Sentiments, Attitudes, and Concerns about Inclusion: Early Years in Teacher Education Programs

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Abstract

This study aims to examine preservice teachers' sentiments toward students with special needs, attitudes and concerns about inclusive education in terms of a number of demographic variables. These demographics included major area, grade level, gender, interaction with disabled people, training for inclusive education, self-confidence for teaching in inclusive classrooms, and teaching experience in inclusive classrooms. Main data were collected only from first and second-year preservice teachers. The result indicated that although some findings matched those observed in earlier studies, others did not support the previous research. The possible reasons were discussed with reference to teacher education programs implemented in Turkey.

Keywords: Inclusion, teacher-related variables, students with special needs, attitudes toward inclusion, concerns about inclusion.

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Kaynaştırma Eğitimine Yönelik Düşünce, Tutum ve Endişeler: Öğretmen Eğitimi Programlarında İlk Yıllar

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Öz

Bu çalışmada, öğretmen adaylarının özel gereksinimli öğrenciler hakkındaki düşüncelerini ve kaynaştırma eğitimine yönelik tutum ve kaygılarını çeşitli demografik değişkenler açısından incelemek amaçlanmıştır. Bu demografik değişkenler öğrenim görülen bölüm, sınıf düzeyi, cinsiyet, engelli kişilerle olan etkileşim, kaynaştırma konusunda alınan eğitim, kaynaştırma sınıflarında eğitim verme konusunda kendine güven ve kaynaştırma sınıflarında öğretme deneyimini içermektedir. Veriler yalnızca birinci ve ikinci sınıftaki öğretmen adaylarından elde edilmiştir. Bazı bulgular alan yazında var olan çalışmaları destekler yönde iken diğerleri önceki araştırmaların bulgularıyla eşleşmemiştir. Bulgular Türkiye'de uygulanan öğretmen yetiştirme programları göz önünde bulundurularak tartışılmıştır.

Anahtar kelimeler: Kaynaştırma, öğretmene özgü değişkenler, özel gereksinimli öğrenciler, kaynaştırmaya yönelik tutumlar, kaynaştırma eğitimine yönelik kaygılar.

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1. Introduction

The recent reforms in inclusive education evoke the need of change in teacher education programs with the purpose of developing preservice teachers' (PTs) abilities to educate students with special needs in regular schools (Peebles & Mendaglio, 2014a). This change in teacher education programs is also necessary in that many countries have accepted the inclusion within the goal of their education systems, including Turkey (Bhatnagar & Das, 2014; De-Boer, Pijl, & Minnaert, 2011; Ministry of National Education [MoNE], 2004). In education systems, teachers are the key elements in the success of inclusive education (De-Boer et al., 2011). Therefore, their sentiments, attitudes, and concerns are important for successful implementations. Moreover, a variety of teacher-related factors are found to contribute to successful implementation of inclusive education such as, gender, teaching experience, previous training for inclusive education, experience in inclusive classrooms, and previous interaction with people with disabilities (De-Boer et al., 2011; Forlin, Loreman, Sharma, & Earle, 2009). Type and severity of disability, family involvement, and professional support are also among other factors affecting the teachers' attitudes toward inclusion and their practices in inclusive classrooms (Leatherman & Niemeyer, 2005; Odom & McEvoy, 1990; Rose & Smith, 1993).

A student with special needs may differ from so-called "normal" students in "mental characteristics, sensory abilities, communication abilities, behavior and emotional development, or physical characteristics" (Kirk, Gallagher, Coleman, & Anastasiow, 2012, p. 4). Inclusive education allows such students to receive education in general classrooms together with other students (Turnbull, Turnbull, & Wehmeyer, 2007). Boykin (1957) underlined that although students with special needs may differ from their peers in some aspects, they have same needs and stated that

> [a student with special needs may be unique] in some trait, capacity, ability, or behavior pattern… nevertheless, has the needs that characterize all human beings - the need for acceptance of self and for social acceptance; the need to achieve a sense of belonging; the need to develop feelings of competence and to experience success; the need to accept the conditions and realities of one's own life and to acquire the ability to perform one's own work and to engage in one's own play; and the need to learn to live in a world of real things and of normal people. In short, he stands as equal to others in the right to educational opportunity, to special services if these are required, and to normal treatment when this, too, is possible (p. 47).

Teaching students with special needs in general education classrooms initiated in the 1980s due to the attempts of parents who demanded equal educational opportunities for their children (O'Dell & Schaefer, 2005). Many scholars supported inclusive education and highlighted the value of integration of each student in a school without considering whether they have any disability and making them a part of the school culture (e.g., Burke & Sutherland, 2004; Nielsen, 2002).

1.1. Factors Affecting Inclusive Practices

There are a number of factors which favor or inhibit successful inclusive practices, for instance preservice and in-service training (Gözün & Yıkmış, 2004; Leatherman & Mieyer, 2005), students' attitudes toward disabled peers, (Batu, Kırcaali-İftar, & Uzuner, 2004; Sukbunpant, Arthur-Kelly, & Dempsey, 2013), teachers' beliefs and their self-efficacies (Jordan, Schwarts, & McGhie-Richmond, 2009) as well as teachers' attitudes (Bhatnagar & Das, 2014; Leatherman & Niemeyer,

2005; Malinen et al., 2013; Orel, Zerey, & Töret, 2004; Ross-Hill, 2009). Among them, teachers' attitudes have received close attention of researchers since it was considered one of the most important contributing factors to successful inclusive practices (Ahmmed, Sharma, & Deppeler, 2012; Sharma, Shaukat, & Furlonger, 2015). McLeskey and Waldron (2000), for example, emphasized that inclusion primarily requires the investigation of teachers' beliefs and attitudes because these are among the major factors for successful inclusive classroom practices. In recent years, researchers also defended that teachers' attitudes are so vital since they may act as a barrier or as a support for the successful implementation of inclusion programs (e.g., Killoran, Woronko, & Zaretsky, 2014; Winship, 2008).

A careful examination of the literature indicated that the research about inclusion mainly focused on the relationship between teachers' attitudes toward inclusion and the factors affecting their attitudes. As an example, Angstadt (2002) reported that three main factors contribute to teachers' attitudes, namely the severity and type of disability, the degree of administrative support, and prior training. Alghazo and Gaad's (2004) study showed that regular education teachers generally hold negative attitudes toward inclusion. In Alghazo and Gaad's study gender, teachers' years of experience, and type of disabilities were found to be related to teachers' attitudes toward inclusion. An opposing finding was reported by Leatherman and Niemeyer (2005) who examined preservice and in-service teachers' attitudes toward inclusion. They found that both group teachers held positive attitudes toward inclusion and supported disabled and nondisabled students' participation in all classroom activities together. Leatherman and Niemeyer (2005) advocated that mastery experience in their professional training programs and in their early classrooms, family involvement, and resource and personnel availability have an impact on teachers' attitudes toward inclusive programs and affect successful implementation of inclusive practices. The literature provided evidence that special education teachers held more favorable attitudes toward inclusion than general education teachers (e.g., Webb, 2004). Webb argued that grade level and teaching experiences are also important in both groups of teachers' favorable attitudes toward inclusion. A more recent study by Otero (2012) also supported the findings of Webb (2004) in terms of comparing general and special education teachers' attitudes. However, Otero could not find a significant relationship between teachers' academic degree, the number of years of teaching experience and their attitudes toward inclusion. In another study, Huber (2009) studied with preservice special education and general education teachers to explore possible factors influencing their attitudes toward inclusion. Huber put emphasis on factors such as previous attitudes, cooperating teacher in the field, personal experience with disabled students, type and severity of disability, and age of the students. Direct experiences with disabled students were considered to help teachers develop practical inclusive teaching skills and allay preservice teachers' anxieties in working with students with special needs (Peebles & Mendaglio, 2014b).

Together, these studies provide important insights into the factors which have a role on teachers' sentiments toward students with special needs, attitudes, and concerns about inclusive education which, in turn, will affect successful inclusive practices in classrooms. In light of all that has been mentioned so far, three fundamental ideas encouraged us to carry out this study which investigated teacher-related demographic variables as factors affecting PTs' sentiments, attitudes and concerns about inclusive education: (1) the critical role of teachers' sentiments, attitudes and concerns on the success of inclusive practices; (2) the decisive role of early-year sentiments, attitudes and, concerns on future sentiments, attitudes and concerns (3) and inadequacy of such studies in Turkish context.

2. Method

2.1. Research Purpose

In this study, we investigated PTs' sentiments toward students with special needs, attitudes and concerns about inclusive education in terms of a number of demographic variables in their early years in teacher education program. These variables included major area, grade level, gender, experience of interacting with people with disabilities, training for inclusive education, self-confidence for teaching in inclusive classrooms, and teaching experience in inclusive classrooms.

2.2. Participants

Table 1. Demographic variables about participants

Demographics	Frequency	Percent (%)
Major		
Preservice elementary teachers	65	31.9
Preservice mathematics teachers	66	32.4
Preservice science teachers	73	35.8
Grade Level		
Freshman	178	87.3
Sophomore	26	12.7
Gender		
Female	121	59.3
Male	81	39.7
Did not report gender	2	1.0
Experience of Interacting with Disabled People		
Yes	52	25.5
No	152	74.5
Training for Inclusive Education		
Yes	9	4.4
No	195	95.6
Self-Confidence		
Very High	0	0.0
High	28	13.7
Moderate	81	39.7
Low	59	28.9
Very Low	36	17.6
Teaching Experience		
Yes	13	6.4
No	191	93.6

The participants of this study were 204 freshmen and sophomores PTs from three different universities and enrolled in elementary teacher education program (n = 65), elementary mathematics education program (n = 66), and elementary science education program (n = 73). Each university is located in different regions of Turkey. We selected these universities purposefully to obtain a representative sample of Turkey as much as possible. Of the total participants, 59.3 % were female (n = 121) while 39.7 % were male (n = 81). The age of PTs ranged from 18 to 23 with a mode of 19. Slightly more than one-fourth of the participants (n = 52) stated that they had interacted with people with disabilities before. Only nine PTs in the sample received training for inclusive education. Moreover, 13 participants had prior teaching experience in inclusive classrooms. The demographic variables about the participants were given in Table 1.

2.3. Instrument

Data were collected through Sentiments, Attitudes, and Concerns about Inclusive Education (SACIE) scale which was originally developed by Loreman, Earle, Sharma, and Forlin (2007). The SACIE contains 19 items in a 4-point Likert scale response format (from strongly agree to strongly disagree) including three factors, namely sentiments (4 items), attitudes (8 items), and concerns (7 items). It was first adapted into Turkish by Cansiz and Turker (2011). Cansiz and Cansiz (2018) provided further validity and reliability evidence for the instrument. They conducted confirmatory factor analysis and the result revealed a good model fit with three factors (*NFI* = .93; *CFI* = .95; *GFI* = .89; *AGFI* = .90). They also found that SACIE has a good internal consistency (Cronbach's Alphas ranging from .89 to .93). The sample item for each dimension of SACIE scale was provided in Table 2.

Table 2. Dimensions and sample items of SACIE scale

Dimension	Sample Item
Sentiment	"It is rewarding when I am able to help people with disabilities."
Attitude	"Students who need assistance with personal care should be in regular classes."
Concern	"I am concerned that it will be difficult to give appropriate attention to all students in an inclusive classroom."

2.4. Data Collection and Analysis

SACIE was administered to 204 PTs in three different universities. Data about demographic variables were also obtained from each participant. While the levels of some demographic variables were dichotomous (i.e. the variables with only two categories; e.g., gender: female, male), other levels were multichotomous (i.e. the variables with more than two categories; e.g., major area: preservice elementary teachers, preservice mathematics teachers, preservice science teachers). Since we wanted to be consistent in presenting the result, and ANOVA is more powerful than t-test (Gravetter & Wallnau, 2004), we analyzed the data using one-way between groups analysis of variance (One-way ANOVA) in both cases. Before running analyses, the required assumptions including normality and homogeneity of variance were checked. The assumption checking indicated that there was no major problem with normality in the data set. On the other hand, some variables, such as PTs' attitudes across different major areas, violated the assumption of homogeneity of variance. In such cases, the result of a more conservative test, i.e. Welch test, was reported as suggested by Pallant (2011).

3. Result

3.1. Preservice Teachers' Sentiments toward Students with Special Needs

One-way between groups analysis of variance was conducted to explore whether participants' sentiments depend upon their majors. The result revealed that there was not a significant difference regarding major areas: F (2, 201) = .72, p = .489. That is, preservice elementary teachers, preservice mathematics teachers, and preservice science teachers hold similar sentiments toward students with special needs.

In terms of grade level, freshmen PTs' sentiments were similar to those of sophomores, F (1, 202) = .01, p = .913. That is, first-year PTs and second-year PTs exhibited comparable sentiments toward students with special needs.

Regarding gender, the result revealed that although males ($M = 2.87$, $SD = .51$) hold slightly more positive sentiment than females ($M = 2.81$, $SD = .33$), the difference between their scores were not significant: $F (1, 200) = .51$, $p = .599$.

Some student in the sample stated that they had a chance to interact with people with disabilities previously. The mean sentiment scores of those participants were compared with other students who have never had that chance. It was found that even though the students interacting with disabled people beforehand ($M = 2.87$, $SD = .31$) displayed more constructive sentiments than other students ($M = 2.82$, $SD = .48$); the mean difference was not statistically significant; $F (1, 202) = .42$, $p = .518$.

As discussed while reviewing related literature, PTs' training is important for successful implementation of inclusive practices. Therefore, we seek to find out the impact of training for inclusive education in our sample. For this purpose, trained PTs' mean sentiment scores were compared with untrained PTs. The result indicated that involvement in training for inclusive education did not yield a significant increase in sentiment scores of PTs: $F (1, 202) = .04$, $p = .835$.

A further one way between groups ANOVA was conducted to compare the sentiment scores of participants who view their self-confidence as very high, high, moderate, low, and very low. Interestingly, none of the participants consider their self-confidence as "very high". The result of the related analysis indicated that there was not a significant difference in the mean sentiment scores of participants with a different level of self-confidence: $F (3, 200) = 1.19$, $p = .316$.

Some participants in the study had opportunities to have real-class experience in inclusive classrooms while others do not. When their sentiment scores were compared, the result was noticeable in that the mean sentiment scores of preservice teachers with inclusive classroom experience were significantly lower than preservice teachers without inclusive classroom experience $F (1, 202) = 6.42$, $p = .012$. Summary of the result considering PTs' sentiments is given in Table 3.

Table 3. Summary of the result regarding PTs' sentiments toward students with special needs

Factor	df	Error df	F	Partial η^2
Dependent Variable: Sentiments				
Major Area	2	201	.72	.01
Grade Level	1	202	.01	.00
Gender	1	200	.51	.01
Interaction with Disabled People	1	202	.42	.00
Inclusive Education Training	1	202	.04	.00
Self Confidence	3	200	1.19	.02
Teaching Experience	1	202	6.42*	.03

*$p < .05$

3.2. Preservice Teachers' Attitudes about inclusive education

When considering PTs' majors, one way between groups ANOVA indicated that preservice teachers who enrolled in elementary education, mathematics education, and science education programs held similar attitudes toward inclusion; $F (2, 201) = 1.00$, $p = .370$.

With the purpose of investigating the effects of grade level on preservice teachers' attitudes toward inclusion, another one way between groups ANOVA was performed on the attitude scores of participants. The result indicated that participants' attitude scores did not differ significantly between grades: $F (1, 202) = 3.39$, $p = .067$.

Gender was not found as a factor having impact on PTs' attitudes toward inclusion. Even though male preservice teachers ($M = 2.53$, $SD = .52$) displayed a little more positive attitudes toward inclusive education than female PTs ($M = 2.41$, $SD = .48$); the mean difference between them was not statistically significant; $F (1, 200) = 1.49$, $p = .228$.

Previous interaction with a disabled person who can be a family member, friend, or a close relative did not yield significant effect on PTs' attitudes toward inclusion. The result of statistical analysis indicated that preservice teachers who interacted with disabled people before ($M = 2.56$, $SD = .42$) were not significantly different than remaining preservice teachers ($M = 2.42$, $SD = .52$) in terms of their attitudes toward inclusion: $F (1, 202) = 2.94$, $p = .088$.

In the sample, some participants received training about inclusive education. The related comparison indicated that involvement in such training did not have a significant impact on PTs' attitudes. The mean attitude scores of those who were involved in training ($M = 2.47$, $SD = .49$) did not differ from others who were not involved in training about inclusion ($M = 2.28$, $SD = .50$): $F (1, 202) = 1.26$, $p = .263$.

Based on one way between groups ANOVA result, it was found that the attitudes of participants with a different level of self-confidence were significantly different than each other: $F (3, 200) = 6.27$, $p < .001$. The actual difference in mean scores between the groups was found to be medium (Partial $\eta^2 = .09$). A further comparison established upon Tukey HSD test demonstrated that the mean attitudes scores of participants with very low self-confidence ($M = 2.18$, $SD = .65$) were significantly lower than participants with moderate self-confidence ($M = 2.59$, $SD = .46$) and with low self-confidence ($M = 2.45$, $SD = .42$). The other mean differences between groups were not significant.

Table 4. Summary of the result regarding PTs' attitudes about inclusive education

Factor	df	Error df	F	Partial η^2
Dependent Variable: Attitudes				
Major Area	2	201	1.00	.01
Grade Level	1	202	3.39	.02
Gender	1	200	1.49	.02
Interaction with Disabled People	1	202	2.94	.01
Inclusive Education Training	1	202	1.26	.01
Self Confidence	3	200	6.27***	.09
Teaching Experience	1	202	8.81**	.04

**$p < .01$; ***$p < .001$

Prior teaching experience in inclusive classroom environments was found to have a positive influence on PTs' attitudes toward inclusion. Based on statistical test result, there was a significant difference between preservice teachers having inclusive classroom experience ($M = 2.85$, $SD = .51$) and without having inclusive classroom experience ($M = 2.43$, $SD = .48$) in favor of the former group; $F (1, 202) = 8.81$, $p = .003$, $\eta^2 = .04$. In Table 4 we have provided a summary of related statistical analyses regarding PTs' attitudes about inclusive education.

3.3. Preservice Teachers' Concerns about Inclusion

There was no significant difference between the concern scores of teacher candidates enrolled in elementary education, mathematics education, and science education programs. All teacher candidates reported similar concerns about the inclusion of students with special needs to general education classrooms: $F (2, 201) = 2.40$, $p = .093$.

Similarly, grade level was not found to be related to PTs' concerns about inclusive education. In other words, PTs in both grade levels (freshmen, and sophomores) expressed similar concerns for inclusive education $F (1, 202) = 1.61, p = .205$.

Although the mean concern scores of female PTs ($M = 2.66, SD = .49$) were less than male PTs ($M = 2.68, SD = .46$) to some extent; statistical comparison indicated that the notion of teaching students with special needs together with general education students aroused female and male PTs' concerns similarly; $F (1, 200) = .22, p = .800$.

The mean concern scores of PTs who had previous interaction with a disabled person ($M = 2.61, SD = .49$) were similar to other PTs who did not have any previous interaction with a disabled person ($M = 2.69, SD = .47$); $F (1, 202) = 1.26, p = .264$.

The result of the statistical test indicated that PTs who participated in training about inclusive education displayed similar concerns with PTs who did not participate in such training: $F (1, 202) = .48, p = .491$.

One way between groups ANOVA indicated that there was a significant difference in the mean concern scores of participants with a different level of self-confidence: $F (3, 200) = 3.04, p = .030$. Post-hoc comparisons using Tukey HSD test demonstrated that the mean concern scores of participants with low self-confidence ($M = 2.81, SD = .37$) were significantly higher than participants with moderate self-confidence ($M = 2.66, SD = .40$) and high self-confidence ($M = 2.55, SD = .54$). Other possible comparisons did not produce statistically significant differences.

Having real-class experience in inclusive classrooms was not found to be a significant factor in determining PTs' concerns about inclusion. $F (1, 202) = 3.01, p = .084$. In Table 5, we have tabulated the findings with reference to PTs' concerns about inclusive education.

Table 5. Summary of the result regarding PTs' concerns about inclusive education

Factor	df	Error df	F	Partial η^2
Dependent Variable: Concerns				
Major Area	2	201	2.40	.02
Grade Level	1	202	1.61	.01
Gender	1	200	.22	.00
Interaction with Disabled People	1	202	1.26	.01
Inclusive Education Training	1	202	.48	.00
Self Confidence	3	200	3.04*	.04
Teaching Experience	1	202	3.01	.02

*$p < .05$

4. Discussion

The present study was conducted to investigate PTs' sentiments toward students with special needs, attitudes and concerns about inclusive education in terms of a number of demographic variables. These variables included major area, grade level, gender, interaction with disabled people, training for inclusive education, self-confidence for teaching in inclusive classrooms, and teaching experience in inclusive classrooms. A thorough literature review provided us with an insight to examine the link between above-mentioned demographic variables and PTs' sentiments toward students with special needs, attitudes and concerns about inclusive education (e.g., Avramidis, Bayliss, & Burden, 2000; Ellins & Porter, 2005; Forlin et al., 2009).

4.1. The Relationship between Preservice Teachers' Sentiments toward Students with Special Needs and Demographic Variables

In terms of PTs' sentiments, we found that PTs with teaching experience in inclusive classrooms significantly differed from PTs without experience. In data analysis, no significant difference was observed for other demographic variables. What we had expected at the outset of the study differed from what we found at the completion of the study in a number of important ways that need consideration. For example, mean sentiment scores of participants who have involved in previous training for inclusive education were similar to mean sentiment scores of participants who did not involve in any training. A growing body of research suggests that PTs gain important benefits from training about inclusive education. For example, Sharma, Forlin, and Loreman (2008) suggested that as a result of carefully planned training, PTs are expected to feel comfortable interacting with disabled students and become more enthusiastic about accepting disabled students into their future classrooms. However, the findings of the current study did not support the previous research in that participating in training for inclusive education did not provide Turkish PTs with more constructive sentiment toward those students. A possible explanation for this may be the lack of carefully planned training and support on inclusive education. Teacher educators do not consider inclusion in the early years of the teacher education. Moreover, courses about either inclusion or special education are scarce in teacher preparation programs. PTs are not required to teach special needs students when they go to practice schools. Therefore, PTs hesitate to take the responsibility of teaching those students. However, they should be trained to teach all students with a diverse ability starting from the first year of teacher education.

Another surprising finding was that the mean sentiment scores of freshmen and sophomores were quite similar to each other. This finding was unexpected and suggested that student-teachers' sentiments did not change significantly with one year experience in teacher education programs. This result did not match those observed in earlier studies as well. For example, Golmic and Hansen (2012) discussed that when progressing through undergraduate years, PTs gain experience about inclusive education and hence their approach to students with special needs are expected to be more optimistic. This could be attributed to "deficiencies" of teacher education programs in terms of preparing PTs for inclusive classrooms. If PTs would receive effective education about teaching in inclusive classrooms in which they were prepared both psychologically and professionally, their sentiments were expected to be more positive with succeeding grade level.

The most interesting finding regarding sentiments was that PTs with teaching experience in inclusive classrooms exhibited significantly less favorable sentiments toward students with special needs than PTs without inclusive classroom experiences. This finding also did not mirror those of the previous studies that have reported the beneficial role of teaching experience in the inclusive classroom (e.g., Elhoweris & Alsheikh, 2006; Fakolade & Adeniyi, 2009; Forlin et al., 2009; Van Reusen, Shoho, & Barker, 2001). It is not easy to explain this result, but it might be related to improper and even wrong practices in inclusive classrooms. Based on our own experience as a researcher and what we observe in school experience and teaching practices courses as an instructor, PTs typically prepare their in-class activities for average students. They suppose that every student can learn from activities prepared for average students. However, teaching in inclusive classrooms requires preparing diverse activities for students coming from

diverse background and abilities in order to ensure their access to knowledge, skills, and information that will prepare them for future. When PTs experience teaching in inclusive classrooms, they use their inaccurate framework as a lens to view the dynamics and needs of inclusive classrooms. Using their fallacious lens, they could interpret the dynamics and needs of inclusive classrooms in a way that they perceive themselves as ineffective teacher candidate and hence may develop a negative sense of sentiments toward disabled students.

4.2. The Relationship between Preservice Teachers' Attitudes toward Inclusive Education and Demographic Variables

Preservice-teachers' attitudes toward inclusion differed significantly in terms of two demographic variables: self-confidence and teaching experience in inclusive classrooms. PTs held more positive attitudes with increasing level of self-confidence. Very little was found in the literature examining the relationship between self-confidence and attitudes toward inclusion. These studies mostly reported that PTs do not feel very confident when teaching in inclusive classrooms (e.g., Bussing, Gary, Leon, Garvan, & Reid, 2002; De-Boer et al., 2011; Sadler, 2005; Snyder, 1999). Our finding is important in that it provided some support for the relation between self-confidence and attitudes toward inclusion. Similarly, PTs with experience in inclusive classrooms displayed more favorable attitudes than the ones without such experience. This finding was in agreement with the literature though. In their study, for example, Avramidis and Kalyva (2007) found that teachers having experience in teaching students with special needs showed more favorable attitudes than teachers who lack such experience. Avramidis and Kalyva considered the lack of experience as a barrier to implement inclusive education. In another study, Alghazo and Gaad (2004) also reported that when teachers gain more experience, they seem to be more responsive to accept students with disabilities into their classrooms. Moreover, teachers' past successful teaching experiences with disabled students were also found among the significant contributors to teachers' attitudes toward inclusion (Ahmmed et al., 2012). Regarding the issue of gender and its role on PTs' attitudes toward inclusion, the current study found that female PTs held comparable attitudes with male PTs. Although this result differed from some published studies (Leyser & Tappendorf, 2001; Romi & Leyser, 2006; Tsakiridou & Polyzopoulou, 2014), it was consistent with those of others (e.g., Avramidis & Kalyva, 2007; Harvey, 1985; Parasuram, 2006).

4.3. The Relationship between Preservice Teachers' Concerns about Inclusive Education and Demographic Variables

Self-confidence for teaching in inclusive classrooms was only variables found to be related to PTs' concerns about inclusive education. The result revealed that PTs' concerns decreased by increasing level of self-confidence in accordance with the past studies (e.g., Forlin et al., 2009). Forlin et al. reported a greater reduction in levels of concerns with increasing prior teaching experience in inclusive classrooms. A possible explanation for this may be explained by a strong sense of efficacy developed by personal mastery experiences in inclusive classrooms. Bandura (1977) stated that performance accomplishments are the source of information based on personal mastery experiences through which strong efficacy beliefs were developed. An individual's own repeated success on a task may cultivate a stronger self-efficacy which maintains even if failures occur occasionally. PTs having successful experiences in inclusive classrooms are supposed to develop a strong sense of self-efficacy; as a result, their concerns about inclusive education are expected to decrease.

A surprising finding was that training about inclusive education was not found to have a significant effect on reducing PTs' concerns about inclusive education. This result did not corroborate the findings of a great deal of the previous work in this field. In this respect, Woodcock, Hemmings, and Kay (2012) defended that involvement in a professional experience in which PTs gain knowledge and experience through working with disabled students has a potential in reducing their anxiety and concerns about inclusive education. Similarly, Sharma et al. (2008) reported that PTs become less concerned about inclusion as a result of training in inclusive education during preservice teacher education program. Sharma et al. (2008) referred to two underlying reasons. First, this training makes student-teachers become aware of resources for supporting inclusive education. Second, the training in inclusive education may emphasize practical strategies for teaching in inclusive classrooms which, in turn, may reduce concerns of PTs toward inclusive education. The reason why we could not find a difference in PTs' concerns may be the fact that they are freshman and sophomores and most of them stated that they did not receive training for inclusive education.

5. Conclusion and Implications

Although education policy documents in many countries including Turkey underlined the importance of including students with special needs in general education classrooms, the approach still suffers from fruitless implementation. In order to better understand this problem, analyses based on a variety of teacher-related demographic variables were carried out to explore the relationship between those variables and PTs' sentiments, attitudes, and concerns about inclusive education. Some of the findings of this study lend credence to previous studies, but other unexpected outcomes were encouraging to argue the effectiveness of teacher education programs as well as the education policy pursued by Ministry of National Education in Turkey.

The evidence from this study suggested that, in the Turkish context, grade level and training for inclusive education did not make a significant contribution to increase PTs' sentiments, and attitudes, and to lessen their concerns about inclusion. This finding was somehow differing with the literature. An implication of this is the possibility that teacher education programs in Turkey are lacking courses including authentic inclusive practices that can result in changes in PTs' sentiments, attitudes, and concerns. Preservice-teachers who receive effective training about inclusion in teacher education programs are expected to show positive thoughts about students with disabilities and less worry about inclusive education. Moreover, in a successful teacher education program in terms of inclusion, one can expect an ongoing or at least fluctuating increase in positive feelings and reduced fears about inclusive education from freshman to sophomores. The authors of this study agree with Forlin et al. (2009, p. 207) who suggested that "pre-service teacher education institutions must acknowledge and embrace their role more fully to ensure that they are producing graduates who have the appropriate knowledge, skills, and attitudes together with the confidence" in teaching in inclusive classrooms. PTs should be prepared to adapt their curricula, teaching strategies, classroom management strategies, and assessment strategies in order to ensure that they meet the needs of diverse students in their classrooms.

Although the combination of findings provided important insight for teacher-related demographic variables concerning inclusive education in Turkey, several questions remained unanswered in the present study. First, an inverse relationship that was found between PTs' teaching experience in inclusive classrooms and their sentiments toward students with special needs requires in-depth investigation. In future studies, a focus group should be identified and interviewed using

qualitative research method to reveal underlying feelings, insights, and values relevant to reduced sentiments of PTs who had experience in inclusive classrooms. In addition, since self-confidence was found to be related to increasing attitudes and decreasing concerns about inclusive education in the current study, further interventional studies should be conducted to exhibit a more coherent cause-effect relationship between self-confidence and related variables. In this way, PTs may be more equipped with necessary skills in terms of inclusive education before graduating from teacher education programs. Lastly, studies focusing on the comparison of sentiments, attitudes, and concerns of teachers who instruct different subjects such as science, mathematics, physical education, art, and music are suggested. This is important when we think the education system of Turkey. In Turkey, there are some national exams (e.g., university entrance exams) that students are supposed to enter right after the completion of K-12 education. In these exams, subjects such as science and mathematics are compulsory while art, music, and physical education are out of the scope. Teachers who teach courses within the scope of those exams, such as science or mathematics, may feel under stress to cover their curriculum and prepare students for those exams. In this respect, these teachers may not welcome students with special needs since they may think that these students require extra time and energy for the preparation. However, teachers who teach art or music may not feel so stressed since these subjects are not the content of the exams and they may be more welcome toward students with special needs. Here, the education policy of Turkey may act as a barrier to implement inclusive education. The result of such studies may give important evidence to comprehend the whole picture about inclusive education better. Furthermore, more research on such topic may help us more clearly understand the association between national exam anxieties of teachers and their attitudes and concerns about inclusive education, as well as sentiments toward students with special needs.

As a last word, we consider that in terms of effective inclusive education, every country needs teachers who know how to adjust their teaching styles to reach every single student in their classrooms, prepare diverse teaching activities for students with different background and abilities, integrate research-backed inclusive methodologies into their classroom practices, and create caring classroom environment in which teacher-student and student-student interactions are based on honoring the full range of abilities. Therefore, similar studies are needed not only to evaluate the readiness of teacher candidates' teaching in inclusive classrooms but also to obtain evidence for the efficacy of teacher education programs in training teachers for inclusion.

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