the statistical analysis showed that female Kindergarten teachers have a more positive attitude towards people with disabilities, compared to male Kindergarten teachers.

Table 3. Descriptives of attitude towards people with disabilities

	Descriptives					
	Attitude towards people with disabilities scale					
	N	Mean	Std. Deviation	Std. Error	F	p
Male	22	83,50	9,37	1,99	7,153	,008
Female	182	78,01	9,06	,67		
Total	204	78,60	9,23	,65		

From the statistical analysis of the data, a significant statistical correlation emerged between the attitude towards disability and the years of service in the Integration Department (Table 4). In more detail, of the 206 participating Kindergarten teachers, 117 (Total=117) stated that they have years of experience in Integration Departments. Specifically, the average score on the scale of attitude towards people with disabilities of Kindergarten teachers who have between 0 and 5 years of experience in the Department of Integration (N=92) is 80.89, of those who have between 6 and 10 years of experience (N=20) the mean is 77.65, those with 11 to 15 years of service (N=3) the mean is 66.67 and those with more than 16 years of service (N=2) the mean is 72.50.

Performing the ANOVA test it is observed that these differences that appear are statistically significant ($F=3.266$, $p=0.024 < \alpha=0.05$). The statistically significant difference

appears between the 0-5 and 11-15 seniority groups, after post hoc analysis with Tukey's test, resulting in Tukey's HSD: 0-5>11-15 ($p=.046$). Therefore, based on these results, the specific research correlation is confirmed.

Table 4. ANOVA Test

	N	Mean	Std. Deviation	Std. Error	F	p
0-5	92	80,89	9,57	,99	3,266	,024
6-10	20	77,65	7,63	1,71		
11-15	3	66,67	5,51	3,18		
over 16	2	72,50	4,95	3,50		
Total	117	79,83	9,45	,87		

Discussion

The present research initially studied the relationship between the locus of control of the participating General and Special Education Kindergarten teachers and their attitude towards people with any form of disability. From the statistical analysis it emerged that there is a statistically significant correlation between the two factors. More specifically, teachers' locus of control is associated with their attitudes towards people with disabilities in a negative way. The negative nature of this relationship lies in the fact that the stronger the Kindergarten teachers' locus of control is, the more negative the attitude they have formed and express towards people with disabilities. When a teacher builds a strong internal locus of control, it means that he or she tends to take full responsibility for the successful or unsuccessful outcomes of their students' performance. Conversely, teachers with a stronger external locus of control attribute responsibility to the students themselves or to external factors. Therefore, the negative attitude of General and Special Education teachers could be due to their fear that low learning outcomes stem from students' disabilities. Disabilities, such as mental retardation, are a significant inhibitor to successful learning, as their characteristics, such as distractibility and low IQ, often prevent students from reaching the performance of their peers. Therefore, many educators may hold low expectations for the education of these children, an attitude due to their belief that disability by its very nature prevents them from reaching or exceeding the average academic achievement for their age. Therefore, they make sure to establish a strong locus of control, which will be responsible for the results of the learning process.

Continuing, the second question that this research was asked to answer was whether Kindergarteners' locus of control is affected by gender. From the responses of the participants it emerged that female teachers have a stronger external locus of control, in contrast to men where the internal locus of control seems to prevail. The effect of gender on the formation of locus of control was also demonstrated by other research (Arakeri & Sunagar, 2017; Çakır, 2017; Gujjar & Aijaz, 2014), where women appeared to attribute the results of their life events to external factors or to luck, while men attributed the positive or negative outcomes of their life situations to their own behavior and choices.

Furthermore, the third question asked in this research concerned the relationship of the teachers' personal characteristics (gender, age, marital status, number of children, specialty, studies, years of service, years of experience in the Department of Integration, number of children they work with, relationship of work) with their attitude towards people with disabilities. Firstly, it was found that the female Kindergarten teachers who participated in the research maintained a more positive attitude towards people with disabilities, compared to their male colleagues. The woman of the modern era is called upon to play many roles in her daily life and to be an important factor in society. Perhaps the most important role is that of a mother, a quality that makes a woman externalizes her love and understanding towards people who need empowerment and protection, such as people with disabilities. Therefore, the fact that female teachers have a more positive view of people with disabilities may be due

to their psyche, where the instinct of protection and love leads them to help people with disabilities to have a normal personal and social life. This finding disagrees with that of Sharna, Shaukat and Furlonger (2014), whose research found that Pakistani male teachers held more positive attitudes towards disability than their female colleagues.

In addition, in Greece the institution of inclusion of students with disabilities in General Education takes place, among other things, through their attendance at an Integration Department, where the students follow an individualized teaching program by a special educator, adapted to their needs. The findings of the research showed that Kindergarten teachers who had work experience in Integration Departments maintained a more positive attitude towards disability. Apparently, this positive attitude is due to the fact that a teacher's daily contact with students who have some kind of disability contributes to the understanding of nature of the disability and the difficulties it implies in the learning outcomes of the students. In this way, the teacher has the possibility to identify the learning difficulties of the students, but also their special abilities and talents and to develop them. Therefore, it is understood that when a teacher is called upon to teach students with disabilities in this context, he directly observes the difficulties and challenges of disability in the daily life of students and their environment and works with the aim of providing equal educational opportunities, mitigating the social differences and finally the dismantling of stereotypes against any form of disability. This finding agrees with those of other researches (Ahmmed et al., 2012; Dessemontet et al., 2014), where it was found that teachers who had teaching experience in Special Education structures maintained a more positive attitude towards students with some type of disability. On the contrary, it disagrees with the findings of Sharna, Shaukat and Furlonger (2014), according to which teaching experience in Special Education did not significantly affect their attitude towards students with disabilities, but also with the research of Dias and Cadime (2015), where it emerged that the participating teachers, despite having worked in Special Education, were negatively disposed to the prospect of teaching disabled students again.

Conclusions and Implications

The locus of control of modern man needs special investigation, as it is a key factor in his behavior, perceptions and actions. The need for study intensifies when it comes to the people who serve the critical field of Education in an organized society. The modern teacher must penetrate the psyche of his students and not treat his function as a bureaucratic process. Many teachers succeed in being role models for their students and their behavior and attitudes inspire children to emulate them. Therefore, it is understood that the role of the teacher is twofold, as he is the one who educates children based on the demands of society and influences their psyche and personality, preparing them to go out into society as complete citizens.

Even today, disability is a difficult subject, about which Education must speak openly, organized and scientifically to children, in order to break down stereotypes. Education must approach the issue of disability in a holistic way, so that from an early age the person faces diversity with a positive outlook and accepts it. The institution of inclusion has brought many important benefits to the education of students with disabilities, but there are still many steps to be taken, as societies like Greek struggle to get rid of stereotypes, such as for example that people with disabilities cannot achieve goals, such as people of typical development and that they are weak and always have to be protected.

In conclusion, the present research contributes to the derivation of important conclusions for Kindergarten teachers of General and Special Education, in an attempt to study a factor of their personality, such as the locus of control, in relation to an element of their social behavior, such as their attitude towards to people with disabilities. At the same time, it could be a trigger for conducting other research on preschool education, as the research interest is mainly

focused on Primary School teachers, thus leaving a significant gap in the study of issues and factors related to Kindergarten.

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