



THE INFLUENCE OF EMOTIONAL INTELLIGENCE IN PHYSICAL EDUCATION TEACHERS' SELF-EFFICACY FOR THE INCLUSION OF STUDENTS WITH DISABILITIES

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Abstract:

The inclusion of students with disabilities in the modern educational process is a necessity for removing barriers to participation, obviating social inequalities and reducing social exclusion. In the direction of equal opportunities, empowerment and social inclusion, the emotional intelligence and emotional literacy of teachers plays a decisive factor. The study investigated the relationship between physical education teachers' emotional intelligence and their self-efficacy, regarding the inclusion of students with physical, sensory and intellectual disabilities. One hundred and fifty physical education (PE) teachers participated in the study. The Wong and Law Emotional Intelligence Scale (WLEIS) was used to measure emotional intelligence and the Self-Efficacy Instrument for Physical Education Teachers Majors Toward Inclusion (SE-PETE) for the evaluation of self-effectiveness. The results showed that demographic factors such as gender, age, level of education, level of schooling employed and years of teaching experience greatly influence the emotional intelligence levels of physical education teachers. Regarding self-efficacy beliefs, no statistically significant differences were observed in terms of gender, age, level of education, level of schooling employed, in contrast to education in adapted physical education which seems to influence self-efficacy. Spearman's Coefficient Correlation showed that emotionally intelligent teachers show increased self-efficacy, since they create appropriate learning conditions, and act supportive and encouraging, while adapting teaching to the needs of their students. The multiple regression analysis showed that the self-emotional appraisal, the emotional appraisal of students, and the ability to use and regulate teachers' emotions have a significant predictive value for high self-efficacy in inclusive practices.

Keywords: emotional intelligence, self-efficacy, inclusion, physical educators

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1. Introduction

An inclusive school classroom poses numerous benefits for students with disabilities at a social, educational and emotional level since they are not treated as patients but rather as equal members (Anderson et al., 2007). In order to limit discrimination, it is necessary to facilitate inclusive education of students with or without disabilities (Salamanca Statement, 1994). However, inclusion is not a self-evident achievement in the educational process (Sherrill, 2004). While the teachers collectively declare that they accept the inclusive education of children with disabilities, at the same time a large percentage of them have doubts and consider this to be particularly risky since the types of disabilities may vary and they prefer not to be involved (Zoniou – Sideri & Vlachou, 2006).

A crucial and decisive factor for inclusion is the notion of the educators' emotional intelligence and emotional literacy. At the same time, a reduced sense of self-efficacy becomes a key inhibitor to inclusive practices (Anderson et al., 2007). After all, the profession of the educator is considered one of the most emotional occupations because of the multitude of varying relationships developing within the school environment (Dolev & Leshem, 2017; Katsora et al., 2022). The educators' emotional state has an immediate impact on the thoughts and behaviors of themselves and their students (Poulou & Norwich, 2000). Emotionally adequate educators create the appropriate learning conditions within the classroom functioning in an encouraging and supportive manner towards their students adapting teaching to their needs and encouraging student cooperation (Katsora et al., 2022). In addition, the high levels of emotional intelligence of educators seem to make them more capable to teach students with severe and less severe disabilities compared to educators with lower levels of emotional intelligence (Skura & Swiderska, 2021).

In the school environment, the inclusion of students with disabilities can be promoted through physical education since sport can be a catalyst for the social inclusion of individuals with disabilities and enhances social cohesion (White Paper on Sports, 2018). Physical educators that demonstrate emotional regulation appear friendlier and more supportive, they understand the feelings of their students while they present low levels of disappointment and strict behavior (Petsios & Gorozidis, 2019). In the same context, educators with low levels of emotional intelligence present increased levels of stress, fatigue, and depression (Martinez et al., 2019) they face more difficulties in teaching students with minor and/or severe mental disabilities (Skura & Swiderska, 2021).

The aim of the present study was to explore the relationship between emotional intelligence and the self-efficacy of physical educators in regard to the inclusion of students with disabilities, with the query if emotional intelligence can be a predictor of teachers' self-efficacy. Also, under research is the effect of demographic variables like gender, age, level of education, teaching experience, education in adapted physical education, work sector (public/private school), and the level of schooling employed

(primary/secondary) in the meanings of emotional intelligence and feeling of self-efficacy.

2. Literature Review

2.1 Conceptual Framework of Emotional Intelligence and Self-efficacy

Meyer and Salovey (1990) set emotional intelligence as the ability to comprehend, to evaluate, to produce emotions, to understand the emotions of others and to adjust emotions in order to promote development and prosperity. They supported that emotional intelligence is intricately intertwined with mental abilities and that emotions make up part of the mental processes and categorize the abilities of emotional intelligence in four parts: a) perception of emotions, b) assimilation of emotions into thinking, c) understanding and analysis of emotions, and d) management of emotions in oneself and others (Mayer & Salovey, 1990). Bar-On (2006) supports that emotional intelligence is a combination of characteristics of one's personality, behavioral predispositions and ability to adjust. Bar-On (2007) focuses on the intrapersonal and interpersonal abilities of an individual but also relevant social skills which are necessary in order to face daily demands, the difficulties of the environment but also the changes happening on a personal and social level. According to Goleman (1995, 1997, 2000), emotional intelligence constitutes the ability of people to recognize and be self-aware of their emotions and the emotions of others, to self-management their emotions, and with empathy to regulate and develop positive and effective interpersonal relationships. The structure of emotional intelligence, according to Goleman (2000), consists of a combination of personality characteristics, a capacity formed by a person's attitudes, behaviors and social skills (e.g., empathy, adaptability) with regard to the successful interaction of a person with their social environment.

The notion of self-efficacy was coined by Bandura (1997) who defined it as the faith an individual has in his abilities to organize and fulfill the courses of action necessary in order to achieve certain goals. The convictions of self-efficacy describe the effort made by people, their persistence when faced with difficulties, their self-motivation, how they modify their behavior and their achievements. Bandura (1997) believes there are four different sources of information for the structure of self-efficacy which refer to a) experiences of the past and personal successes, b) experiences through role models, c) social persuasion, and d) emotional stimulation. According to Asthon and Webb (1986), the feeling of an educator's efficiency refers to the extent to which educators believe they have the ability to affect the performance of students. To better understand the nature of self-efficacy, researchers (Asthon et al., 1982; Asthon & Webb, 1986) created a three-dimensional framework which consists of a) teaching efficacy which refers to the convictions of educators about the general relationship between teaching and learning, b) personal efficacy which refers to the general feeling of efficiency of the educator as a teacher, and c) personal teaching efficacy which represents the integration of personal efficacy and teaching efficacy. Asthon et al. (1983) suggest that each of these functions,

independently from others and the teaching strategies chosen by educators, are connected to their level of self-efficacy.

2.2 Educators' Emotional Intelligence and Self-efficacy

According to researchers (Jennings & Greenberg, 2009; Katsora et al., 2022), emotionally adequate teachers create the appropriate learning conditions within the classroom functioning encouragingly and supportively towards their students, adjusting their teaching to their needs, and encouraging co-operation between students. They can effectively respond to negatively charged situations while at the same time becoming appropriate behavioral role models for their students. In contrast, when educators present difficulty in managing various emotional and social challenges both within the classroom and the general school environment, students present low levels of acceptable behavior (Marzano et al., 2003). Moreover, Skura and Swiderska (2021) studied how the different levels of emotional intelligence affect the difficulties possibly faced by educators when they are obligated to teach students with disabilities. Differences appeared in the teaching of students with moderate, severe mental disabilities, and chronic diseases between educators with low or high emotional intelligence with the latter facing fewer difficulties.

In this direction, Bayse et al. (2008) were led to the conclusion that emotional support offered by educators enhances the functionality of students with emotional and behavioral disorders. Furthermore, Martinez et al. (2019) discovered that educators who present low levels of emotional intelligence, also present higher levels of stress, burn-out, and depression. They emphasize the meaning of empowerment of educators through programs of intervention which will enhance their emotional abilities.

Regarding physical education classes, Lee et al. (2019) support that educators of physical education with higher emotional intelligence can distinguish, various emotional situations in which their students may find themselves, either through body language (gestures, facial expressions etc.), meaning that they may be able to avoid possible disturbing behaviors as well as knowing how to manage them. Petsios and Gorozidis (2019) support that physical educators that have the skills to self-regulate their emotions are friendlier and more supportive, they understand the feelings of their students while they present low levels of disappointment and strict behaviors projecting constructive and healthy relationships with their students. Furthermore, studies showed that the emotional intelligence of physical education teachers contributes to the decrease of emotional burn-out and the improvement of professional satisfaction (Lee et al., 2019; Rizvandi et al., 2020).

Many researchers have focused on the self-efficacy of educators since the educators' beliefs regarding their efficiency play a prominent role in the school climate of a classroom (Bandura, 1993). Educators with higher perceptions of self-efficacy show a greater tendency to support and help students with disabilities or special educational needs (Caprara et al., 2006; Katsora et al., 2022; Poulou & Norwich, 2002) and treat them with more tenderness and empathy (Pendergast et al., 2011; Skaalvik & Skaalvik, 2007).

The convictions of self-efficacy of physical education teachers can define the success of a well-adjusted physical education program for the inclusion of students with disabilities (Block et al., 2010; Li et al., 2018).

Chan (2004) in his study regarding high school educators in Hong Kong realized that educators with high emotional intelligence showed high convictions of self-efficacy. Kostić-Bobanović (2020) while exploring the relationship between emotional intelligence, teaching experience and educators' self-efficacy, supports that more experienced educators have higher levels of emotional intelligence like self-control and sociability along with high beliefs of self-efficacy in regards to class management. The positive correlation between emotional intelligence and self-efficacy is established in the literature (Aparisi et al., 2020; Valente et al., 2020; Wu et al., 2019). Educators with high levels of emotional intelligence present high levels of self-efficacy as they are considered more capable in class management, they motivate the participants in the learning procedure and showcase teaching efficiency. The high levels of an educator's emotional intelligence are connected with not only high self-efficacy but also higher working satisfaction (Sokmen & Sarikaya, 2022). Katsora et al. (2022) support the belief that educators with high emotional intelligence present powerful convictions about their self-efficacy, they develop more effective teaching strategies, demonstrate behaviors of empathy, enhance the socialization of students with or without disabilities, promote social cohesion, and become a crucial and decisive factor of inclusion and social integration.

3. Material and Methods

3.1 Sample

One hundred fifty (N = 150) physical educators participated in the study (96 women and 54 men). Fourteen of the participants were < 30 years old (9.3%), 35 (23.3%) between 31-40, 53 (35.3%) between 41-50, and 48 (32%) over 50 years old. Eighty educators (53.3%) had a degree in physical education, 65 (43.3%) had a master's degree, and 5 (3.3%) had a PhD. One hundred thirteen (75.3%) worked in public schools and 37 (24.7%) in private ones. Furthermore, 104 educators (69.3%) worked in primary schools whereas 46 educators (30.7%) in high schools. Regarding teaching experience in adapted physical education, 30 physical educators (20%) were inexperienced, 33 (22%) had 1-5 years of experience, 20 (13.3%) 6-10 years, 39 (26 %) 11-20, and 28 (18.7%) over 21 years of experience. Finally, 90 of the participants (60%) stated that they had been trained in adapted physical education whereas 60 (40%) answered negatively.

3.2 Research Tools

For the measurement of emotional intelligence, the Wong Law Emotional Intelligence Scale- WLEIS (Wong & Law, 2002) was used. The questionnaire consists of 16 statements, divided into four factors: (a) Self Emotional Appraisal, (b) Others' Emotional Appraisal, (c) Use of Emotion and (d) Regulation of Emotion. The validity and reliability of the Greek version of the WLEIS has been demonstrated by Kafetsios and Zampetakis (2008)

through confirmatory factor analysis. For the measurement of the self-efficacy of physical education teachers, the Self-Efficacy Instrument for Physical Education Majors Toward Inclusion SEPETE (Block et al., 2013) questionnaire was used. Participants were asked to answer 25 questions and to state the degree of trust in themselves regarding the inclusion of students with (a) intellectual disabilities, (b) physical disabilities and (c) visual impairments in physical education classes. The factors of the questionnaire are four: (a) the guidance of peers to help students with disabilities during the class (PI), (b) students' safety(S), (c) the particular adjustments to the class of physical education (SA) regarding a mental disability and the obvious malfunctions and (d) their guidance so students remain focused on their duty (ST) in regards to physical disabilities.

3.3 Statistical Analysis

For the statistical analysis of data, IBM SPSS 25 was used. The independent variables were gender, age, level of education, teaching experience, education in adapted PE, work sector and level of schooling employed. The factors of the questionnaires were used as dependent variables. As for the demographic data, a descriptive analysis was conducted, and the mean value and the standard deviation of emotional intelligence and self-efficacy of physical education teachers were calculated. To correlate emotional intelligence with the self-efficacy of PE teachers in the inclusion of students with disabilities, the correlation coefficient Spearman was used. Moreover, in order to correlate emotional intelligence and self-efficacy with the independent variables concerning gender, education in adapted PE, the workforce, the degree of education t-tests for independent groups were conducted. Regarding the independent variables which concern demographic factors like age, level of education and teaching experience an analysis of variance (ANOVA) was conducted. Finally, in the predictive model of emotional intelligence and self-efficacy in regard to the inclusion of students with disabilities, Multiple Regression Analysis was applied.

4. Results

4.1 Demographic Factors, Occupational Profile and Emotional Intelligence

Regarding gender, the results of an independent sample - test of the factors of emotional intelligence showcased a statistically important variation of the average figures of the factor "Others emotional appraisal" ($t(148) = -2.853, p = 0.005$), where the average of men ($M = 5.51$) is statistically smaller ($t(148) = -2.853, p = 0.005$) than the respective of women ($M = 5.87$).

As far as age, the results of ANOVA of factors of emotional intelligence showed statistically a very important variation in the average figures in the factors "Self emotional appraisal" ($F(3,146) = 4.567, p = 0.004$), "Others emotional appraisal" ($F(3,146) = 2.853, p = 0.039$) and "Regulation of emotion" ($F(3,146) = 3.582, p = 0.015$). From Post hoc Analysis Games-Howell, it was discovered that the factor "Self emotional appraisal" the average of individuals aged 51 and over ($M = 6.08$) is statistically bigger than of those

who are 41-50 ($M = 5.71, p = 0.006$), 31-40 ($M = 5.66, p = 0.006$) and up to 30 ($M = 5.48, p = 0.004$). In the factor "Others emotional appraisal" the average of individuals age 51 and over ($M = 5.95$) is statistically bigger ($p = 0.0014$) than the respect of those who are 41-50 ($M = 5.54$). In the factor "Regulation of Emotion" the average of individuals aged 51 and over ($M = 5.46$) are statistically larger from the respective of those who are 31-40 ($M = 4.89, p = 0.043$) and up to 41-50 ($M = 5.04, p = 0.047$).

In reference to the educational grade, a statistically important variation of the average figures of the factors "Use of emotion" ($t(148) = 3.365, p = 0.001$) appeared in the results of the independent sample- test, where the median of educators who teach in primary school ($M = 5.87$) is statistically larger ($t(148) = 3.365, p = 0.001$) than the respective of those who teach in high school ($M = 5.43$). Finally, in reference to the years of teaching experience in special education the results of ANOVA, showed a statistically important variation in the average figures of the factor "Regulation of Emotion" ($F(3,146) = 3.228, p = 0.014$), where the average of individuals with 1-5 years of teaching experience in special education ($M = 4.70$) is statistically smaller than the respective of those who have over 21 years of service ($M = 5.20, p = 0.021$). 12-21 years ($M = 5.22, p = 0.009$), 6-11 ($M = 5.33, p = 0.009$) and 0 years ($M = 5.37, p = 0.002$).

4.2 Demographic Factors, Occupational Profile and Self-efficacy

In reference to the educational grade the results of the independent sample- test indicated a statistically important variation in the average figures of the factor "Self-efficacy physical disability" ($t(148) = 2.284, p = 0.024$) the median of educators who teach in primary school ($M = 4.55$) is statistically larger than those who teach in high school ($M = 4.37$).

Regarding the education of adapted physical education, the results of the independent sample- test showed statistically important variation in the average figures of the factor "Self-efficacy physical disability" ($t(148) = 2.005, p = 0.047$), the median of educators that have received further training is statistically larger in comparison to those who have not received such an education ($M = 4.43$).

Statistically, it was not deemed possible to detect major differences in self-efficacy based on gender ($p \geq 0.237$), age ($p \geq 0.155$), level of education ($p \geq 0.594$), work institution ($p \geq 0.434$) and the years of teaching experience in adapted PE ($p \geq 0.674$).

4.3 Mean (M) and Standard Deviations (SD) factors of Wong Law Emotional Intelligence Scale (WLEIS)

Table 1 lists the average figures Mean (M) and the Standard Deviations (SD) of factors regarding emotional intelligence. This suggests, that to a great extent, there is Self-Emotional Appraisal ($M = 5.80 \pm 0.71$) and Others' Emotional Appraisal ($M = 5.74 \pm 0.75$). Similarly, educators can sufficiently Use of Emotion ($M = 5.74 \pm 0.75$) and regulate ($M = 5.14 \pm 0.86$) their emotions.

Table 1: Wong Law Emotional Intelligence Scale–WLEIS – Factors Descriptive

Factors WLEIS	N	(M)	(S.D)
Self Emotional Appraisal	150	5.80	0.71
Others' Emotional Appraisal	150	5.74	0.75
Use of Emotion	150	5.74	0.75
Regulation of Emotion	150	5.14	0.86

4.4 Mean and Standard Deviations Factors of Self-Efficacy Instrument for Physical Education Teachers Mayors Towards Inclusion SE-PETE

Table 2 presents the average figures of factors Mean (M) and the Standard Deviations (SD) of self-efficacy. It appeared that self-efficacy was estimated from a high to a very high degree in regards to the dysfunction of visual impairment ($M = 4.52 \pm 0.50$), physical disability ($M = 4.50 \pm 0.47$) but also in regards to intellectual disability ($M = 4.30 \pm 0.53$).

**Table 2: Self-Efficacy Instrument for Physical Education Teachers
 Education Majors Toward Inclusion SE-PETE –Factor Descriptive**

Dimension SE-PETE	N	(M)	(SD)
Self-efficacy Intellectual Disability Scale (ID)	150	4.30	0.53
Self-efficacy Physical Disability Scale (PD)	150	4.50	0.47
Self-efficacy Visual Impairment Scale (VI)	150	4.52	0.50

4.5 Correlating Emotional Intelligence and Self-efficacy (Spearman's rho)

The case of a possible correlation between emotional intelligence and self-efficacy of physical education educators regarding the inclusion of students with physical, and intellectual disabilities and sensory impairment, was cross-examined through the Spearman correlation coefficient. Positive correlations of statistical importance, at significance levels of 1% were detected between all the pairs of studied factors (Table 3).

Table 3: Spearman's rho Emotional Intelligence X Self-efficacy

Factors	1	2	3	4	5	6	7
1. Self Emotional Appraisal	1.000						
2. Others' Emotional Appraisal	.572**	1.000					
3. Use of Emotion	.522**	.499**	1.000				
4. Regulation of Emotion	.435**	.343**	.526**	1.000			
5. Self-efficacy Intellectual Disability Scale (ID)	.438**	.371**	.411**	.423**	1.000		
6. Self-efficacy Physical Disability Scale (PD)	.452**	.445**	.541**	.386**	.774**	1.000	
7. Self-efficacy Visual Impairment Scale (VI)	.307**	.347**	.395**	.294**	.631**	.759**	1.000

4.6 Multiple Regression Analysis Self-efficacy X Emotional Intelligence

Table 4 describes the results of Multiple Regression Analysis with dependent variable self-efficacy in regards to intellectual disability and independent of the factors of emotional intelligence. A statistically important effect of the independent variables on the

dependent has been observed ($F(4,145) = 12.156, p < 0.001$) with a moderate grade of adjustment ($AdjR^2 = 0.230$). Specifically, the effect of the independent variable "Regulation of Emotion" ($Beta=0.240, t = 2.804, p = 0.006$) was considered statistically important.

Table 4: Multiple Regression Analysis with Dependent Variable Self-efficacy Intellectual Disability and Independent Variables the Factors of Emotional Intelligence Scale

Dependent Variable	R	R ²	AdjR ²	F(4,145)	p-value
Self-efficacy Intellectual Disability (ID)	0.501	0.251	0,230	12.156	<0.001
Independent Variables	B	Beta	T	p-value	VIF
Constant	1.840	-	4.989	<0.001	-
Self Emotional Appraisal	0.121	0.161	1.689	0.093	1.759
Others' Emotional Appraisal	0.111	0.156	1.720	0.088	1.593
Use of Emotion	0.063	0.090	0.983	0.327	1.620
Regulation of Emotion	0.148	0.240	2.804	0.006	1.421

In Table 5 we can observe the results of Multiple Regression Analysis with the dependent variable "Self-efficacy Physical Disability" and independent of the demographic factors. A statistically important dependence of independent variables upon the dependent ($F(2,147) = 4.822, p = 0.009$) has been detected, with a moderate grade of adjustment ($AdjR^2 = 0.291$). Specifically, the effect of the independent variable "Use of Emotion" ($Beta=0.327, t=3.727, p < 0.001$) was considered statistically important.

Table 5: Multiple Regression Analysis with Self- efficacy Physical Disability (PD) and Independent Variables the Factors of Emotional Intelligence Scale

Dependent Variable	R	R ²	AdjR ²	F(4,145)	p-value
Self-efficacy Physical Disability (PD)	0.557	0.31	0.291	16.278	<0.001
Independent Variables	B	Beta	T	p-value	VIF
Constant	2.068	-	6.639	<0.001	-
Self Emotional Appraisal	0.073	0.111	1.218	0.225	1.759
Others' Emotional Appraisal	0.099	0.158	1.820	0.071	1.593
Use of Emotion	0.203	0.327	3.727	<0.001	1.620
Regulation of Emotion	0.053	0.098	1.194	0.234	1421

Table 6 depicts the results of Multiple Regression Analysis with the dependent variable "Self-efficacy Visual Impairment" and independent of the factors of emotional intelligence. The statistically important effect of the independent variable on the dependent ($F(4,145) = 7.538, p < 0.001$) with a low grade of adjustment ($AdjR^2 = 0.149$) has been observed. More specifically, the effect of independent variables "Others' Emotional Appraisal" ($Beta=0.204, t = 2.141, p = 0.034$) and "Use of Emotion" ($Beta=0.205, t = 2.136, p = 0.034$) was considered statistically important.

Table 6: Multiple Regression Analysis with Dependent Variable Self-efficacy Visual Impairment Scale and Independent Variables the Factors of Emotional Intelligence Scale

Depended Variable	R	R ²	AdjR ²	F(4,145)	p-value
Self- efficacy Visual Impairment	0.415	0.172	0.149	7.538	<0.001
Independent Variables	B	Beta	T	p-value	VIF
Constant	2.620	-	7.169	<0.001	-
Self Emotional Appraisal	0.001	0.002	0.018	0.986	1.759
Others' Emotional Appraisal	0.137	0.204	2.141	0.034	1.593
Use of Emotion	0.136	0.205	2.136	0.034	1.620
Regulation of Emotion	0.064	0.11	1.221	0.224	1.421

4.7 Multiple Regression Analysis Emotional Intelligence X Demographic Factors

Table 7 presents the results of Multiple Regression Analysis with the dependent variable "Others Emotional Appraisal" and independent of the demographic factors. It was observed that statically there is considerable dependence of the independent variables of the dependent ($F(4,145) = 5,553, p < 0,001$) with a low grade of adjustment ($AdjR^2 = 0,109$). Gender ($Beta = 0,286, t = 3,599, p < 0,001$) and age 51 and over ($Beta = 0,324, p < 0,001$) were proven to be predictive factors.

Table 7: Multiple Regression Analysis with Depended Variable "Others Emotional Appraisal" and Independent Variables the Demographic Factors

Dependent Variable	R	R ²	AdjR ²	F (4,145)	p-value
Others Emotional Appraisal	0.364	0.133	0.109	5.553	<0.001
Independent Variables	B	Beta	T	p-value	VIF
Constant	4.782	-	20.570	<0.001	-
Gender	0.443	0.286	3.599	<0.001	1.059
Age <30	0.302	0.118	1.428	0.155	1.148
Age 31-40	0.164	0.094	1.072	0.286	1.274
Age >51	0.516	0.324	3.604	<0.001	1.352

Table 8 shows the results of Multiple Regression Analysis with the dependent variable "Regulation of Emotion" and independent demographic factor associations. A statistically important dependence of independent variables to the dependent ($F(9,140) = 2,945, p = 0,003$), with a low grade of adjustment ($AdjR^2 = 0,105$) was observed. Age 51 years and over ($Beta = 0,232, p = 0,025$) and teaching experience of 1-5 years in physical education were decisive factors.

Table 8: Multiple Regression Analysis with Depended Variable "Regulation of Emotion" and Independent Variables the demographic factors

Dependent Variable	R	R ²	AdjR ²	F (9,140)	p-value
Regulation of Emotion	0.399	0.159	0.105	2.945	0.003
Independent Variables	B	Beta	T	p-value	VIF
Constant	5.272	-	32.474	<0.001	-
Age					
<30	0.260	0.088	0.981	0.328	1.343

31-40	0.003	0.002	0.018	0.986	1.384
>51	0.427	0.232	2.259	0.025	1.757
Teaching Experience					
0	-0.040	-0.019	-0.193	0.848	1.569
1-5	-0.530	-0.256	-2.518	0.013	1.719
6-11	0.152	0.060	0.671	0.503	1.337
>21	-0.315	-0.143	-1.380	0.170	1.787

4.8 Multiple Regression Analysis Self-efficacy X Demographic Factors

Table 9 presents the results of Multiple Regression Analysis with the dependable variable "Self- efficacy physical disability" and independent of correlative demographic factors. A statistically important dependency on the independent variables upon the dependent ($F(2,147) = 4.822, p = 0.009$), with a very low adjustment grade ($AdjR^2=0.049$) was observed. The degree of education ($Beta=-0.187, p = 0,020$) and further training in adapted physical education ($Beta=0.166, p = 0.040$) were proved to be predictive factors.

Table 9: Multiple Regression Analysis with Depended Variable "Self-efficacy" and Independent Variables the demographic factors

Dependent Variable	R	R ²	AdjR ²	F (2,147)	p-value
Self- efficacy physical disability	0.248	0.062	0,049	4.822	0.009
Independent Variables	B	Beta	T	p-value	VIF
Constants	4.679	-	40.736	<0.001	-
Grade of Occupation	-0.188	-0.187	-2.346	0.020	1.000
Further education in Adapted Physical Activity	0.157	0.166	2.077	0.040	1.000

5. Discussion

The research at hand explored the correlation between emotional intelligence and the self-efficacy of physical education educators regarding the inclusion of students with a disability. Moreover, investigated if emotional intelligence may be considered a predictive factor for self-efficacy. From the results, it is indicated that physical education educators demonstrate high levels of emotional intelligence (understanding of personal emotions and the emotion of others) while managing the relationships with students, who have physical, intellectual disabilities and visual impairment, efficiently.

The results coincide with relevant research in educational environments (Katsora et al., 2022; Kostić-Bobanović, 2020) which reveal that emotionally intelligent educators create the appropriate teaching conditions within the school classroom functioning encouragingly and supportively towards their students while effectively adjusting teaching to the needs of students. In contrast, when educators have difficulty in being faced with various emotional and social challenges within the classroom the students present low levels of acceptable behaviors (Marzano et al., 2003). Similarly, the research of Skura and Swiderska (2021) underlines the major differences in the teaching of students with mild and serious intellectual disabilities between educators with low and high emotional intelligence with the latter facing fewer difficulties.

On the subject of physical education Lee et al. (2019) support that physical education educators with increased emotional intelligence can detect and prevent possible unwanted behaviors as well as demonstrate sufficient knowledge on how to manage them. Petsios and Gorozidis (2019) support that physical education educators who have self-regulation skills regarding their emotions are friendlier and more supportive, they understand their students' emotions better while presenting low levels of disappointment and strict behaviors, promoting constructive and healthy relationships with their students.

In regards to the case, the extent to which emotional intelligence can be considered a predictive factor for self-efficacy, the results showed that physical education educators with a high ability to regulate emotions have, expectedly, high self-efficacy in their teaching towards intellectual disability. At the same time, physical education educators with a higher ability to regulate emotions might demonstrate high self-efficacy in their teaching regarding physical disability.

Moreover, physical education educators with a high ability to regulate emotions and with an understanding of the emotions of others might showcase high self-efficacy in teaching in regard to visual impairment.

Chan (2004) supported that educators with increased emotional intelligence presented strong attitudes of self-efficacy as well. Those beliefs of self-efficacy of physical education educators could determine the success of an adapted physical education program for the inclusion of students with disability (Block et al., 2010; Li et al., 2018). Educators with high emotional intelligence handle a classroom maturely, offer powerful incentives for participation, develop effective teaching strategies, demonstrate sensitive behaviors, promote social interaction and cohesion and constitute a critical and decisive factor in inclusion and social integration (Aparisi et al., 2020; Katsora et al., 2022; Valente et al., 2020; Wu et al., 2018). The view that emotional intelligence functions as a predictive factor of self-efficacy are enhanced by other studies as well (Gurol et al., 2010; Iordanoglou, 2000; Katsora et al., 2022; Kocoglu, 2011; Mouton et al., 2012).

Regarding the correlation between emotional intelligence with the demographic and professional profile of educators, the results of the study showed that women educators can understand the feelings of others to a great extent than male educators. The findings coincide with the studies which support that women show a higher level of emotional intelligence in contrast to men (Cabello et al., 2016; Patel, 2017; Petrides & Furnham, 2000; Shutte et al., 1998). In contrast, in other studies, statistically, major differences regarding the emotional intelligence of both genders were not found (Katsora et al., 2022; Rastegar & Memarpour, 2009). Age seems to be another characteristic which influences emotional intelligence. Specifically, individuals 51 and over can better comprehend their personal emotions, and how other people around them feel and they can regulate their relationships more effectively than younger educators. The above results are in accordance with the study of Bar-On (2000) in which it has been confirmed that emotional intelligence increases to a great extent until the fifth decade of a person's life. Finally, the finding that individuals with longer teaching experience in special

education can adjust their emotions more easily in comparison to educators with brief experience according to the research of Rastegar and Memarpour (2009), who support that emotional intelligence increases with the progression of age and depending on work experience.

In the present study, it has been proven that, regarding the correlation between self-efficacy and the demographic and professional profile of the educators, primary school educators are more efficient in teaching, concerning the physical disability of students in comparison to high school educators. Similar conclusions were drawn by Gorozidis and Digelidis (2012), who noted higher levels of self-efficacy in primary school physical education educators in comparison to high school educators. Similar are the results in the studies of Wolters and Daugherty (2007) and Lee et al. (2013). Finally, any further education in adapted physical education contributes to cultivating self-efficacy. In particular, individuals who have received further education/training are more efficient in regard to the inclusion of students with disabilities in comparison to those who have not (Reina et al., 2019; Taliafero et al., 2015). In contrast, the beliefs of educators' self-efficacy do not appear to be affected by the demographic variables of gender, age, and teaching experience, exactly as in the research of Rezaeian and Abdollahzadeh (2020) who ended up with similar results.

6. Recommendations

Through this present study, the importance of emotional intelligence in the self-efficacy of physical education educators regarding the inclusion of students with disability is evident. Additionally, it would be productive in the future, to create educational programs aiming to enhance the emotional intelligence of educators. Educators who are emotionally intelligent will shape the character of inclusive teaching, they will facilitate social inclusion and integration of students with a disability and add a student-centered character to education.

7. Conclusion

The present research studied the correlation of perceived emotional intelligence with the attitudes of self-efficacy of physical education educators in the inclusion of students with disabilities in schools of general education. It has been noted that physical education educators demonstrate satisfactory levels of emotional intelligence thus consistently displaying higher levels of self-efficacy in the inclusion of students with physical, and intellectual disabilities and visual impairment. The two main notions of this research were associated with the demographic and professional profile of physical education educators. As far as emotional intelligence is concerned, it was noticed that the demographic factors of gender and age of the participants, the degree of education, teaching experience and the level of studies affect the levels of emotional intelligence. Furthermore, it was noticed that further education in adapted physical education and the

level of education affect self-efficacy, which, as it appears is not affected by gender, age and teaching experience. Finally, in the present study, it has been proven that there is a significant correlation between emotional intelligence and self-efficacy in regard to the inclusion of students with disability and that emotional intelligence in fact should be considered a predictive factor of self-efficacy of physical education educators.

Conflict of Interest Statement

The authors declare no conflicts of interest.

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