

PRE-SERVICE EARLY CHILDHOOD TEACHERS' BELIEFS ON INCLUSIVE
EDUCATION WITH RESPECT TO THEIR SELF-REPORTED PERSONALITY
TRAITS

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ABSTRACT

PRE-SERVICE EARLY CHILDHOOD TEACHERS' BELIEFS ON INCLUSIVE EDUCATION WITH RESPECT TO THEIR SELF-REPORTED PERSONALITY TRAITS

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The aims of this study were; (1) to examine the pre-service early childhood teachers' beliefs on inclusion, their personality traits, (2) the relationship between the pre-service early childhood teachers' beliefs on inclusion and their personality traits, and (3) whether the pre-service early childhood teachers' beliefs on inclusive education differ with respect to participation a course on inclusive education. The participant of the study were 907 second, third and fourth year pre-service early childhood teachers from four public and one private university in Ankara. Data were collected in the fall term of 2014-2015 academic year using the Demographic Information Scale, the Turkish version of Pre-service Teachers' Beliefs Toward Inclusion Scale (TPTBI) and the Turkish version of Big Five Inventory (BFI).

The results of the exploratory and confirmatory factor analyses indicated that the Turkish version of Pre-service Teachers' Beliefs Toward Inclusion Scale is valid and reliable instrument to measure pre-service teachers' beliefs on inclusive education. Based on results of descriptive analysis, the pre-service early childhood teachers' hold positive

beliefs on inclusive education. The results of MANOVA analysis revealed that there is a positive relationship between pre-service teachers' beliefs on inclusion and their participation a course on inclusive education. Moreover, the multiple regression analysis indicated pre-service teachers' openness, conscientiousness, and agreeableness personality traits have a predictive impact on their beliefs on inclusive education.

Keywords: Inclusive Education, Beliefs, Big Five Personality Traits, Pre-service Early Childhood Teachers

ÖZ

OKUL ÖNCESİ ÖĞRETMEN ADAYLARININ KAYNAŞTIRMA EĞİTİMİ HAKKINDAKİ İNANÇLARININ KİŞİLİK ÖZELLİKLERİNE İLİŞKİN OLARAK İNCELENMESİ

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Bu çalışmanın amaçları (1) Okul öncesi öğretmen adaylarının kaynaştırma uygulamaları hakkındaki inançları ve kişilik özelliklerini belirlenmesi, (2) Okul öncesi öğretmen adaylarının kaynaştırma uygulamaları hakkındaki inançlarının kaynaştırma eğitimi hakkında ders alıp almamalarına göre anlamlı bir değişime sebep olup olmadığının incelenmesi ve (3) Okul öncesi öğretmen adaylarının kaynaştırma uygulamaları hakkındaki inançları ve kişilik özelliklerini arasındaki ilişkilerinin incelenmesidir. Bu çalışmaya Ankara’da bulunan dördü devlet üniversitesi ve biri özel üniversite olmak üzere toplam 5 üniversitede ikinci, üçüncü ve dördüncü sınıfta öğrenim görmekte olan 907 okul öncesi öğretmen adayı katılmıştır. Veriler 2014-2015 eğitim-öğretim yılı güz döneminde Demografik Bilgi Ölçeği, Kaynaştırmaya Yönelik Öğretmen İnançları Ölçeği ve Beş Büyük Kişilik Özellikleri Envanteri uygulanarak toplanmıştır.

Açımlayıcı ve Doğrulayıcı Faktör Analizi sonuçları, Kaynaştırmaya Yönelik Öğretmen İnançları Ölçeğinin öğretmen adaylarının kaynaştırma uygulamalarına yönelik inançlarını ölçmek için geçerli ve güvenilir olduğunu göstermiştir. Betimsel istatistik sonuçlarına göre öğretmen adaylarının kaynaştırma uygulamalarına yönelik pozitif inançlara sahip oldukları tespit edilmiştir. MANOVA sonuçlarına göre kaynaştırmaya ilişkin ders alan ve

almayan öğretmen adaylarının inançları arasında anlamlı bir fark vardır. Ayrıca çoklu regresyon analizi sonuçlarına göre öğretmen adaylarının kişilik özelliklerinin kaynaştırmaya yönelik inançları üzerinde yordayıcı bir etkisi olduğu sonucuna ulaşılmıştır.

Anahtar Kelimeler: Kaynaştırma Eğitimi, İnançlar, Beş Faktör Kişilik Özellikleri , Okul Öncesi Öğretmen Adayları

To My Parents
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LIST OF ABBREVIATIONS

CFA	Confirmatory Factor Analysis
DV	Dependent Variable
EFA	Exploratory Factor Analysis
IV	Independent Variable
MANOVA	Multivariate Analysis of Variances
MoNE	Ministry of National Education
NAEYC	National Association for the Education of Young Children
OECD	Organization for Economic Cooperation and Development
RMSEA	Root Mean Square Error of Approximation
UNESCO	United Nations Educational, Scientific and Cultural Organization

CHAPTER I

INTRODUCTION

There are over half a billion people all over the world that have mental, physical or sensory impairments. Approximately 80 per cent of this huge differently abled population lives in developing countries. It is estimated that 140 million children cannot go to school; most of these children are either girls or children with special needs (UNESCO, 2005). There are lots of children with special needs as well as children without special needs educated in all education settings and grades (McLeskey & Henry, 1999). Children with special needs are educated in four different general education settings: separate schools, separate classes, resource rooms outside of the general education, and general education classes. The first one is separate schools in which children with special needs receive special education and related services in separate day schools, residential facilities, or hospitals' education settings for more than % 60 of the school day. The second one is separate classes in which children with special needs receive special education and related services outside of the general education classrooms for more than % 60 of the school day. The third one is resource rooms in which children with special needs receive special education and related services outside of the general education classrooms for 21% to 60 % of school day. The last one is general education classes where children with special needs can receive special education and related services outside of the general education classrooms for less than 21 % of the school day (McLeskey & Henry, 1999).

Among these different options, general education classes are considered to be the most suitable for children with special needs. This type of education setting is also called "*inclusion*" or "*inclusive education*" that is based on the principle of social justice that advocates equal access to the educational opportunities for all students regardless of their physical, intellectual, emotional or learning special needs in general education classes with their chronological age peers (Loreman, Sharma, Forlin & Earle, 2005). Another definition of inclusion is "the practice of educating students with moderate to severe

special needs alongside their chronological age peers without special needs in education settings within their home neighborhood schools” (Alper, 2003, p. 15). The philosophy of inclusion is based on the principle of equal opportunity for all people. Through inclusion, children with special needs can reach public education facilities without any limitation or obstacle in a modern democratic society (Akçamete, 1998). When the current status of the education of the children with special needs is examined, it is seen that different special education services for children with special needs have been increased in general education classrooms (McLeskey & Henry, 1999). Among these special education services, inclusion practices are considered as a solution to increase the quality of education for children with special needs. It is realized that this solution will also increase the number of children with special needs in the education system (Odom, 2000). In addition, inclusion will lead societies to respond positively to pupil diversity, and thus, individual differences will not be considered as a problem to be fixed; rather, it will be seen as an opportunity for enriching learning (UNESCO, 2005). All children with and without special needs benefit from inclusion since it allows to increase social relationships with peers, educators, and other stuff. Also, all individuals in the inclusive education setting can have opportunities to work together; thus, they foster more positive attitudes towards each other (Odom, Buysse & Soukakou, 2011). Teachers also believe that the inclusive education program provides opportunities to become aware of and accept people’s differences. Furthermore, children without special needs have an increased awareness related to the needs of others, learn to assist others, and show appropriate behaviors and skills as models for children with special needs in their classrooms. On the other hand, children with special needs benefit from the inclusive education programs as well. They are considered as a member of the group, and so they can make friendships with their peers who act as models for cognitive, linguistic, and social behaviors for them (Leiber et al., 1998). Accordingly, children with special needs can be protected from discrimination, and the negative attitudes and behaviors of their peers, educators and other stuff through inclusion practices (Odom, Buysse & Soukakou, 2011).

On the other hand, inclusive education practices are considered as challenging issues for teachers, parents, policymakers, and principals. Teachers' roles and responsibilities in inclusive education have changed. They have been expected to be responsible and better understand the needs of children with special needs, to make some adaptations on the curriculum considering the developmental levels of children, and to prepare an interactive education environment both children with and without special needs. Besides the traditional roles, teachers are not considered only responsible for all children's developments but also responsible for constituting an appropriate educational environment. In this way, teachers can involve all children in the activities and use evidence-based strategies in their learning processes (Lieber et al., 1997).

According to the related literature, one of the most important elements of inclusion practices for children with special needs in the regular classroom is the beliefs of general education teachers (Baum & McMurray-Schwarz, 2003). Concordantly, teacher candidates enter undergraduate education programs with a set of beliefs regarding teaching, children and classrooms (Kagan, 1992; Pajares, 1992). According to Stoiber, Gettinger and Goetz (1998), it is important to understand the beliefs of parents and practitioners on inclusive education since beliefs are associated with both the process of change, and standardization of the practices about education. Beliefs are considered as a key factor that affects parents' and educators' decision making process about inclusion. Stoiber et al. (1998) found that teachers' beliefs related to inclusion were related with their educational levels, backgrounds and years of experiences. According to Richardson (1996), beliefs are "psychologically held understandings, premises, or propositions about the world that are felt to be true" (p. 103). There is a considerable agreement on beliefs that are based on evaluation and judgment. In addition, individuals' belief systems are formed by their beliefs, attitudes, and values. Thus, to explore an individual's beliefs, there should be observations and measurements on "what people say, intend and do" (Pajares, 1992, p. 319). Especially, teacher beliefs play a significant role in the implementation of a practice (Pajares, 1992; Stoiber, Gettinger & Goetz, 1998). Teacher belief is defined as "a particularly provocative form of personal knowledge" that is

commonly used for “pre- or in-service teachers’ implicit assumptions about students, learning classroom, and the subject matter to be taught” (Kagan, 1992, p.65). According to Kagan (1992), teacher beliefs have two main characteristics: (1) teacher beliefs are relatively stable and difficult to change, and (2) teacher beliefs have a tendency to be associated with a compatible teaching style that can often be evident during different classes and grade levels. According to Richardson (1996), teacher beliefs are derived from personal experiences, experience with schooling and instruction, and formal knowledge about teaching. In addition, there are six variables that influence the formation of teachers’ beliefs and attitudes towards inclusion: types of pre-service training in the teacher education programs and level of educational achievement, quality and amount of in-service training for inclusion, adequate time for planning and collaboration, hands-on experiences with inclusion, type and severity of a child’s special needs, and perceived outcomes for children with and without special needs (Richardson, 1996).

The determination of the pre-service teachers’ beliefs has been considered highly important for their future practices since these beliefs have long-lasting effects (Begum, 2012; Johnson & Hall, 2007; Nespor, 1987; Pajares, 1992). According to Pajares (1992) it is important to investigate teacher beliefs to understand the fundamental reasons behind teachers’ behaviors and teaching practices. Correspondingly, Nespor (1987) advocated that teachers’ beliefs have a considerable effect on teaching practices and endeavors, and the organization of their activities. Within this scope, it is believed that determining pre-service teachers’ beliefs may provide feedback for teacher education programs, their context and the effectiveness of the applied practices in training programs; thus, the revision of pre-service teachers’ beliefs can be fulfilled through studies on teachers’ beliefs (Pajares, 1992). Considering the future classroom performance of pre-service teachers, pre-service teacher education programs are highly significant (Meredith et al., 2000). Initially exploring the pre-service early childhood teachers’ beliefs, and then improvement these beliefs in a positive direction are considered as primary responsibilities of teacher educators (Kagan, 1992; Pajares, 1992). In addition to teachers’ general beliefs, teachers’ self-efficacy beliefs was also considered the most important

components of their behavior and motivation (Pajares, 1992). Teachers' self-efficacy beliefs have been formed by two factors that; a variety of student outcomes (such as achievement motivation), and teacher behaviors in the classroom (such as effort investment in teaching) (Romi & Leyser, 2006).

In the study of Richardson (2003), it was observed that pre-service teachers' beliefs have a significant effect on their education in undergraduate years. For this reason, teacher training programs have an important role in pre-service teachers' future performances since these programs may equip pre-service teachers with the essential proficiencies for inclusive education in the early childhood classrooms. As Pajares (1992) stated, "unexplored entering beliefs may be responsible for the perpetuation of antiquated and ineffectual teaching practices" (p. 328). Especially during the training years, teachers' beliefs are more flexible and malleable compared with their in-service years. Thus, the formation of teachers' beliefs should and can take place during the years of teacher preparation (Brownlee, Purdie & Boulton-Lewis, 2001). Furthermore, the National Council for Accreditation of Teacher Education (NCATE, 2002) suggests teacher educators that they should increase their own awareness related with their pre-service teachers' beliefs; and Rath (2001) expressed more radically that pre-service teachers' beliefs should be considered as a criterion for acceptance into teacher education programs. Because teachers have powerful effect on children that can eliminate prejudices, discrimination and discriminatory characteristics of individuals by showing respect for differences as role models to them. It is a fact that children begin to discriminate differences in early ages, and they started to be aware of their similarities and difference from others. They also begin to recognize differences (such as gender) and special needs (Divrengi & Aktan, 2011). At this point, early childhood teachers have an important responsibility with their behaviors and personalities to their students as role models in the early childhood education (Vorkapić, 2012). Teacher personality also has a significant influence on children learnings and given education with regard to effectiveness, academic behaviors, motivations and classroom performance (Stronge, 2007; Musgrave-Marquart, Bromley, & Dalley, 1997; Hart, Stasson, Mahoney, & Story, 2007). Personality is defined

as the complex organization of cognitions, affects, and behaviors that gives direction and pattern to the person's life (John, Robins & Pervin, 2008). In other words, it is "a dynamic organization, inside the person, of psychophysical feelings" (Carver & Scheier, 2000, p.5). Teacher personality is considered as one of the important qualities determining the effectiveness of teachers' future performance (Pigge & Marso, 1997; Stronge, 2002). Thus, teachers are considered as an important role model for children from early childhood to older ages in their socialization processes (Bandura, 1986). It is acknowledged that after the parents, teachers and schools are the most vital models for forming the children's personality characteristics in the early childhood education periods (Hawkes, 1991). Therefore, early childhood educators' personality characteristics should be examined carefully, and then, findings of these studies should be imported for constructing early childhood education settings as desired by the National Association for the Education of Young Children (NAEYC) (Nowak-Fabrykowski & Caldwell, 2002).

1.1. Significance of the Study

Even though early childhood education and special education in Turkey have been improving, there are still controversies among professionals. It was concluded that the scarcity of trained teachers and schools is currently the most critical problem in the special education field (Senel, 1998). The Children with Special Needs Law, which was enacted in 1983, was a starting point for the inclusive education practices in Turkey to give education opportunities to children with special needs with their peers in general education classrooms, and inclusion has been recognized as a desirable service model for children with special needs (Eğitim Reformu Girişimi-ERG, 2011). Concordantly, The Children with Special Needs Law mandated some legislations that gave responsibilities to school managements, teachers and school counselors to take the compulsory measures to support the children's with special needs in an effective way. As a result, since 1983, the number of children with special needs in the general education settings has increased year by year (Sucuoğlu, 2013). According to the statistics of the MONE in 2011, the total number of children with special needs in the inclusive classrooms was about 125,000, but only

25,000 of them were served in inclusive pre-school classrooms (MONE; Milli Eğitim İstatistikleri: Örgün Eğitim 2010-2011). Teachers are considered as key actors for successful inclusion in the general education, and their beliefs influence the implementation process of the inclusive education, and standardization of the inclusion practices in the inclusive classrooms (Stoiber et al, 1998). Besides teacher beliefs, teachers' personalities also play an important role in the effectiveness of inclusive education (Stronge, 2002). For the implementation of the inclusion practices, it has a critical importance to explore what pre-service preschool teachers already believe about inclusive education and what their personalities are (Decker & Rimm-Kaufman, 2008). The lack of studies on teachers' beliefs about inclusion and teachers' personality traits are issues in Turkey. In this regard, the current study was conducted with 907 sophomore, junior and senior pre-service early childhood teachers in Ankara to explore their inclusion beliefs in early childhood education settings, and their self-reported personality traits by using two questionnaires: Inclusion Belief Scale and Personality Trait Inventory. It was also aimed to define a possible relationship between pre-service teachers' beliefs about inclusion and their personality traits. Moreover, it was aimed to explore whether there are any differences between pre-service teachers who took courses related to inclusion and who did not with respect to beliefs.

Four research questions are addressed to accomplish the purposes of the study;

- 1) What are the pre-service early childhood teachers' beliefs regarding inclusive education?
- 2) What type of personality traits do pre-service early childhood teachers have?
- 3) Do pre-service early childhood teachers' beliefs about inclusion differ with respect to their taking courses in inclusive education?
- 4) How much of the variance in pre-service early childhood teachers' beliefs regarding inclusive education can be explained by their personality traits?

1.2. Definition of Important Terms

Inclusion: An effort towards maximum level of participation in and minimum level of exclusion from early childhood education, from other schools and from society (Nutbrown and Clough, 2006).

Personality: It is defined as the complex organization of cognitions, affects, and behaviors that give direction and pattern to the person's life (John, Robins & Pervin, 2008).

Personality traits: Personality traits are defined as “the relatively enduring patterns of thoughts, feelings, and behaviors that distinguish individuals from one another” (John, Robins & Pervin, 2008, p. 375).

Disability: It can be defined in a broad context which includes such conditions as “impairments to vision and hearing, speech and language disorders, intellectual and learning disabilities, serious emotional disturbance, physical and multiple disabilities and other health impairments” (Loreman, Deppeler & Harvey, 2005).

Special Education: It is a specially designed educational setting which aims to meet the unique needs of a child with special needs via special education teachers, special education programs and techniques (Heward, 2006).

Pre-service teacher: It can be defined as an early childhood general education candidate who has not been employed as a teacher in a public or private school for preschool through third grade children (Watters, 2007).

Early childhood: It is defined as the period from birth to eight years of age (UNESCO, n.d.).

Early childhood education: It is defined as developmentally appropriate programs that provide education to children from birth to age eight (Essa, 2003).

CHAPTER II

REVIEW OF THE RELATED LITERATURE

Early childhood period, from birth to age eight, is considered the most crucial time for social-emotional, physical, and cognitive development of children. At this period, especially early childhood teachers have an important responsibility to meet the developmental and learning needs of all children in their classroom (Sezer, 2009).

Programs with high quality can create teachers with high quality, who will make a difference for children and families. In the study by Voss and Bufkin (2011), it was expressed that teachers should be prepared for inclusion because it becomes evident that the amount of diversity in every classroom is increasing. Since the passage of the Education for All Handicapped Children Act in 1975 (Public Law 94-142), U.S. educators and schools have been trying to examine where and how students with special needs should be educated. According to Allen and Cowdery (2009) this legislation (PL 94-142) brought some changes in the education settings. The first one is zero reject principle, meaning that local schools must serve all children, regardless of severity of their special needs. All children with special needs can benefit from these facilities free. The second one is nondiscriminatory evaluation principle, which stipulates that no child can be placed in a special education program without full individual testing. This test must be appropriate for child's language and cultural background. The third one is appropriate education principle, which underlines that local schools must provide appropriate educational programs that are called individualized educational programs (IEP) to meet children's special needs. The fourth one is least restrictive environment which refers to inclusion, and it highlights that children with special needs must be educated together with children who don't have identified special needs. The fifth one is due process principle, which gives parents some rights to examine all records of their children and to receive

consultation about their children's educational program before it is practiced. The sixth and the last one is parent participation principle, through which the role of parents is strengthened by letting them participate in all the education process of their children with special needs.

2.1. Rationales for Inclusion

Rationales for inclusion can be ordered as ethical, social, developmental issues, and cost effectiveness, respectively. Firstly, children with special needs should have equal opportunities as much as children without special needs (Stainback & Stainback, 1992). Secondly, inclusion of young children with special needs into the educational system means that they have equal social status with their peers developing normally. These practices will increase the social acceptance of children with special needs (Romi & Leyser, 2006). Thirdly, each day, all children encounter a variety of planned and unplanned challenging materials, equipment, and activities, and a quality educational program in the early childhood period can assist both children with and without special needs to develop all their developmental skills. Finally, inclusive education programs suggest an economic alternative because the existing program structures and facilities are used instead of creating duplicate structures; thus, the cost of providing educational services for children can be reduced by implementing the inclusion programs (Burke & Sutherland, 2004; Allen & Cowdery, 2009).

2.2. Benefits of Inclusion

In addition to the philosophical and legal issues mentioned, there are many other benefits of inclusion for children with special needs as well as children without special needs, families, and society. Firstly, children with special needs gain social competence from the inclusive education. They find opportunities to observe, interact with, and imitate their normally developing peers. As a result of this, they acquire higher-level motor, social, language and cognitive skills (Allen & Cowdery, 2009). Secondly, children without special needs gain benefits from inclusion by educating their peers with special needs.

This is called peer tutoring, which enables one child to instruct the other, and consequently, both sides gain experience and increase their social and cognitive skills. Children without special needs also acquire respect for differences via inclusive education. Thirdly, families of both children with and without special needs gain positive attitudes and experiences from inclusion. In general, families are supporters of inclusive education. Fourthly and lastly, society gains positive long-term benefits from inclusion in that children without special needs gain opportunities to be more tolerant in their later years via interacting with children with special needs, and they grow up with greater understanding and respect for differences in their society (Romi & Leyser, 2006; Burke & Sutherland, 2004; Allen & Cowdery, 2009).

2.3. Arguments against Full Inclusion

According to Hallahan and Kauffman (2005), “general educators, special educators and parents are largely satisfied with and see the continuing need for the continuum of alternative placements” (p. 49). Yet, some general educators are unwilling or unable to cope with children with special needs in the classroom. It is criticized that people with special needs are tried to be depicted as a flawed minority group in order to justify inclusive education. Also, it is asserted that the available empirical evidence does not support full inclusion. Nevertheless, there is not enough data to support one service delivery model, so special educators must preserve the continuum of placements.

2.4. Teacher Beliefs

According to the related literature, beliefs of general education teachers are considered as one of the most important predictors of the success of the inclusive education for the children with special needs (Baum, 2003). Concordantly, teacher candidates enter undergraduate education programs with a set of beliefs regarding teaching, children and classrooms (Kagan, 1992; Pajares, 1992). Understanding of the parents’ and practitioners’ beliefs on inclusive education is considered as an important factor to plan inclusive education process and standardization of the inclusive practices Therefore beliefs are

considered the as key factor for the success of inclusive education (Stoiber, Gettinger & Goetz, 1998). In this sense, beliefs are defined as “mental constructions of experience-often condensed and integrated into schemata or concepts” (Sigel, 1985, p. 351) that are felt to be true, and that guide the individuals behaviors. Beliefs are acknowledged that consist of individuals’ subjective evaluations and judgements. Besides, teacher belief is defined as “pre-or inservice teachers’ imlicit assumptions about students, learning, classroom and subject matter to be taught” (Kagan, 1992, p. 66).

2.5. Teachers’ Personalities

Personality is defined as composition of cognitions, affects, and behaviors of individuals that gives direction and pattern to the person’s life (John, Robins & Pervin, 2008). From this point of view, teachers’ personality is considered as an important determinant of their their own learnings, than quality of given education, academic behaviors, motivations and classroom performance (Stronge, 2002; Musgrave-Marquart, Bromley, & Dalley, 1997; Hart, Stasson, Mahoney, & Story, 2007). Teachers have powerful effect on children’s personality showing respect for differences as role models to them (Divrengi & Aktan, 2011). Due to the importance of early years and experiences, early childhood educators as role models to children in their class with their behaviors and personalities in the early childhood education (Vorkapić, 2012) are considered as an important role model for children from early childhood to higher education (Bandura, 1986).

It is generally acknowledged that after the parents, teachers and schools are the most important figures for the formation of the children’s personality characteristics in the early years (Hawkes, 1991). Therefore, early childhood educators’ personality characteristics should be examined carefully, and then, findings of these studies should be imported for constructing early childhood education settings as desired by NAEYC (Nowak-Fabrykowski & Caldwell, 2002).

Personality is considered as the complex organization of cognitions, affects, and behaviors that gives direction and pattern to the person's life (John, Robins & Pervin, 2008). In other words, it is "a dynamic organization, inside the person, of psychophysical feelings" (Carver & Scheier, 2000, p.5). Teacher personality is one of the important elements of determining the quality of teachers' future performance (Pigge & Marso, 1994; Stronge, 2002).

In a study by Vorkapić (2012), the influence of the preschool teachers on early childhood education was investigated. Personality analysis was conducted within the Big Five Personality Model. The researcher used this model because it is substantially descriptive, and was constructed in a taxonomic way. According to the Big Five Theory (Costa & McCrae, 1992), personality can be described under five factors: extraversion, agreeableness, conscientiousness, emotional stability, and intellect/openness to experience. When individuals receive a high score from extraversion, it means that they have high quality and intensity of interpersonal interactions; they are active and dominant; they have positive emotionality; and they are talkative, sociable and affectionate. In the event of opposite personality of extraversion, people can be described as unsociable, quiet, reserved, not exuberant, balanced, serious, aloof, and task oriented. Highly agreeable people are soft-hearted, of a good nature, trusting, helping, forgiving, open, straightforward, and honest. The opposite pole of this personality means that people are ruthless, suspicious, cynical, mocking, rude, irritable, vengeful, uncooperative, and manipulative. When individuals receive a high score from conscientiousness that means they are self-disciplined, organized, reliable, assured, punctual, scrupulous, ambitious, committed, preserving, neat, polite and considerate. People with opposite characteristics are unreliable, lazy, careless, negligent, imprudent, inconsiderate, indifferent, weak-willed, inert, hedonistic, and aimless with no aspirations. When individuals are highly positioned on neuroticism, they are described as unreliable, inadequate, worrying, nervous, irritable, easy jumping, insecure and frequently hypochondriacal. Low positioned individuals are calm, relaxed, hardy, secure, and self-satisfied. Finally, individuals scoring high on intellect/openness to experience are known as intelligent, creative, operational, imaginative, adventurous, curious, and non-conventional people

with broad interests. On the other hand, low scoring individuals are not curious, not interested to explore, traditional, down-to-earth, narrow-hearted, limited and inartistic (Pervin & John, 1997; as cited in Vorkapić, 2012; Viswesvaran & Ones, 2000). According to Bedel (2006), attitudes of teachers toward teaching and their personality traits play a significant role that determines the behaviors of these teachers in the education settings. Especially early childhood teachers who are probably the first adult in their students' life after parents have a special bond with their students. Thus, exploration of pre-service teachers' attitudes and their personality characteristics may be valuable in planning early childhood education process.

2.6. Theoretical Framework of the Study

Theoretical perspective of this study is based on the Albert Bandura's (1986) Social Cognitive Theory. According to Bandura, learning can occur in four way that through internal states, as well as the effects of external factors, observing others, and the consequences of their behaviors in the social environment. Accordingly, each individuals' behaviors influence each other in social environment (Bandura, 1997). According to Social Cognitive Theory, learning occur via modeling process is called "vicarious learning" and it require five steps (Thomas, 1996). First step is the pay attention to a model who should be salient for individuals. The second step is coding the exposed behavior for memory that is called "semantic code" (Thomas, 1996, p. 199). The third step is retaining the observed behaviors in the memory to use them in the future. In this step, frequency and length of the behavior observation are so crucial to modeling process to remember the observed behaviors. The fourth step is the reproducing observed behaviors that is a requirement for modeling a behavior (Thomas, 1996). The last step for vicarious learning process is motivation to do the observed behavior that is related with the pleasant or unpleasant outcomes of observed behaviors, and pleasant outcomes increase the motivation of individuals to modelling the observed behavior (Bandura, 1986; Thomas, 1996).

Considering the Albert Bandura's (1986) Social Cognitive Theory in terms of inclusive education, teachers are very important role model for their students. Because, after the parents, teachers' behavior and their personality traits are the most salient model for children in their social environments. Accordingly, teachers are observed by their students throughout of class time, so children produce their visuals or symbolic codes for their teachers' behaviors, and memorized them to reproduce in the future. If the consequences of this observed behaviors is pleasant they motivate to modeling the same behavior in the future.

CHAPTER III

METHODOLOGY

3.1. The Aim of the Study

The aim of the present study was to explore and describe the pre-service early childhood teachers' beliefs about inclusive education, their personality traits, and their background information (age, gender, grade, GPA, high school graduation, attendance at courses or seminars related to inclusive education). Moreover, the study aimed to investigate the probable relationship between the pre-service early childhood teachers' beliefs related to inclusive education and their personality traits. Another aim of the study was to explore the probable difference between early childhood pre-service teachers' beliefs related to inclusive education and the courses and seminars attended on inclusion. In order to achieve the above mentioned aims, the following research questions were addressed:

- 1) What are the pre-service early childhood teachers' beliefs regarding inclusive education?
- 2) What type of personality traits do pre-service early childhood teachers have?
- 3) Do pre-service early childhood teachers' beliefs about inclusion differ with respect to their taking courses in inclusive education?
- 4) How much of the variance in pre-service early childhood teachers' beliefs regarding inclusive education can be explained by their personality traits?

3.2. Methodology

The survey method is used for describing the characteristics of a group, and the correlational research methodology is used for comparing two or more groups of subjects (Frankel, Wallen & Hyun, 2012). Research questions of the study and the type of research design pertaining to each research question are presented in Table 3.1.

Table 3.1

Summary of the Research Design

Research Questions	Research Type	Research Methodology
RQ1, RQ2	Descriptive Study	Survey Research
RQ3	Associational Study	Correlational Research
RQ4	Associational Study	Correlational Research

3.3. The Population and Sampling

The target population of this study was sophomore, junior and senior pre-service early childhood teachers who were pursuing undergraduate education in early childhood education programs at one private (University E) and four public universities (University A, B, C, and D) in Ankara, Turkey at the time of the study. Convenience and purposive sampling methods were used during sampling procedure (Frankel, Wallen & Hyun, 2012). Convenience sampling method is used to select individuals who are available for a study; therefore, in this study it was utilized to easily reach the participants of the study. Purposive sampling method is used to select individuals who are especially qualified for the study. In the current study, it was utilized for studying with pre-service early childhood teachers who took Special Education courses which might be related to inclusive education and who didn't take this course. Pre-service early childhood teachers are suggested to take Special Education I course in the fifth semester and Special Education II course in the sixth semester except for University D. Special Education course is offered in only one section in the sixth semester in University D. For this reason; sophomore, junior and senior pre-service early childhood teachers were included in this study in the fall term of 2014-2015.

3.4. External Validity of the Study

External validity is defined by Fraenkel, Wallen and Hyun (2012) as “the extent that the results of a study can be generalized from a sample to a population” (p. 103). In this study, nonrandom sampling method was used, but this sampling procedure can be a threat for the generalizability of the study results. For this reason, Fraenkel, Wallen and Hyun (2012) suggest that if the researchers cannot use random sampling method in their studies, they should describe their sample characteristics in detail such as age, gender, educational background and socioeconomic status (see Table 3.2). Accordingly, these research findings can help researchers to make more proper decision with working nonrandom sample studies.

Furthermore, Fraenkel, Wallen and Hyun (2012) described ecological generalizability as “the degree to which the results of a study can be extended to other settings or conditions” (p. 105). Accordingly, the environmental conditions must be the same for all settings and researchers must describe the environmental conditions and the settings in detail in their studies since these detailed information help generalizability of findings for different populations in similar conditions. In addition, Fraenkel, Wallen and Hyun (2012) concluded that ecological generalizability increases the generalizability of studies with nonrandom sampling method. Thus, the present study was conducted during regular course hours in ordinary university classrooms at large universities in Ankara. Therefore, the findings of the study can be generalized by the researchers for similar universities in Turkey.

3.4.1. Sample Characteristics

3.4.1.1. Demographic Information for the Pilot Study

In the pilot study, pre-service early childhood teachers’ ages ranged from 17 to 28, and their mean age was 20.23. The number of the male participants was 37 (9 %), and the

number of the female participants was 373 (91 %). These findings are very similar with MONE (2013) statistics in that the percentage of female early childhood teachers is 94.6 % in both private and public early childhood education institutions. The average GPA of participants in the pilot study was 2.91 out of 4. Most of their parents' educational level remained at primary school. Most of the participants graduated from Vocational High School (35.4 %, n= 145) or from Anatolian High School (32.9 %, n= 135). Most of the participants have not had any interaction with individuals with special needs (83.4 %, n= 342) (see Table 3.2).

Table 3.2

Demographic Information for the Pilot Study

Gender	f	%
Female	373	91
Male	37	9
Grade	f	%
1 (Freshman)	121	29.5
2 (Sophomore)	95	23.2
3 (Junior)	114	27.8
4 (Senior)	80	19.5
High School Type	f	%
General High School	58	14.1
Language Intensive High School	5	1.2
Anatolian High School	135	32.9
Anatolian Teacher High School	59	14.4
Science High School	1	0.2
Vocational High School	145	35.4
Others	7	1.6

Table 3.2 (Continued)

Interaction with individuals with special needs	f	%
Yes	68	16.6
No	342	83.4
<hr/>		
Took courses on Inclusion	f	%
Yes	130	31.7
No	280	68.3
Total	410	100

Descriptive Statistics for the Pilot Study

Number of courses taken on Inclusion	f	%
didn't take any course	280	68.3
1	85	20.7
2	38	9.3
3 and more	7	1.6
<hr/>		
Name of courses taken on Inclusion	f	%
didn't take any course	280	68.3
Inclusion	29	7
Special Education	74	18
High School Courses	7	1.6
Others	20	5.1

Table 3.2 (Continued)

Course Satisfaction	f	%
didn't take any course	282	68.8
1 (quite unsatisfactory)	13	3.2
2 (unsatisfactory)	48	11.7
3 (Undecided)	25	6.1
4 (satisfactory)	34	8.3
5 (quite satisfactory)	8	2
Total	410	100

3.5. Instruments

For the current study, three instruments were used to gather relevant data. The first instrument is the Demographic Information Form used to gather information about the participants including age, gender, grade level, GPA, type of high school they graduated, and number of courses or seminars they took related to inclusive education.

The second instrument is “Pre-service Teachers’ Attitudes toward Inclusion Questionnaire (PTAI)”, which was developed by El-Ashry (2009). The PTAI scale was drawn from measures of previous studies (Antonak & Larrivee, 1995; McHatton & McCray, 2007; McLeskey, Waldron, So, Swanson & Loveland, 2001; Stoiber, Gettinger & Goetz, 1998) on preschool and elementary school teachers’ beliefs and attitudes toward inclusion. This scale consists of 33 items. The permission request was responded positively. Then, this questionnaire was translated and adapted by the researcher, and at the end of the process, the final version of the questionnaire was titled as “Turkish version of Pre-service Teachers’ Beliefs toward Inclusion Scale (TPTBI)” for the pre-service preschool teachers. The original questionnaire developed by El Ashry (2009) was formatted on a five–point Likert scale ranging from 5 (Stronly Agree) to 1 (Strongly Disagree). These items focus on teachers’ beliefs and attitudes about inclusion in terms of five different dimensions: “a) benefits of inclusion, b) inclusive classroom management, c) ability to teach students with special needs, d) special versus inclusive general education placements, and e)

perspectives towards teaching students with specific types of special needs” (El-Ashry, 2009, p. 52). However, only three of these five dimensions, namely (a) benefits of inclusion, b) inclusive classroom management, e) perspectives towards teaching students with specific types of special needs, were involved in the “Pre-service Teachers’ Beliefs Toward Inclusion Questionnaire”. The reliability and internal consistency of this questionnaire were calculated with Cronbach’s alpha test, the result of which was 0.87, and split-half reliability was 0.87. Therefore, this scale was considered reliable since the Cronbach’s alpha coefficient was higher than 0.70 (Fraenkel, Wallen & Hyun, 2012).

The third instrument used in the study was “The Big Five Inventory”. The original form of this scale was developed by Benet-Martinez and John (1998) to assess five personality dimensions (extraversion, conscientiousness, neuroticism, openness and agreeableness). This instrument consists of 44 items and has already been translated and adapted into Turkish for a cross cultural study (Schmitt et al., 2007) by Sümer and Sümer (2005). The permission request was responded positively. The reliability and internal consistency of this questionnaire was examined with Cronbach’s alpha test, and the result of Cronbach’s alpha ranged from 0.67 to 0.77. Therefore, this scale was also considered reliable since the Cronbach’s alpha coefficient was above 0.70 (In this case, because of the scale with fewer than ten items, 0.67 was an acceptable value for reliability) (Fraenkel, Wallen & Hyun, 2012).

3.5.1. Translation and Adaptation Procedure of “Pre-service Teachers’ Attitudes toward Inclusion Questionnaire (PTAI)”

Before the translation and adaptation processes, initially the required permission was obtained from the developer of the scale via e-mail. Then 28 items of the original scale “Pre-service Teachers’ Attitudes Toward Inclusion Scale (PTAI)” was translated and adapted into Turkish as “Turkish Version of Pre-service Teachers’ Beliefs Toward Inclusion Scale” by the researcher. In addition, two more parts included for the teachers’ beliefs about teaching children with special needs in the early childhood education and

teachers' self-efficacy beliefs about working with children with special needs. Vijver and Leung (1997) define the adaptation process as follows: "If the construct is not fully covered in the new group, the instrument can be adapted by rephrasing, adding, or replacing items that measure the missing aspects" (p. 265). For this reason, the researcher was required to make some adjustments on the items of the instrument to better cover the characteristics of target population and field requirements.

In addition, according to Hambleton (2005), in cross-cultural adaptation procedures, it is important to include culturally and psychologically appropriate words and expressions in the second language instead of following a simple literal translation. Therefore, in the translation procedure of this study, necessary revisions and corrections were made by changing the name of the target population, the field and the tense of instrument items (see Table 3.3).

Table 3.3

Changes made to the original version of the scale items

The original version of items	The adapted version of items
The inclusion of students with special needs can be beneficial for students without disabilities.	The inclusion of children with special needs can be beneficial for children without special needs .
Students with special needs lose the stigma of being "different" or "failures" when placed in the <u>general education</u> classrooms.	Children with special needs lose the stigma of being "different" or "failures" when placed <u>in the early childhood education</u> classrooms.
It is likely that the students with special needs will exhibit behavior problems in a <u>general education</u> classroom.	It is likely that the children with special needs will exhibit behavior problems in an <u>early childhood education</u> classroom.

* Note: In the table, bold and underlined phrases refer to word change in the sentence.

In this process, firstly, the scale was initially translated into Turkish by the researcher, and then this initial translation was reviewed by five research assistants who are good at both

Turkish and English and who are familiar with the field of early childhood education. After that, this translation was separately sent to experts who had PhD degrees in English language and literature, early childhood education, early childhood special education and Turkish language and literature. All experts who had proficiency both in Turkish and in English languages examined each items of the scale in detail and made comments and suggestions to give the most appropriate meaning for the early childhood education and pre-service early childhood teachers specifically. Firstly, experts with a PhD degree on early childhood education and early childhood special education examined each item in detail. Following their comments and suggestions, content validity was ensured, and then, an instructor with a PhD degree from the Academic Writing Center at a public university checked each item to see whether they express the intended meaning exactly. After that, an instructor with a PhD degree at the department of Turkish language and literature reviewed the scale to finalize it by considering the Turkish grammar rules. Thus, the translation and adaptation processes were completed.

3.5.2. Pilot Study

After the translation and adaptation processes, the pilot study of The Turkish version of “Pre-service Teachers’ Beliefs Toward Inclusion (PTBTI) Scale” was implemented during the fall term of the 2013-2014 academic year to 373 female (91 %) and 37 male (9 %) (N=410) pre-service early childhood teachers with a mean age of 20.23 (SD= 1.67) at a state university in Afyonkarahisar to test and adjust the questionnaire items. Most of the participants graduated from Anatolian High School (32.9 %, n= 135), and they didn’t take any courses about the inclusive education (68.3 % n= 280). Based on the results of the pilot study, necessary corrections were made and the scale was finalized. In the next stage, the main data factor analysis and inferential statistics procedures were applied.

3.5.2.1. Exploratory Factor Analysis

In order to explore the main construct of the Turkish form of “Pre-service Teachers’ Beliefs Toward Inclusion (TPTBI) Scale”, exploratory factor analysis was implemented

via PASW20 statistical package program. Before conducting the factor analysis, assumptions of the exploratory factor analysis, that is sample size, factorability of the correlation matrix, outliers among cases and linearity were checked, respectively. According to Tabachnick and Fidell (2007), sample size should be at least five times of the number of items in the scale for the pilot study. Correspondingly, in the current pilot study, the number of the items was 28, and the sample size of the study was 410 pre-service early childhood teachers, so the sample size assumption was assured. Regarding the linearity assumption, there was no need to check this assumption because of the adequate sample size ($n=410$) (Pallant, 2007). In addition, there were no outliers indicated among the cases in the pilot study. To ensure the assumption of factorability of the correlation matrix; correlation matrix, Kaiser-Meyer-Orkin (KMO) values and Bartlett's test of Sphericity value were calculated. According to Tabachnick and Fidell (2007), there should be a correlation between scale items and this correlation should be greater than .3 to show the strength of the relationships; KMO value should be at least .06 for a good factor analysis; and Bartlett's test of Sphericity value should be significant ($p < .05$). Therefore, firstly, correlation matrix was calculated and it was seen that many items had correlation coefficients of .3 and more. Secondly, the Kaiser- Meyer-Orkin (KMO) values were calculated as 0.77. Lastly, the Bartlett's test of Sphericity value was found to be ($\chi^2=2507.317$ and $p=.000$) statistically significant. All these results indicate that the data set of belief scale was appropriate for factor analysis.

After meeting the required assumptions, factor analysis was conducted on 28 items. Principal Component Analysis (PCA) was used as an extraction technique. Oblique rotation method was preferred as the rotation method since it produces more accurate solutions in social science (Costello & Osborne, 2005), and shows possible correlations among factors (Tabachnick & Fidell, 2007). In order to ensure consistency among components, Kaiser (1960) suggested that eigenvalues should be equal or greater than 1. Following the factor analysis, there were nine factors, which had initial eigenvalues greater than 1, and these eigenvalues explain 59.3 cumulative percentage of the variance in the study (see Table 3.4). However, Field (2009) argued that Kaiser's (1960) proposal

has a tendency to overestimate the number of factors. Therefore, as suggested by Costello and Osborne (2005), to handle this possible overestimation, scree plot is also examined to determine the number of factors (see Figure 3.1).

Table 3.4

Exploratory Factor Analysis Results about the Initial Eigenvalues of the TPTBI Scale

Factor	Initial Eigenvalues		
	Total	% of Variance	Cumulative %
1	4,583	16,369	16,369
2	2,843	10,155	26,524
3	2,137	7,633	34,157
4	1,449	5,175	39,331
5	1,302	4,649	43,980
6	1,151	4,111	48,092
7	1,079	3,852	51,944
8	1,044	3,729	55,673
9	1,028	3,671	59,344
10	,925	3,304	62,648

Note. Oblique rotation method was used for the factor analysis

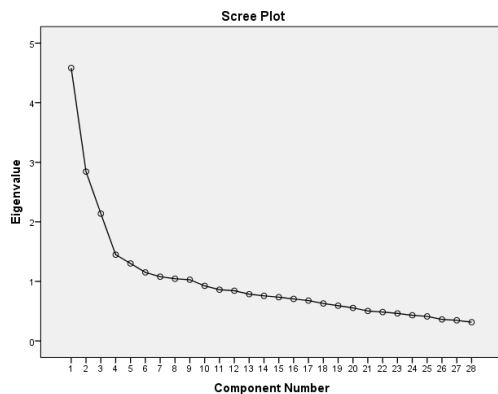


Figure 3.1 Scree plot for TPTBI Scale

Although there were nine factors that had initial eigenvalues greater than 1, the scree plot indicated three factors. It was suggested to interpret factor loadings of each item from the pattern matrix table for the factor analysis (Field, 2009). According to Stevens (2009), if communality value of items is greater than .30, it is acceptable for the scale. Thus, item

5, 7, 10, 13, and 15 were removed from factor analysis. Costello and Osborne (2005) recommended that there should be no or few cross loadings among the items in the data set. For this reason, item 1, 11, 18, 20, 22, 23, 24, 25, 26, 27, and 28 were removed from the scale. Relying upon the suggestions, sixteen items in total were removed from the final form of the instrument. After these revisions, the final structure of TPTBI scale was composed of a two-factor structure and 13 items (see Figure 3.2 and

Table 3.5)

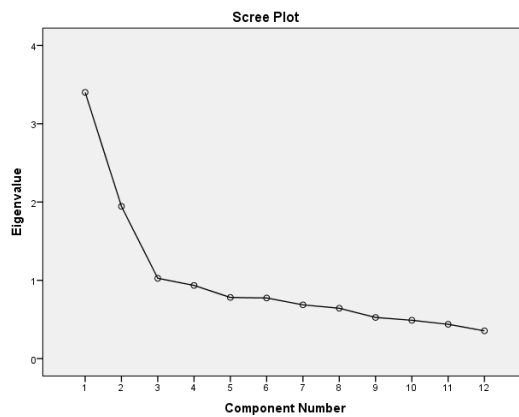


Figure 3.2 Scree plot for TPTBI Scale

Table 3.5

Distribution of the Turkish version of TPTBI Scale Items in the Pilot Study

Components	Number of Items	Item Numbers
*Benefits of Inclusion	6	2-3-4-6-8-9
*Classroom Management	6	12-14-16-17-19-25
Total	12	

The first factor of the TPTBI Scale was named as the Benefit of Inclusion, which was composed of six items, and it accounted for 28.34 % of the variance. The second factor of the TPTBI Scale was named as the Classroom Management in Inclusive Education, which was composed of six items, and it accounted for 16.21 % of the variance. In total,

both factors accounted for 44.56 % of the cumulative percentage of the variance (see Table 3.6), and this variance is above the expected value, which is .40 (Kline, 1994).

Table 3.6

Factor Loadings for the Rotated Factors of the TPTBI Scale

Factor Loadings		
Item	Classroom Management	Benefits
atti_25R	.69*	
atti_14R	.66	-.17
atti_19R	.64	
atti_12R	.64	
atti_17R	.60	
atti_16R	.55	
atti_3		-.78
atti_4		-.72
atti_8		-.71
atti_2	.20	-.65
atti_6	-.13	-.61
atti_9	.11	-.58
Eigenvalues	3.41	1.95
% of variance	28.34	16.21

*Note. The highest factor loadings are presented in bold. Extraction Method: Principal Component Analysis. Rotation Method: Oblimin with Kaiser Normalization.

After determining the factor patterns of the scale, Cronbach Alpha values were calculated for each factor of TPTBI Scale in order to explore the internal consistency of pre-service preschool teachers' responses to the scale. According to Pallant (2007), Cronbach Alpha values above .70 are acceptable for internal consistency reliability for scales. Regarding internal consistency, Cronbach Alpha values of Total TPTBI Scale, Benefit of Inclusion,

and Classroom Management in Inclusive Education were found to be .76, .76, and .71, respectively. Thus, the Cronbach Alpha values were acceptable for the reliability of the scale. The Cronbach Alpha values for each factor and the whole scale were indicated in Table 3.7.

Table 3.7

Reliability Coefficients for Each Dimension of the TPTBI Scale

Dimension	Benefits of Inclusion	Classroom Management in Inclusive Education	Total TPTBI Scale
Number of items	6	6	12
Cronbach Alpha	.76	.71	.76

3.5.2.2. Confirmatory Factor Analysis

Confirmatory factor analysis is a type of structural equation modeling that considers the relationships between observed measures and factors (Brown, 2006). Especially, it is recommended for newly developed scales because firstly exploratory factor analysis (EFA) is conducted to establish the factor pattern of scales and then, these established factors are confirmed with confirmatory factor analysis (Çokluk, Şekercioğlu and Büyüköztürk, 2010). Considering this recommendation, after completing the exploratory factor analysis with the pilot study data, confirmatory factor analysis was applied to confirm the results of exploratory factor analysis for this scale with the main study.

3.5.2.2.1. Confirmatory Factor Analysis Results of the TPTBI Scale

After finalizing the TPTBI Scale with the participation of 410 pre-service preschool early childhood teachers in the pilot study, confirmatory factor analysis was utilized to confirm the two factor structure of TPTBI Scale with the participation of 907 pre-service preschool early childhood teachers in the main study via the LISREL 8.8 software program. It was hypothesized that the observed variables B01, B02, B03, B04, B05, and B06 load on the

dimension of benefits of inclusion; and the observed variables B07_R, B08_R, B09_R, B10_R, B11_R, and B12_R load on the dimension of classroom management in inclusive education. The hypothesized model for the TPTBI Scale and confirmatory factor analysis results are displayed in Figure 3.3.

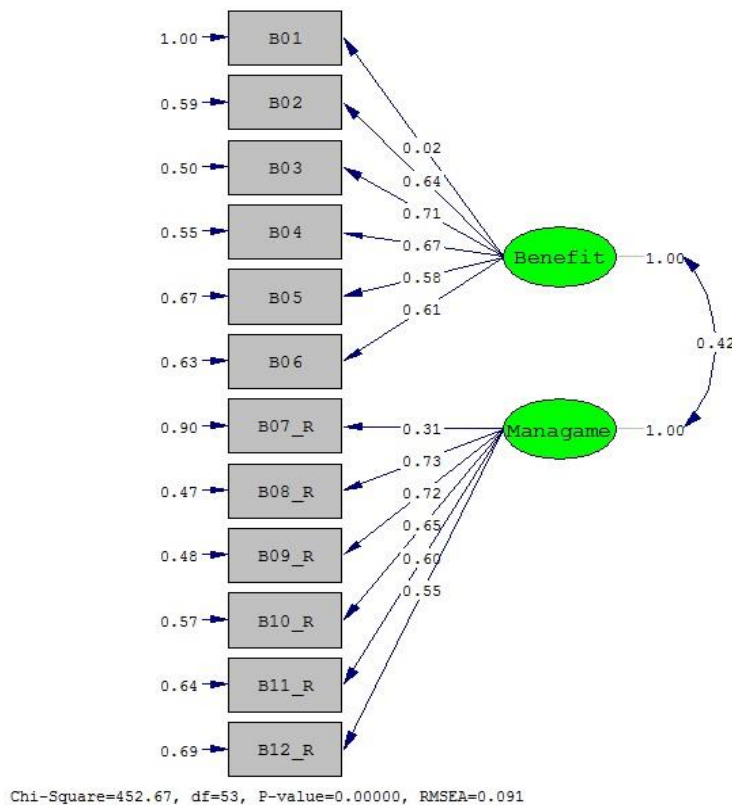


Figure 3.3 The Hypothesized Model and Confirmatory Factor Analysis Results of the TPTBI Scale

The LISREL software program gives various goodness of fit indices which enable one to evaluate fitness between the hypothesized model and the main data set. According to Brown (2006), there are three main fit indices categories: “absolute fit, fit adjusting for model parsimony, and comparative or incremental fit” (p.82). The first one, absolute fit indices, allow to assess model fitness at an absolute level that consists of chi-square (X^2), the standardized root mean square residual (SRMR), and the root mean square residual

(RMR) indeces. The second one, fit adjusting for model parsimony, could be grouped under the absolute fit categories, yet, it is widely used and different from the X^2 , SRMR, and so forth (RMSEA; Steiger & Lind, 1980). For the RMSEA values, figures lower than .05 express a close fit; figures between .08 to .10 indicate marginal fit; and figures higher than .10 refer to poor fit (Brown, 2006). The last one is the comparative or incremental fit indeces that allow evaluating the model fit with a solution supporting the relationships among variables. The most common fit indeces were comparative fit index (CFI) and non-normed fit index (NNFI) (Brown, 2006). For CFI and NNFI values, while the values can range from 0 to 1, the values closer to 1 indicate a better fit (Brown, 2006). Considering these recommendations, the results of the confirmatory factor analysis were evaluated with the chi-square, RMSEA, CFI, and NNFI values and their cutoff criteria.

As it was demonstrated in Table 8, goodness-of-fit test was used to evaluate to fit between the hypothesized Turkish version of TPTBI Scale and the main data set. The NNFI (0.89) and CFI (0.91) values indicated a good fit values since they were closer to 1 (Brown, 2006). The RMSEA (0.084) value showed a mediocre fit since it was between .08 and .10 (Brown, 2006). The value of Normed Chi-Square (X^2/df) was calculated to be 8.52 for the TPTBI Scale. As a result of considering the overall indices, it was concluded that the two factor Turkish version of the TPTBI Scale has a good fit (see Table 3.8).

Table 3.8

Goodness-of-Fit Indicators of the Models for the Turkish version of the TPTBI Scale

Model	df	X^2	X^2/df	NNFI	CFI	RMSEA
Two Factor	53	452.67 *	8.528	0.89	0.91	0.084 (with a 90 % confidence interval)

Note. df= degrees of freedom; RMSEA= root mean square error of approximation; CFI= comparative fit index; NNFI= non-normed fit index.

* $p < .001$.

3.6. Data Collection Procedure and Data Analysis

In this study, quantitative data collection method was used to collect data on beliefs of pre-service early childhood teachers and their personality traits. Before the study, permission was obtained from the Human Subjects Ethics Committee at Middle East Technical University (METU). Then, official permissions were obtained from the other selected universities in Ankara via METU Presidency. Then, the researcher communicated with course instructors in person, and time schedule of the study was determined by considering the course schedules of departments.

After completing the official permission process and arranging the study schedule, paper based instruments were administrated by the researcher in all participating universities. Before the data collection, all participants were informed about the purpose of the study, importance of their responses and importance of their voluntary participation in the study. Moreover, the researcher expressed that there were no questions about their personal identity, and no right or wrong responses in the survey to make them comfortable.

3.6.1 Data Analysis

Before further analysis, the data sets were checked and corrected by using PAWS 20 statistical program for the probable errors and to see if they are between the determined values. The mean and standard deviation of each item was calculated and ranked from highest to lowest. For the present study, data were collected quantitatively by Demographic Information Form, Turkish version of Pre-service Teachers' Beliefs toward Inclusion Scale and Big Five Inventory, and all these quantitative data were analyzed by PAWS 20 through three analysis methods, which are descriptive statistical techniques, MANOVA, and Multiple Regression Analysis (see Table 3.9).

Table 3.9

Summary of the Research Design

Research Questions	Research Type	Research Methodology	Analysis Method
RQ1: What are the pre-service early childhood teachers' beliefs regarding inclusive education?	Descriptive Study	Survey Research	Descriptive statistical techniques
RQ2: What type of personality traits do pre-service early childhood teachers have?	Descriptive Study	Survey Research	Descriptive statistical techniques
RQ3: Do pre-service early childhood teachers' beliefs about inclusion differ with respect to their taking courses in inclusive education?	Associational Study	Correlational Research	MANOVA
RQ4: How much of the variance in pre-service early childhood teachers' beliefs regarding inclusive education can be explained by their personality traits?	Associational Study	Correlational Research	Multiple Regression Analysis

For the first and third research questions, that is, “What are the pre-service early childhood teachers' beliefs regarding inclusive education?” and “What type of personality traits do pre-service early childhood teachers have?” descriptive statistical techniques were used. For the second research question, “Do pre-service early childhood teachers' beliefs about inclusion differ with respect to their taking courses in inclusive education?”, MANOVA was used to explore the differences between variables.

To explain the fourth research question, “How much of the variance in pre-service early childhood teachers’ beliefs regarding inclusive education can be explained by their personality traits?” multiple regression analysis was used.

3.7. Internal Validity of the Study

According to Fraenkel, Wallen and Hyun (2012), as far as internal validity is concerned, “observed differences on the dependent variable are directly related to the independent variable and not due to some other unintended variable” (p. 166). Thus, internal validity of research studies can be affected by subject characteristics, loss of subject (mortality), location, instrumentation, testing, history, maturation, attitude of subjects, regression, and the implementation as threats. To control these threats, four techniques can be used as solutions: standardizing the conditions, obtaining and using more information on the participants, obtaining and using more detailed information about the study, and choosing the appropriate design (Fraenkel, Wallen & Hyun, 2012). In the present study, subject characteristics, loss of subject (mortality), location, and instrumentation were considered as threats, and suitable controlling techniques used againsts these threats were explained in detail below.

The first threat of the study was subject characteristics. “The selection of people for a study may result in the individuals (or groups) differing from one another in unintended ways that are related to the variables to be studied” (Fraenkel, Wallen & Hyun, 2012, p. 167). There were some variables that were related with subject characteristics in the present study such as age, gender, and courses taken related with inclusion. To reduce this threat, detailed information was collected about the subjects.

The second threat of the study was loss of subjects (mortality) which means loss of the participants from the study by not completing the questionnaire for a reason (Fraenkel, Wallen & Hyun, 2012). To control this threat, the purpose of the study was clearly explained to the participants, and voluntary participation and importance of filling out the

questionnaire entirely were emphasized before starting the data collection process. Also, incomplete questionnaires were removed from the data analyses process to eliminate the mortality threat.

The third threat of the study was location, which refers to the place where the data is collected from the participants (Fraenkel, Wallen & Hyun, 2012). Participants' responses may be affected undesirably by the location factor (physical environment, size, lighting, noise, etc.). For this reason, the present study was implemented in the same physical environment conditions in regular classrooms. Thus, the location did not cause a problem for this study.

The fourth and the last threat of the study was instrumentation that derived from some changes in the data collection process. Instrument decay, data collector bias and data collector characteristics cause some changes in this process. Standardizing conditions technique was used in order to eliminate and control these instrumentation factors in the present study. The study was designed as a survey research model, and Likert type self-reported questionnaires were used to collect the responses of the participants. In addition, the data were collected by the researcher to control the characteristics of the data collector.

3.8. Ethics

During the study, all pre-service teachers were assured that any data collected would be kept confidential and the names of subjects would not be used in any kind of publication. They were informed about the actual purposes of the study. In order to ensure confidentiality of the research data, the participants did not write their names. In other words, possibility of harm to the participants was minimized.

CHAPTER IV

RESULTS

In this chapter, the results of the current study are presented in detail through descriptive and inferential statistics. Three statistical analysis methods were used to address the four research questions of the study, including descriptive statistics, the Multivariate Analysis of Variance (MANOVA), and the Multiple Regression Analysis. Moreover, preliminary analyses were conducted to confirm the required assumptions of both the Multivariate Analysis of Variance (MANOVA) and the Multiple Regression Analysis.

4.1. Demographic Information for the Main Study

The number of the male participants was 54 (6 %), while the number of the female participants was 853 (94 %). These findings are consistent with MONE (2013) statistics in that the percentage of female early childhood teachers is 94.6 % in both private and public early childhood education institutions. The participants are mainly the graduates of Anatolian Teacher High School (36.3 %, n= 329) and Vocational High School (29.5 %, n= 268). Most of the participants had not had any interaction with individuals with special needs when the study was conducted (58.7 %, n= 532). Almost half of the participants (49.0 %, n=441) didn't take any course about special education. On the other hand, almost half of the participant (51.0 %, n= 450) took at least one course about special education, and only 13.1 % (n= 119) of them found these courses sufficient and quite sufficient (see Table 4.1).

Table 4.1

Demographic Information for the Main Study

Gender	f	%
Female	853	94
Male	54	6

Demographic Information for the Main Study

Grade	f	%
2 (Sophomore)	304	33.5
3 (Junior)	338	37.3
4 (Senior)	265	29.2

High School Type	f	%
General High School	81	8.9
Anatolian High School	190	20.9
Anatolian Teacher High School	329	36.3
Science High School	5	0.6
Vocational High School	268	29.5
Others	19	2.1

Interaction with individuals with special needs	f	%
Yes	356	39.3
No	532	58.7

Took courses on Inclusion	f	%
Yes	466	51.4
No	441	48.6

Table 4.1 (Continue)

Demographic Information for the Main Study

Number of courses taken on Inclusion	f	%
didn't take any course	441	49.5
1	293	32.3
2	95	10.5
3 and more	62	7.6

Name of the courses on Inclusion	f	%
didn't take any course	441	49.5
Inclusion	100	11
Special Education	337	37.2
High School Courses	169	18.6
Others	20	2.2

Course Satisfaction	f	%
didn't take any course	441	49,0
1 (quite unsatisfactory)	27	3.0
2 (unsatisfactory)	190	20.9
3 (Undecided)	127	14.0
4 (satisfactory)	105	11.6
5 (quite satisfactory)	14	1.5

4.1.1. Pre-service Preschool Teachers' Self-Efficacy Beliefs in terms of Working with Children with Special Needs

In the current study, pre-service preschool teachers' self-efficacy beliefs about working with different types of children with special needs were explored. The highest mean score was calculated to work with children with emotional and behavioral disorders ($M= 3.90$; $SD= 0.84$), and the lowest mean score was calculated to work with children with mental retardation ($M= 2.87$; $SD= 1.09$) (see Table 4.2).

Table 4.2

Descriptive statistics for pre-service preschool teachers' self-efficacy beliefs about working with children with special needs

Special needs	M	SD	Min	Max	N
1. Children with learning disabilities	3.40	1.06	1	5	907
2. Children with emotional and behavioral disorders	3.90	0.84	1	5	907
3. Children with hearing impairments	3.29	1.13	1	5	907
4. Children with visual impairments	3.12	1.14	1	5	907
5. Children with mental retardation	2.87	1.09	1	5	907
6. Children with physical disabilities	3.76	1.02	1	5	907
7. Children with speech and language disabilities	3.88	0.90	1	5	907
8. Children with autism spectrum disorders	2.98	1.09	1	5	907
9. Gifted Children	3.52	1.09	1	5	907
10. Children with Attention-Deficit/Hyperactivity Disorders	3.74	0.92	1	5	907
11. Children with long term disabilities	3.28	1.09	1	5	907

The pre-service early childhood teachers in the study expressed that they had more self-efficacy to teach children with physical special needs than children with mental retardation.

4.1.2. Pre-service Preschool Teachers' Beliefs about Teaching Children with Special Needs in Early Childhood Education

In order to explore pre-service preschool teachers' beliefs about teaching children with special needs in early childhood education, participants of this study were asked about which types of children with special needs can be educated in the early childhood education classrooms. (see Table 4.3).

Table 4.3

Descriptive statistics for teaching children with special needs in early childhood education

Special needs	M	SD	Min	Max	N
1. Children with learning disabilities	3.50	1.07	1	5	907
2. Children with emotional and behavioral disorders	3.92	0.90	1	5	907
3. Children with hearing impairments	3.50	1.10	1	5	907
4. Children with visual impairments	3.27	1.12	1	5	907
5. Children with mental retardation	3.03	1.15	1	5	907
6. Children with physical disabilities	3.90	0.97	1	5	907
7. Children with speech and language disabilities	3.98	0.89	1	5	907
8. Children with autism spectrum disorders	3.20	1.14	1	5	907
9. Gifted Children	3.62	1.14	1	5	907
10. Children with Attention-Deficit/Hyperactivity Disorders	4.01	0.79	1	5	907
11. Children with long term disabilities	3.35	1.06	1	5	907

The highest mean score was calculated for children with attention-deficit/hyperactivity disorders ($M= 4.01$ $SD= 0.79$), and the lowest mean score was calculated for children with mental retardation ($M= 3.03$; $SD= 1.15$). In general, the pre-service early childhood teachers in the study had positive or neutral beliefs about teaching children with special needs in early childhood education

4.2. Pre-service Early Childhood Teachers' Beliefs Regarding Inclusive Education

In order to answer the first research question of the study (What are the pre-service early childhood teachers' beliefs regarding inclusive education?), the data were gathered through the Turkish version of the TPTBI Scale. The scale had two components: benefits of inclusion and classroom management in inclusive education.

The first component of the Turkish version of the TPTBI Scale was benefit of inclusion (see Table 4.4). As revealed by the responses given to item 4 ($M= 4.27$), the majority of the pre-service early childhood teachers had positive beliefs about the benefit of inclusion; they believe that inclusion practices promote understanding and acceptance about individual differences among children with and without special needs in early childhood education. On the other hand, as understood from the responses given to item 6 ($M= 3.72$), the majority of the pre-service early childhood teachers had neutral beliefs about the benefit of inclusion in that they believe children with special needs lose the stigma of being “different” or failures” when placed in the early childhood education classrooms.

Table 4.4

Descriptive Statistics for the Benefits of Inclusion Items

Items	Strongly Disagree			Disagree		Neutral		Agree		Strongly Agree	
	<i>M</i>	<i>f</i>	%	<i>F</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
1. The inclusion of children with special needs can be beneficial for children without special needs.	4.02	11	1.2	45	5	135	14.9	430	47.4	284	31.3
2. Inclusion promotes social independence among children with special needs.	4.23	8	0.9	20	2.2	68	7.5	458	50.5	351	38.7
3. The nature of the study in early childhood education classrooms will promote the academic growth of the children with special needs.	4.14	9	1.0	27	3.0	110	12.1	437	48.2	322	35.5
4. Inclusion promotes understanding and acceptance of individual differences between children with and without special needs.	4.27	7	0.8	15	1.7	66	7.3	433	47.7	382	42.1
5. Inclusion promotes self-esteem among children with special needs.	4.21	9	1.0	27	3.0	108	11.9	371	40.9	390	43.0
6. Children with special needs lose the stigma of being “different” or failures” when placed in the early childhood education classrooms.	3.72	14	1.5	49	5.4	291	32.1	373	41.1	180	19.8

Table 4.5

Descriptive Statistics for Classroom Management Items

Items	Strongly Disagree			Disagree		Neutral		Agree		Strongly Agree	
	<i>M</i>	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
7. Children with special needs are likely to create confusion in the early childhood education classroom	3.39	102	11.2	342	37.7	307	33.8	124	13.7	31	3.4
8. The behavior of children with special needs will set a bad example for other children in the classroom.	3.61	158	17.4	377	41.6	251	27.7	100	11.0	21	2.3
9. It is likely that the children with special needs will exhibit behavior problems in an early childhood education classroom.	2.85	42	4.6	192	21.2	302	33.3	330	36.4	41	4.5
10. Increased freedom in the early childhood education classroom creates too much confusion for the children with special needs.	3.38	88	9.7	364	40.1	283	31.2	149	16.4	21	2.3
11. The extra attention children with special needs require will be to the detriment of the other students in the classroom.	3.09	82	9.0	261	28.8	277	30.5	232	25.6	54	6.0
12. It is difficult to maintain order in classrooms that contain a mix of children with and without special needs.	2.92	48	5.3	238	26.2	275	30.3	289	31.9	57	6.3

The second component of the Turkish version of the TPTBI Scale was classroom management in inclusive education (see Table 4.5). As revealed by the responses to item 9 ($M= 2.85$), although many pre-service early childhood teachers had neutral beliefs about classroom management in inclusion, they also had slightly positive beliefs since they believe it is likely that the children with special needs will exhibit behavior problems in an early childhood education classroom. On the other hand, as understood from the mean score of item 8 ($M= 3.61$), most of the pre-service early childhood teachers had neutral beliefs about classroom management in inclusion, and they also had slightly negative beliefs since they believe that the behavior of children with special needs will set a bad example for other children in the classroom.

The pre-service early childhood teachers' average scores and standard deviations on the scales of Turkish version of the TPTBI were given in Table 4.6. According to the results, pre-service early childhood teachers scored highest on benefits of inclusion (an average of 4.12), followed by classroom management (an average of 3.21). All the mean scores for the scales were higher than the absolute mean of the 1-5 Likert-scale. This revealed that pre-service early childhood teachers had relatively more positive beliefs on benefits of inclusion than classroom management in inclusive education.

Table 4.6

Descriptive Statistics for Turkish version of TPTBI Sub-Scales

Name of the Sub-Scale	M	SD	Min	Max	N
Benefits of Inclusion	4.12	0.52	1	5	894
Classroom Management	3.21	0.69	1	5	894

4.3. Pre-service Early Childhood Teachers' Personality Traits

In order to answer the third research question of the study (What type of personality traits do pre-service early childhood teachers have?), the data were gathered via the Turkish version of the Big Five Inventory (BFI), and then analyzed using descriptive statistical

methods. The Turkish version of the BFI was composed of five components, namely, openness, conscientiousness, extraversion, agreeableness, and neuroticism. For the openness component (see Table 4.7), the highest mean score was calculated for Item 15 ($M= 4.04$). Most of the pre-service early childhood teachers stated that they are ingenious and deep thinkers, and the lowest mean score was calculated for Item 35 ($M= 2.99$). The pre-service early childhood teachers expressed that they prefer to work neither at a routine job nor at a non-routine job. For the conscientiousness component (see Table 4.8), the highest mean score was calculated for Item 13 ($M= 4.32$). Most of the pre-service early childhood teachers stated that they are reliable, and the lowest mean score was calculated for Item 43 ($M= 2.97$). The participants stated that they are neither easily nor hardly distracted. For the extraversion component (see Table 4.9), the highest mean score was calculated for Item 11 ($M= 3.85$), meaning that the pre-service early childhood teachers have an energetic personality, and the lowest mean score was calculated for Item 31 ($M= 2.31$), showing that the participants do not have a shy and inhibited personality. For the agreeableness component (see Table 4.10), the highest mean score was calculated for Item 7 ($M= 4.31$), meaning that the pre-service early childhood teachers have helpful and unselfish personality, and the lowest mean score was calculated for Item 27 ($M= 2.90$), showing that they do not have a cold and aloof personality. For the neuroticism component (see Table 4.11), the highest mean score was calculated for Item 14 ($M= 3.51$), meaning that the pre-service early childhood teachers can be tense, and the lowest mean score was calculated for Item 4 ($M= 2.38$), showing that they do not have a depressed and blue personality.

Table 4.7

Descriptive Statistics for Openness Items

Items	Strongly Disagree			Disagree		Neutral		Agree		Strongly Agree	
	<i>M</i>	<i>F</i>	%	<i>F</i>	%	<i>F</i>	%	<i>f</i>	%	<i>f</i>	%
5. Is original, has new ideas	3.76	5	0.6	72	7.9	216	23.8	441	48.6	167	18.4
10. Is curious about many different things	3.73	20	2.2	98	10.8	201	22.2	368	40.6	218	24.0
15. Is ingenious, deep thinker	4.04	6	0.7	33	3.6	161	17.8	414	45.6	290	32.0
20. Has an active imagination	3.94	11	1.2	65	7.2	162	17.9	396	43.7	271	29.9
25. Is inventive	3.37	27	3.0	148	16.3	289	31.9	328	36.2	111	12.2
30. Values artistic, aesthetic experiences	3.90	18	2.0	56	6.2	156	17.2	434	47.9	239	26.4
35. Prefers work that is routine	2.99	75	8.3	236	26.0	260	28.7	273	30.1	58	6.4
40. Likes to reflect, play with ideas	3.94	5	0.6	51	5.6	165	18.2	457	50.4	228	25.1
41. Has few artistic interests	3.78	282	31.1	319	35.2	157	17.3	105	11.6	43	4.7
44. Is sophisticated in art, music, or literature	3.15	52	5.7	207	22.8	302	33.3	243	26.8	103	11.4

Table 4.8

Descriptive Statistics for Conscientiousness Items

Items	Strongly Disagree			Disagree		Neutral		Agree		Strongly Agree	
	<i>M</i>	<i>F</i>	%	<i>F</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
3. Does a thorough job	3.87	10	1.1	52	5.7	195	21.5	435	48.0	215	23.7
8. Can be somewhat careless	3.12	152	16.8	229	25.2	203	22.4	230	25.4	93	10.3
13. Is a reliable worker	4.32	6	0.7	13	1.4	58	6.4	444	49.0	385	42.4
18. Tends to be disorganized	2.98	172	19.0	187	20.6	135	14.9	273	30.1	139	15.3
23. Tends to be lazy	3.42	179	19.7	300	33.1	200	22.1	177	19.5	49	5.4
28. Perseveres until the task is finished	3.85	14	1.5	48	5.3	194	21.4	442	48.7	207	22.8
33. Does things efficiently	4.00	6	0.7	21	2.3	153	16.9	523	57.7	204	22.5
38. Makes plans, follows through with them	3.61	31	3.4	116	12.8	193	21.3	403	44.4	164	18.1
43. Is easily distracted	2.97	66	7.3	259	28.6	244	26.9	259	28.6	78	8.6

Table 4.9

Descriptive Statistics for Extraversion Items

Items	Strongly Disagree			Disagree		Neutral		Agree		Strongly Agree	
	<i>M</i>	<i>f</i>	%	<i>F</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
1. Is talkative	3.72	20	2.2	143	15.8	130	14.3	397	43.8	216	23.8
6. Is reserved	3.62	270	29.8	284	31.3	143	15.8	163	18.0	40	4.4
11. Is full of energy	3.85	11	1.2	65	7.2	205	22.6	382	42.1	241	26.6
16. Generates a lot of enthusiasm	3.82	13	1.4	64	7.1	212	23.4	399	44.0	217	23.9
21. Tends to be quiet	3.24	185	20.4	241	26.6	169	18.6	228	25.1	84	9.3
26. Has an assertive personality	3.45	27	3.0	164	18.1	251	27.7	309	34.1	156	17.2
31. Is shy, inhibited	2.31	49	5.4	97	10.7	117	12.9	474	52.3	169	18.6
36. Is outgoing, sociable	3.76	18	2.0	84	9.3	205	22.6	399	44.0	201	22.2

Table 4.10

Descriptive Statistics for Agreeableness Items

Items	Strongly Disagree			Disagree		Neutral		Agree		Strongly Agree	
	<i>M</i>	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
2. Tends to find fault in others	3.89	223	24.6	459	50.6	138	15.2	76	8.4	9	1.0
7. Is helpful and unselfish with others	4.31	5	0.6	13	1.4	40	4.4	493	54.4	355	39.1
12. Starts quarrels with others	4.05	311	34.3	408	45.0	123	13.6	43	4.7	22	2.4
17. Has a forgiving nature	4.19	15	1.7	35	3.9	92	10.1	381	42.0	383	42.2
22. Is generally trusting	3.45	47	5.2	153	16.9	180	19.8	405	44.7	122	13.5
27. Can be cold and aloof	2.90	110	12.1	204	22.5	174	19.2	332	36.6	86	9.5
32. Is considerate and kind to almost everyone	4.28	3	0.3	15	1.7	58	6.4	484	53.4	346	38.1
37. Is sometimes rude to others	3.26	139	15.3	271	29.9	220	24.3	246	27.1	29	3.2
42. Likes to cooperate with others	3.87	19	2.1	43	4.7	154	17.0	512	56.4	178	19.6

Table 4.11

Descriptive Statistics for Neuroticism Items

Items	Strongly Disagree			Disagree		Neutral		Agree		Strongly Agree	
	<i>M</i>	<i>f</i>	%	<i>F</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
4. Is depressed, blue	2.38	227	25.0	306	33.7	200	22.1	129	14.2	42	4.6
9. Is relaxed, handles stress well	3.02	117	12.9	225	24.8	234	25.8	230	25.4	99	10.9
14. Can be tense	3.51	24	2.6	141	15.5	191	21.1	448	49.4	102	11.2
19. Worries a lot	3.14	72	7.9	219	24.1	233	25.7	255	28.1	124	13.7
24. Is emotionally stable, not easily upset	2.86	70	7.7	208	22.9	260	28.7	269	29.7	95	10.5
29. Can be moody	2.59	180	19.8	307	33.8	187	20.6	165	18.2	66	7.3
34. Remains calm in tense situations	2.67	60	6.6	148	16.3	257	28.3	326	35.9	114	12.6
39. Gets nervous easily	3.01	104	11.5	243	26.8	203	22.4	245	27.0	110	12.1

Table 4.12

Descriptive Statistics for the Turkish version of BFI Sub-Scales

Name of the Sub-Scale	<i>M</i>	<i>SD</i>	Min	Max	N
Openness	3.66	0.59	1	5	894
Conscientious	3.57	0.64	1	5	894
Extraversion	3.47	0.71	1	5	894
Agreeableness	3.80	0.47	1	5	894
Neuroticism	2.90	0.69	1	5	894

Descriptive statistics was calculated for Five Factor Personality component scores. Table 4.12 shows five components of the scale, respectively: Openness ($M= 3.66$; $SD= 0.59$), Conscientious ($M= 3.57$; $SD= 0.64$), Extraversion ($M= 3.47$; $SD= 0.71$), Agreeableness ($M= 3.80$; $SD= 0.47$), and Neuroticism ($M= 2.90$; $SD= 0.69$). According to these findings, participants demonstrated the highest mean score on Agreeableness, and the lowest mean score on Neuroticism.

4.4. Pre-service Early Childhood Teachers' Beliefs and Courses on Inclusion

In order to address this research question, (Do pre-service early childhood teachers' beliefs about inclusion differ with respect to their taking courses in inclusive education?) one-way between-groups multivariate analysis of variance (MANOVA) was conducted as a statistical analysis method. Although MANOVA is very similar to ANOVA, the main difference between these two analysis methods is that in MANOVA there are two or more continuous dependent variables that were affected by one or more categorical independent variables having two or more levels (Tabachnick & Fidell, 2007). In other words, MANOVA allows one to compare groups if there is more than one dependent variable which should be related in some way (Pallant, 2007). In addition, when separate ANOVAs and MANOVA are compared, it is seen that MANOVA also decreases the "Type I error" risk for each dependent variable (Pallant, 2007). In the current study, there are two dependent variables, namely, benefits of inclusion and classroom management in inclusive education, and one independent variable having two levels, which is, "taken and not-taken courses on inclusion". Accordingly, MANOVA was preferred as the appropriate

statistics for the current study. On the other hand, MANOVA is a complex statistical analysis with seven assumptions: sample size, normality, outliers, linearity, homogeneity of regression, multicollinearity and singularity, and homogeneity of variance-covariance matrices.

4.4.1. The Assumptions of Multivariate Analysis of Variance (MANOVA)

4.4.1.1. Sample size

According to Tabachnick and Fidell (2007), in order to conduct MANOVA, the cases in each cell should be more than the number of the dependent variables of the study. In the current study, there are two different dependent variables, and the minimum required number of cases in each cell is two (the number of dependent variables). In the present study, there are more participants than required ($n=894$); therefore, the sample size assumption was ensured.

4.4.1.2. Normality

In order to assure normality assumption, univariate and multivariate normality were checked (Pallant, 2007). Normality refers to a distribution where greatest scores are in the middle and smaller frequencies of scores are in the extremes that creates a bell shaped, symmetrical curve. Normality is checked by assessing the skewness and kurtosis values or shape of the distribution. In a normal distribution, the skewness and kurtosis values (see Table 4.13) for all dimensions are between -2 and +2 range which is acceptable (Pallant, 2007).

Table 4.13

Skewness and Kurtosis values for the dependent variable in each group

		Benefits of Inclusion	Classroom Management
Taken a course on inclusion	Skewness	-.438	-.112
	Kurtosis	.610	.082
Not-taken a course on inclusion	Skewness	-.518	-.072
	Kurtosis	.782	.004

In addition to the skewness and kurtosis values, the histogram graphs were checked for the assessment of normality. In the current study, although the distribution of classroom management scores appears ‘normal’, the distribution of benefit of inclusion scores appears non-normal (see Figure 4.1). However, in social sciences, many scale and measures are generally skewed, and this is not a problem for the scale (Pallant, 2007). In this sense, it can be said that the distribution of scores was reasonably normal.

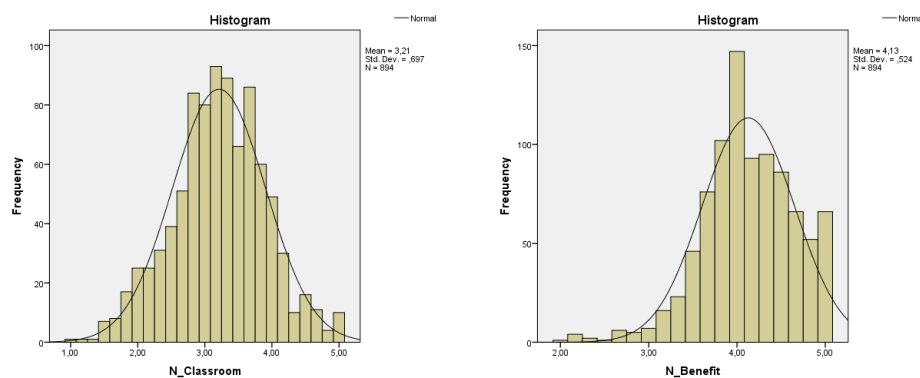


Figure 4.1 Histograms for the Benefit of Inclusion and Classroom Management in Inclusive Classroom Dimensions

4.4.1.3. Outliers

In order to check multivariate normality, Mahalanobis distances were explored. For the current study, maximum Mahalanobis distance was found to be 41.679. This

distance was compared with the critical value in the Chi-square table (20.52) and was found higher than the critical value given. If Mahalanobis distance is greater than the critical value, there are multivariate outliers (Pallant, 2007). There were thirteen cases that had higher Mahalanobis distance values than the critical value; therefore, these thirteen cases were excluded from the analysis. Thus, the maximum value for Mahalanobis distance was 20.22, which is under the critical value.

4.4.1.4. Linearity

Linearity refers to straight-line relationship. In order to check the linearity assumption, a matrix of scatterplots between each pair of the dependent and independent variables was generated. As indicated in Figure 4.2, for each group, there are no serious violations of linearity assumption.

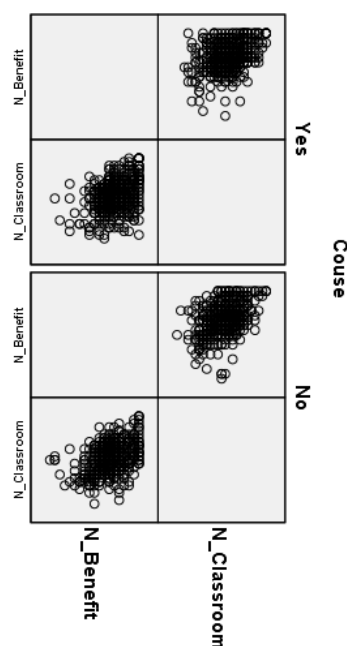


Figure 4.2 Scatterplots for each group

4.4.1.5. Homogeneity of Regression

Homogeneity of regression assumption is important only if you intend to perform a stepdown analysis (Pallant, 2007). Since such an analysis was not necessary in the current study, this assumption was violated.

4.4.1.6. Multicollinearity and Singularity

In order to examine multicollinearity and singularity assumptions, the correlation coefficients between the dependent variables were calculated, and the strength of the correlations between these variables was assessed. According to Pallant (2007), dependent variables should be correlated moderately. If the correlations are up around .8 or .9, it is a reason for considering multicollinearity and singularity. In the current study, the correlation coefficient between the dependent variables was found to be .39, which is acceptable and smaller than .8 (see Table 4.14). Therefore, there was no violation of the multicollinearity assumption.

Table 4.14

Correlation Coefficient between Dependent Variables

	Benefit	Classroom Management
Benefit	1	.392**
Classroom Management	.392**	1

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

4.4.1.7. Homogeneity of Variance-Covariance Matrices

In order to check homogeneity of variance-covariance matrices, Box's M Test of Equality of Covariance Matrices was used. According to Pallant (2007), if the significance value in the Box's M Test of Equality of Covariance Matrices is greater than .001 (see Table 4.15), this assumption is not violated. In the present study, significance value was .134 and greater than .001, which indicates that the assumption was not violated.

Table 4.15

Box's M Test of Equality of Covariance Matrices

Box's M	F	df1	df2	Sig.
5.593	1.860	3	170834493.159	.134

Furthermore, in order to check homogeneity of variance-covariance matrices, Levene's Test of Equality of Error Variances table was used. According to Pallant (2007), if the significance value in the Levene's Test of Equality of Error Variances is less than .05, this indicates a violation of the assumption. As the values of benefits of inclusion and classroom management dimensions presented in the Table 4.16 are examined, it is seen that significance values are greater than .05, which indicates there is no violation of the assumption.

Table 4.16

Levene's Test of Equality of Error Variances

	<i>F</i>	df1	df2	Sig. (<i>p</i>)
Benefit of inclusion	2.179	1	892	.140
Classroom management	.039	1	892	.844

4.4.2. Multivariate analysis of variance (MANOVA)

A one way between groups multivariate analysis of variance was performed to investigate differences in beliefs regarding inclusive education and attending courses-seminars on inclusion. Two independent variables were used: benefit of inclusion and classroom management in inclusive education. The dependent variable was attending/not attending courses-seminars on inclusion. Preliminary assumption testing was conducted to assess sample size, normality, outliers, linearity, homogeneity of regression, multicollinearity and singularity, and homogeneity of variance-covariance matrices. All assumptions were assured.

The result of MANOVA indicated that there was a statistically significant difference between attending courses-seminars and dependent variables (benefit of inclusion and classroom management in inclusive education) $F(2, 891) = 9.22, p = .000$; Wilks' Lambda = .98; partial eta squared = .02 (see Table 4.17).

Table 4.17

Multivariate Tests

	Wilks' Lambda	F	Sig.	Partial eta squared
Taken courses	.98	9.22	.000	.02

When the results for the dependent variables were considered separately, the original alpha level of .05 was divided by the number of dependent variables, and the new alpha level was found to be .025. When the Sig. values were compared by using a Benferroni adjustment alpha level of .025, there is a statistical significance for each dependent variable: benefits of inclusion $F(1, 892) = 12.99, p = .000$, partial eta squared = .01, and classroom management $F(1, 892) = 12.53, p = .000$, partial eta squared = .01.

According to Pallant (2007), the partial eta squared (η^2) indicates a small effect size if the value is .01; it indicates a moderate effect size if the value is .06; it indicates a large effect size if it is .14. For the current study, the partial eta squared (η^2) shows a small effect size for both benefit of inclusion (.01) and classroom management in inclusive education (.01).

As the mean scores indicate, having taken courses related to inclusion led to slightly higher levels of positive belief scores with respect to benefit of inclusion ($M=4.19$, $SD=.49$) when compared with the scores of those who did not take a course on inclusion ($M=4.06$, $SD=.54$).

As further indicated by the mean scores, having attended courses-seminars related to inclusion led to slightly higher levels of positive belief scores on classroom management in inclusive education ($M=3.29$, $SD=.69$) when compared with the scores of those who did not attend a course or seminar on inclusion ($M=3.13$, $SD=.68$).

4.5. The Effects of Personality Traits on Pre-Service Early Childhood Teachers' Beliefs Regarding Inclusive Education

In order to investigate the fourth research question (How much of the variance in pre-service early childhood teachers' beliefs regarding inclusive education can be

explained by their personality traits?), a multiple regression analysis was conducted separately to predict the effect of personality traits on teachers' beliefs about benefits of inclusion and classroom management in inclusive education. Due to the wide range of indicators used as independent variables, multiple regression analysis is one of the best ways of measuring the association between dependent and more than one independent variable. In addition, the multiple regression analysis allows one to assess the effect of each variable on outcome variables (Field, 2009). According to Tabachnick and Fidell (2007), there are six main assumptions of multiple regression analysis, which are sample size, multicollinearity and singularity, outliers, normality, linearity, homoscedasticity, and independence of residuals.

4.5.1. Assumptions of Multiple Linear Regression Analysis for Benefits of Inclusion

4.5.1.1. Sample Size

Firstly, sample size requirement was assessed considering the formulas suggested in Tabachnick and Fidell (2007). The minimum sample size to run this analysis should be $N \geq 50 + 8m$, where m is the number of independent variables (IVs). For the current data, while the minimum sample size should be 90, there were 907 participants in the study, so this assumption has not been violated.

4.5.1.2. Multicollinearity and Singularity

Multicollinearity refers to the relationship among the independent variables, and it can be observed when the independent variables are highly correlated ($r = .9$ and above). Singularity can be seen when one independent variable is actually a combination of the other independent variables. In order to check Multicollinearity, the correlation between the independent variables, and Tolerance and Variance of Inflation Factor (VIF) scores were examined. All the correlations between the independent variables were found to be under $.9$, while some of them were above $.3$ (see Table 4.18).

Table 4.18

Pearson Correlation Coefficients for DV and IVs

Pearson Correlation	Benefit	Openness	Conscientiousness	Extraversion	Agreeableness	Neuroticism
Benefit	1	.165	.174	.027	.149	-.043
Openness	.165	1	.225	.398	.195	-.186
Conscientiousness	.174	.225	1	.156	.314	-.216
Extraversion	.027	.398	.156	1	.159	-.208
Agreeableness	.149	.195	.314	.159	1	-.389
Neuroticism	-.043	.186	-.216	-.208	-.389	1

In addition, if the Tolerance values are less than .10 and Variance of Inflation Factor (VIF) scores are above 10, this indicates the possibility of multicollinearity (Pallant, 2007).

Table 4.19

Tolerance and VIF Values for Each Independent Variable

Variables	Tolerance	VIF
Openness	.804	1.244
Conscientiousness	.865	1.115
Extraversion	.820	1.219
Agreeableness	.786	1.272
Neuroticism	.818	1.223

As seen in the Table 4.19, for the current study, all Tolerance values are above .10, and all VIF values are below the 10. Therefore, the Multicollinearity assumption has not been violated. On the other hand, there are no Ivs that include the others, meaning that there is no risk for the singularity assumption. Therefore, this assumption was assured as well.

4.5.1.3. Outliers

Multiple regression analysis is very sensitive to outliers with very high or very low scores (Pallant, 2007). According to Tabachnick and Fidell (2007), outliers among the Ivs and DVs have an important influence on the regression analysis. Thus, univariate and multivariate outliers should be examined, and the detected outliers should be deleted. In order to check outliers on the dependent variable, examination of standardized residual plot and Mahalanobis distance are recommended (Pallant, 2007). Tabachnick and Fidell (2007) stated that if the standardized residual values are between +3.3 to -3.3, there is no outlier in the data set. For the current study, standardized residual values are min. -3.97 and max. 2.43. On the other hand, according to Tabachnick and Fidell (2007), the maximum Mahalanobis distance values should be under the critical value for the number of the independent variables. The critical value for five independent variables is 20.52. In the current study, maximum Mahalanobis distance value is 20.22, which is under the critical value. Concordantly, this assumption was assured for the current study as well.

4.5.1.4. Normality, Linearity, Homoscedasticity, and Independence of Residuals

To check the normality assumption, “the residuals should be normally distributed about the predicted dependent variable score” (Pallant, 2007, p.149). For the linearity assumption, there should be a straight-line relationship between residuals and predicted DV score. For the homoscedasticity assumption, “the variance of the residuals about predicted DV scores should be the same for all predicted scores” (Pallant, 2007, p.149). In order to conduct multiple regression analysis, Normal P-P Plot, histogram, and residuals scatterplots (see Figure 4.3) were constructed to assure normality, linearity, and homoscedasticity assumptions.

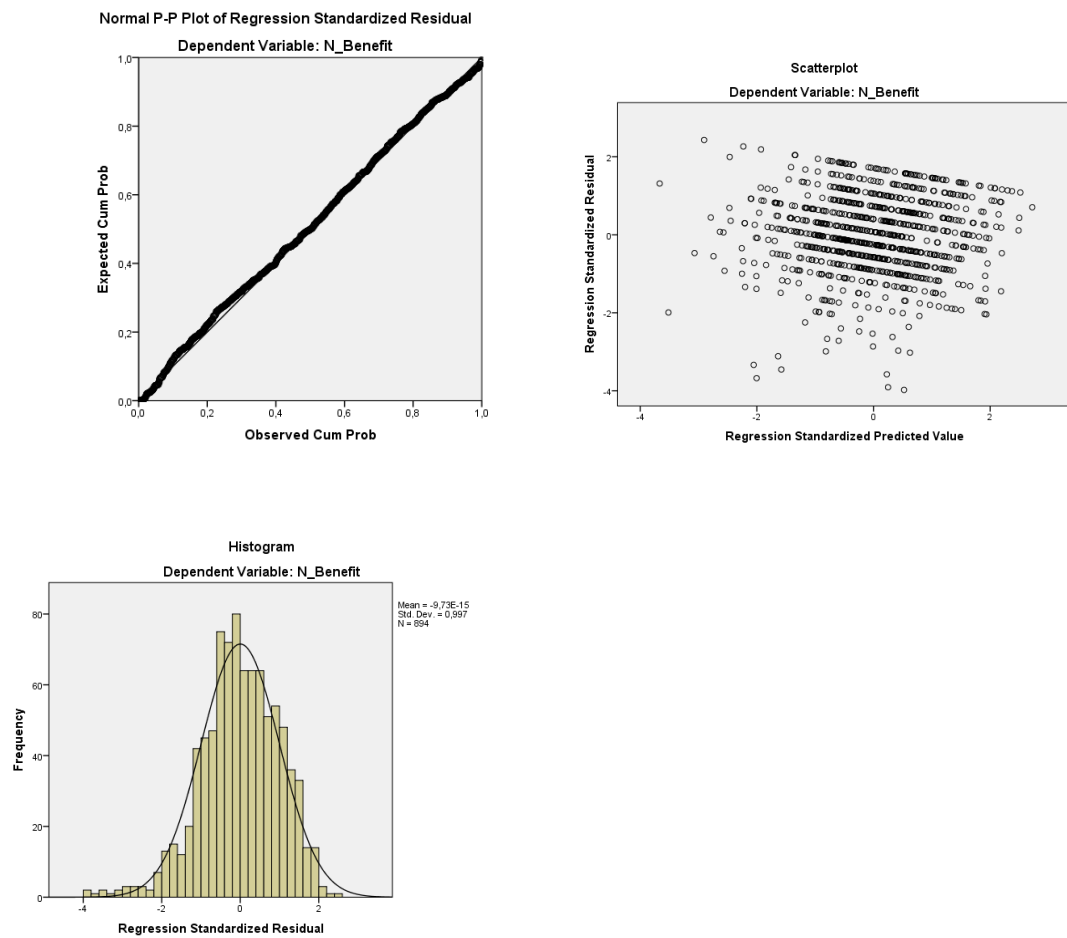


Figure 4.3 Regression Standardized Residual, Residuals Scatterplots, and Normal Probability Plot (P-P)

In the Normal P-P Plot there is reasonably straight diagonal line from bottom left to top right. This indicates that there is a straight-line relationship, and there are no major deviations for normality. Also, the histogram shows a normal distribution. On the other hand, the scatterplot of standardized residuals shows a roughly rectangular distribution in that most of the scores concentrated in the center around the 0 point. Regression Standardized Residual, Residuals Scatterplots, and Normal Probability Plot (P-P) indicate no violation of the Normality, Linearity, Homoscedasticity assumption.

4.5.2. Results of Standard Multiple Regression for Benefits of Inclusion

A Standard multiple linear regression analysis was conducted to determine the possible effects of personality traits on the pre-service teachers' beliefs on benefits of inclusion. Pearson correlations were obtained to determine the relationship between personality traits and benefits of inclusion. The overall model was found to be significant, $R^2 = .06$, $F(5, 888) = 11.043$, $p < .05$. The effect size indicates that the model explained 6% of the variance in pre-service teachers' beliefs regarding benefits of inclusion. In the model, significant predictors of pre-service teachers' beliefs regarding benefits of inclusion were found to be openness as the strongest ($\beta = .147$, $p = .000$); conscientiousness as moderate ($\beta = .126$, $p = .000$); and agreeableness as the lowest ($\beta = .106$, $p = .004$). Extraversion ($\beta = -.059$, $p = .100$); and neuroticism ($\beta = .040$, $p = .265$) were found as the insignificant predictors of pre-service teachers' beliefs regarding benefits of inclusion (see Table 4.20). The regression equation to predict pre-service early childhood teachers' inclusion beliefs is:

$$\hat{Y} = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3$$

$$\hat{Y}_{\text{Benefit of inclusion}} = 2.899 + 0.013.X_{\text{Openness}} + 0.011.X_{\text{Conscientiousness}} + 0.013.X_{\text{Agreeableness}}$$

Table 4.20

Multiple Regression Analysis for Variables Predicting Benefits of Inclusion (N = 894)

Variables	B	SEB	B	Sig.
Constant	2.899	.230	-----	.000
Openness	.013	.003	.147	.000*
Conscientiousness	.011	.003	.126	.000*
Extraversion	-.005	.003	-.059	.100
Agreeableness	.013	.005	.106	.004*
Neuroticism	.004	.003	.040	.265

Note: * $p < 0.001$

According to the results, the standard multiple linear regression accounted for 6 % of the variance in benefits of inclusion when all independent variables were included in the model.

4.5.3. Assumptions of Multiple Linear Regression Analysis for Classroom Management in Inclusive Education

4.5.3.1. Sample Size

Firstly, sample size assumption was assessed considering the formulas suggested in Tabachnick and Fidell (2007). The minimum sample size should be $N \geq 50 + 8m$ to run multiple linear regression analysis, where m is the number of Ivs. For the current data, while the minimum sample size should be 90, there were 894 participants in the study, so this assumption has not been violated.

4.5.3.2. Multicollinearity and Singularity

Multicollinearity refers to the relationship among the Ivs, and it can be observed when the independent variables are highly correlated with each other ($r=.9$ and above). Singularity can be observed when one independent variable is actually a combination of the other independent variables. In order to observe Multicollinearity, the correlation between the independent variables, and Tolerance and Variance of Inflation Factor (VIF) scores were checked. All the correlations between the independent variables were found to be under $.9$, while some of them were above $.3$ (see Table 4.21)

Table 4.21

Pearson Correlation Coefficients for DV and IVs

Pearson Correlation	Classroom management	Openness	Conscientiousness	Extraversion	Agreeableness	Neuroticism
Classroom management	1	.106	.138	.067	.117	-.108
Openness	.106	1	.225	.398	.195	-.186
Conscientiousness	.138	.225	1	.156	.314	-.216
Extraversion	.067	.398	.156	1	.159	-.208
Agreeableness	.117	.195	.314	.159	1	-.389
Neuroticism	-.108	-.186	-.216	-.208	-.389	1

In addition, when the Tolerance values are less than .10 and Variance of Inflation Factor (VIF) scores are above 10, this indicates the possibility of multicollinearity (Pallant, 2007).

As seen in Table 4.22, for the present study, all Tolerance values were above .10, and all VIF values were below 10. Therefore, the Multicollinearity assumption was assured. On the other hand, there is not any IV that includes others, meaning that there is no risk for the singularity assumption. Thus, this assumption was also assured.

Table 4.22

Tolerance and VIF Values for Each Independent Variable

Variables	Tolerance	VIF
Openness	.804	1.244
Conscientiousness	.865	1.115
Extraversion	.820	1.219
Agreeableness	.786	1.272
Neuroticism	.818	1.223

4.5.3.3. Outliers

Multiple regression analysis is very sensitive to outliers that have very high or very low scores (Pallant, 2007). According to Tabachnick and Fidell (2007), outliers among the Ivs and DVs have an important effect on the regression analysis. Thus, univariate and multivariate outliers should be examined, and the detected outliers should be deleted. In order to check outliers on the dependent variable, examination of standardized residual plot and Mahalanobis distance are suggested (Pallant, 2007). Tabachnick and Fidell (2007) argued that if the standardized residual values are between +3.3 to -3.3, there is no outlier in the data set. For the current study, the standardized residual values are min. -3.188 and max. 2.63. On the other hand, according to Tabachnick and Fidell (2007), the maximum Mahalanobis distance values should be under the critical value for the number of the independent variables. The critical value for five independent variables is 20.52. In the current study, maximum Mahalanobis distance value is 20.22, which is under the critical value. Concordantly, this assumption was assured for the current study.

4.5.3.4. Normality, Linearity, Homoscedasticity, and Independence of Residuals

For the normality assumption, “the residuals should be normally distributed about the predicted dependent variable score” (Pallant, 2007, p.149). For the linearity assumption, there should be a straight-line relationship between residuals and predicted DV score. For the homoscedasticity assumption, “the variance of the residuals about predicted DV scores should be the same for all predicted scores” (Pallant, 2007, p.149). In order to conduct multiple regression analysis, Normal P-P Plot, histogram, and residuals scatterplots (see Figure 4.4) were constructed to assure normality, linearity, and homoscedasticity assumptions.

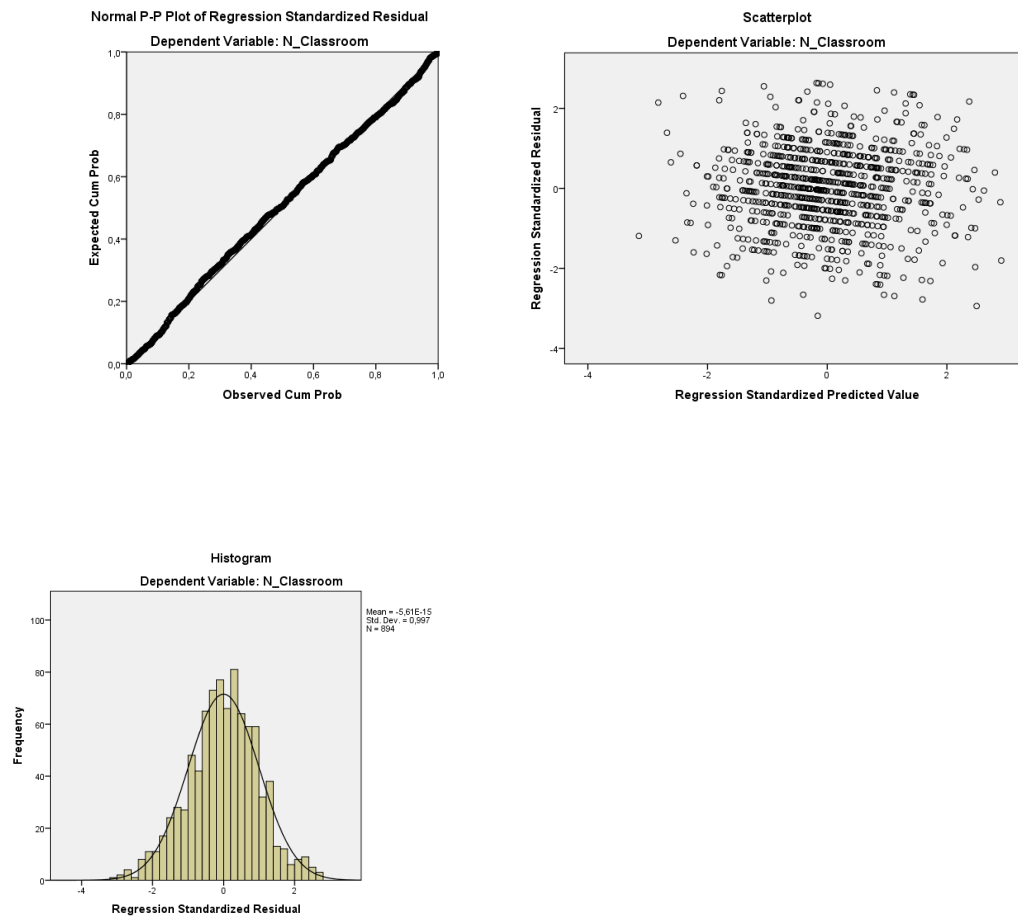


Figure 4.4 Regression Standardized Residual, Residuals Scatterplots, and Normal Probability Plot (P-P)

In the Normal P-P Plot, there is a reasonably straight diagonal line from bottom left to top right. This indicates that there is a straight-line relationship, and there are no major deviations for normality, and also, the histogram shows a normal shape distribution. On the other hand, the scatterplot of standardized residuals shows a roughly rectangular distribution and it is seen that most of the scores concentrated in the center around the 0 point. Regression Standardized Residual, Residuals Scatterplots, and Normal Probability Plot (P-P) indicate that there is no violation of the Normality, Linearity, and Homoscedasticity assumption.

4.5.4. Results of Standard Multiple Regression

A Standard multiple linear regression analysis was conducted to determine the possible effects of personality traits on the pre-service teachers' beliefs on classroom management in inclusive education.

Pearson correlations were examined to determine the relationship between personality traits and classroom management in inclusive education. The overall model was found as significant, $R^2 = .032$, $F(5, 888) = 5.881$, $p < .05$. The effect size indicates that the model explained 3.2% of the variance in pre-service teachers' beliefs on classroom management in inclusive education. In the model, only conscientiousness was ($\beta = .094$, $p = .008$) found to be the significant predictor of pre-service teachers' beliefs related to classroom management in inclusive education. On the other hand, openness ($\beta = .061$, $p = .098$); agreeableness ($\beta = .053$, $p = .155$); extraversion ($\beta = .009$, $p = .810$); and neuroticism ($\beta = -.054$, $p = .140$) were found as insignificant predictors of pre-service teachers' beliefs on classroom management in inclusive education (see Table 4.23).

Table 4.23

Multiple Regression Analysis for Variables Predicting Classroom Management in Inclusive Education (N = 894)

Variables	<i>B</i>	<i>SEB</i>	<i>B</i>	<i>Sig.</i>
Constant	2.412	.310	-	.000
Openness	.007	.004	.061	.098
Conscientiousness	.011	.004	.094	.008*
Extraversion	-.001	.004	.009	.810
Agreeableness	.009	.006	.053	.155
Neuroticism	-.007	.005	-.54	.140

Note: * $p < 0.001$

According to the results, the standard multiple linear regression accounted for 3.2 % of the variance in classroom management in inclusive education when all independent variables were included in the model.

CHAPTER V

DISCUSSION

This study aimed to explore and describe the pre-service early childhood teachers' beliefs regarding inclusive education, their personality traits, their background information (age, gender, grade, GPA, graduated high school, attending courses or seminars related to inclusive education). Moreover, the probable relationship between the pre-service early childhood teachers' beliefs related to inclusive education and their personality traits was investigated in this study. In addition, it was aimed to explore the probable relationship between early childhood pre-service teachers' beliefs related to inclusive education and related courses-seminars on inclusion which the participants attended.

In order to understand the pre-service early childhood teachers' beliefs related to inclusive education and personality traits, firstly descriptive analyses were done. Secondly, to examine if there is a difference among teachers' inclusion beliefs with respect to their taking courses in inclusive education, one-way MANOVA was run. Thirdly, pre-service early childhood teachers' beliefs related to inclusive education and their personality traits were examined through Standard Multiple Regression, and a significant relationship was found between these variables.

5.1. Pre-service Early Childhood Teachers' General Beliefs Related to Inclusive Education

The first research question of the current study aimed to examine the pre-service early childhood teachers' general beliefs on teaching children with special needs in early childhood education and their self-efficacy beliefs related to inclusive education and beliefs towards teaching children with different types of special needs.

In the current study, the pre-service early childhood teachers expressed their beliefs about teaching children with special needs in early childhood education. The results of the current study are consistent with the results of the previous studies in that all types of children with special needs can benefit from inclusion by improving their communication skills working together with their peers and whole school staffs, and increasing academic achievements in early childhood education classrooms (Stainback & Stainback, 1992; Romi & Leyser, 2006; Burke & Sutherland, 2004).

For the current study, the highest mean score was calculated for children with attention-deficit and hyperactivity disorders (ADHD). This means that among all types of children with special needs, pre-service early childhood teachers considered that children with ADHD can most benefit from early childhood education. On the other hand, the lowest mean score was calculated for children with mental retardation. This means that even though pre-service preschool teachers believed all types of children with special needs can be educated in early childhood settings, pre-service early childhood teachers considered children with mental retardation (MR) can least benefit in early childhood education classrooms.

In the related literature, Cook's (2002) study results showed that preservice teachers hold positive beliefs toward all types of children with special needs in inclusive education, which is consistent with the results of the present study. On the other hand, some studies focused on children's specific types of special needs. Diken (2006) focused on specifically the pre-service teachers' attitudes towards mental retardation, and found that in general pre-service teachers were positive toward inclusion of children with MR in inclusive classrooms. Semmel et al. (1991) found that in-service teachers had some difficulties in inclusion of children with mild special needs, since inclusion brought more intensive classroom management issues.

5.2. Pre-service Preschool Teachers' Self-Efficacy Beliefs in terms of Working with Children with Special Needs

In the current study, the pre-service early childhood teachers' self-efficacy beliefs in terms of working with children with special needs in early childhood education were investigated, and it was found that in general they hold moderate or relatively high self-efficacy beliefs for almost all types of special needs. Although they had the highest self-efficacy beliefs to teach children with speech and language disabilities and children with physical disabilities; they hold the lowest self-efficacy beliefs to work with children with mental retardation (MR), and secondly children with autism spectrum disorders. Teachers who had high level self-efficacy beliefs are more open and more willing to use and experiment new methods in order to meet the educational needs of their children (Romi & Leyser, 2006). In the current study results, pre-service teachers' self-efficacy beliefs vary across the types of children's special needs. The reason of this difference can be explained by the needs of alteration of instructions and curriculum which teachers have to implement in their classrooms (Scruggs & Mastropieri, 1996). Moreover, it can be said that teachers can be more confident working with mild learner children in their classroom since they require little amount of alteration of instruction and curriculum in the classroom practices so (Cook, 2002).

5.3. Pre-service Early Childhood Teachers' Beliefs Related to Inclusive Education

In the present study, in order to explore pre-service early childhood teachers' beliefs toward inclusion, the Turkish version of Pre-service Teachers' Beliefs toward Inclusion Scale was used. The scale consists of two sub-scales, namely benefits of inclusion and classroom management in inclusive education. Descriptive analyses were conducted and mean scores of pre-service early childhood teachers on each sub-scale, and the highest mean scores were obtained from the benefit sub-scale (M: 4.12) and then from the classroom management sub-scale (M: 3.21). In terms of benefit of inclusion, results of the current study are consistent with the related literature in that majority of the pre-service early childhood teachers had more positive beliefs about

the benefit of inclusion. They believed that the inclusion practices promote understanding and acceptance of individual differences between children with and without special needs in early childhood education (Avramidis et al., 2000; Lambe & Bones, 2006; Martinez, 2003; Romi & Leyser, 2006; Yellin et al., 2003)

In terms of the classroom management dimension, the results indicate that pre-service early childhood teachers hold relatively positive beliefs toward the classroom management in inclusive education. Although they hold relatively positive beliefs about classroom management in inclusive education, they believed children with special needs may exhibit behavior problems and it may be difficult to maintain order in classrooms that contain a mix of children with and without special needs. Concordantly, Verne (2013) examined private preschool teachers' inclusive education beliefs and their support. The results of Verne's study showed that the private school early childhood teachers support the inclusion of children with special needs but also they believed that children with special needs may exhibit negative examples with their challenging behaviors, and this can cause changes in the behavior of their peers. Similarly, Romi and Leyser (2006) found that despite all endorsement of inclusion, preservice teachers seem to be concerned about the probable behavior problems of children with special needs as a classroom management issue in inclusive classrooms.

5.4. Pre-service Early Childhood Teachers' Personality Traits

In the current study, personality traits of pre-service early childhood teachers were explored under five main personality components (openness, conscientiousness, extraversion, agreeableness and neuroticism) via the Turkish version of Big Five Inventory (BFI). The results of Big Five Inventory showed that pre-service early childhood teachers' agreeableness was dominant among the five personality traits, but also respectively their openness, conscientiousness and extraversion levels were also high. The findings of the current study are consistent with the study of Decker and Rimm-Kaufman (2008). The study by Decker and Rimm-Kaufman (2008) showed that high level of agreeableness, openness, conscientiousness and extraversion are beneficial for people entering teaching profession which requires teachers to be

determined, independent, curious, reliable, flexible, and social. Moreover, in the current study, pre-service early childhood teachers' neuroticism was also consistent with Decker and Rimm-Kaufman's study (2008) in that the neuroticism personality trait of pre-service teachers was found lower as compared to other four personality traits. This means that, low level of neuroticism refers not being anger- hostility, depression and vulnerability that is a favorable personality trait for being a good teacher.

5.5. Pre-service Early Childhood Teachers' Beliefs and Courses Related To Inclusion

In the current study, in order to investigate pre-service early childhood teachers' beliefs about inclusion in terms of their taking related courses in inclusive education, one-way between-groups multivariate analysis of variance (MANOVA) was conducted as a statistical analysis method.

The results of MANOVA indicated that there was a statistically significant difference between attending related courses-seminars related to inclusion and the pre-service early childhood teachers' beliefs about inclusion. The results of MANOVA further showed that pre-service preschool teachers who had taken related courses on inclusion reported slightly higher levels of positive belief scores on benefits of inclusion ($M=4.19$, $SD=.49$) compared to those who did not take a course ($M=4.06$, $SD=.54$). Similarly, the results of MANOVA revealed that pre-service preschool teachers who had attended related courses-seminars for the inclusive education reported slightly higher levels of positive belief scores on classroom management in inclusive education ($M=3.29$, $SD=.69$) compared to those who did not take a course ($M=3.13$, $SD=.68$). These results are consistent with the related literature. In Verne's study (2013), in-service preschool teachers' inclusion beliefs were examined and teachers who had more training about inclusion reported more favorable beliefs about including children with special needs in regular classrooms. Similarly, Romi and Leyser (2006) examined the attitudes of special education teachers and regular education teachers toward

inclusion, and they found that special education teachers who had more courses in their college education program had more favorable attitudes about inclusive education.

5.6. Effects of Personality Traits on Pre-service Early Childhood Teachers' Beliefs Related to Inclusive Education

In the present study in order to explore how much of the variance in pre-service early childhood teachers' beliefs related to inclusive education can be explained by their personality traits, a Multiple Regression Analysis was conducted separately to predict pre-service preschool teachers' personality traits and their beliefs about inclusive education. Accordingly, a relationship was found between personality traits and benefits of inclusion, and between personality traits and classroom management in inclusive education.

According to the results, the standard multiple linear regression accounted for 6 % of the variance in benefits of inclusion when all independent variables were included in the model. Consequently, openness, conscientiousness and agreeableness personality traits were found as the statistically significant predictors for pre-service preschool teachers' beliefs about benefit of inclusion. Concordantly, Pre-service teachers who had creative-imaginative, self-disciplined-reliable, soft-hearted-honest personality characteristics that so beneficial for the implementation of inclusive education. On the other hand, extraversion and neuroticism personality traits were not found as significant predictors.

Similarly, the standard multiple linear regression accounted for 3.2 % of the variance in classroom management in inclusive education when all independent variables were included in the model. The results showed that only conscientiousness personality trait was found as the statistically significant predictor for pre-service preschool teachers' beliefs about classroom management in inclusive education. On the other hand, openness, agreeableness, extraversion and neuroticism personality traits were not found as significant predictors for pre-service preschool teachers' beliefs about classroom management in inclusive education.

Teacher beliefs are considered as the key factor of the success of the inclusive education. In the results of current study, teachers' personality traits can predict their beliefs about inclusion. Concordantly, the relationship between teachers' inclusive beliefs and their personality traits should be considered for the success of the inclusive education.

5.7. Implications of the Study

This study was the first step for trying to explore the pre-service preschool teachers' inclusion beliefs and their personality traits which have a significant predictive impact on inclusive education in pre-service preschool teacher training programs (Decker & Rimm-Kaufman, 2008).

This study was also enabled to evaluate special education in pre-service early childhood teacher training program by way of the beliefs of pre-service early childhood teachers.

Pre-service early childhood teachers' belief about the sufficiency of special education courses, they need more courses about special education. Accordingly, to enhance the quality of inclusive education in pre-service early childhood teacher training programs, the below suggestion can be ordered.

Considering the special education content in pre-service early childhood teacher training programs, participants of the current study were put forwarded that inclusive education was limited with only few courses. For this reason, there should be a separate course for inclusive education in pre-service early childhood teacher training program, so pre-service teacher can extent their knowledge and experience about the inclusion to address the needs of children with special needs more properly. Furthermore, there should be practice teaching

5.8. Recommendations for Future Research

In this section, further research recommendations were presented to guide future researchers. In the related literature, there is limited number of research on pre-service preschool teachers' inclusion beliefs and their personality traits. In this study, the pre-service preschool teachers' inclusion beliefs and their personality traits were investigated.

In the current study, data were collected via scales, so participants may have not expressed their actual beliefs, thus further research studies could be performed with in-depth interviews and observation methods to understand the pre-service teachers' actual beliefs about the inclusion and to evaluate the needs of inclusive education in the faculty of education. In addition, to explore the effectiveness of the inclusive education courses in special education courses, the same scale can be utilized for a single group before and after taking a special education courses in an experimental research design study. Another recommendation for the future studies is to conduct a study to evaluate both in-service teachers' and pre-service teachers' beliefs on inclusive education together, and compare these two groups' beliefs on inclusion whether there is an increase/decrease for in-service teachers' beliefs on inclusion or not. If there is a decrease in in-service teachers' beliefs on inclusion, the reasons can be investigated and then solutions can be suggested to increase in-service teachers' beliefs on inclusion.

The participants of this study were students of five different universities in Ankara, the capital city of the Turkey with different backgrounds and socioeconomic status. The future studies can be extended the participation of pre-service early childhood teachers from different regions and different provinces throughout the country.

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APPENDICES

APPENDIX A: Demographic Information Form

Sayın Katılımcı,

Aşağıda yer alan anket okul öncesi öğretmen adaylarının kaynaştırma eğitimine yönelik sahip oldukları inançları ve kişilik özellikleri arasındaki olası ilişkileri belirlemeye yönelik hazırlanmış olup, bu ankette kişisel bilgi formu, kaynaştırma eğimine yönelik inanç ölçeği ve kişilik testi yer almaktadır. Bu çalışmaya katılıminız gönüllü olmanıza bağlı olup, çalışmanın sonuçlandırılabilmesi açısından çok değerlidir. Bu çalışma kapsamında vereceğiniz tüm kişisel bilgiler gizli tutulacaktır. Bu çalışma ile ilgili sorularınız için ODTÜ Eğitim Fakültesi Arş. Gör. Celal İLER'e 0312 210 75 08 no'lu telefondan ya da iler@metu.edu.tr e-posta adresinden ulaşabilirsiniz. Eğer bu çalışmaya gönüllü olarak katkıda bulunmayı kabul ediyorsanız lütfen sonraki bölümlerde yer alan soruları yanıtlamaya geçiniz ve lütfen her soru için bir seçenek işaretleyiniz.

Araştırmaya sağlayacağınız katkılar için teşekkür ederiz.

Araş. Gör. Celal İLER
ODTÜ Eğitim Fakültesi

Yrd. Doç. Dr. Refika OLGAN
ODTÜ Eğitim Fakültesi

1. Yaşınız:
2. Cinsiyet: Kadın Erkek
3. Sınıf: 2. Sınıf 3. Sınıf 4. Sınıf
4. Okuduğunuz Üniversite :
.....
5. Üniversite Genel Not Ortalamanız

6. Kaynařtırma eęitimi ile ilgili daha nce herhangi bir ders aldınız mı? Evet Hayır
.....

Cevabınız **Evet** ise Sayısı : _____

- **Derslerin** adlarını ya da kapsamını belirtiniz. (Birden ok seenek iřaretleyebilirsiniz)
 - 1) zel Eęitim
 - 2) Kaynařtırma Eęitimi
 - 3) Staj Uygulamaları
 - 4) Lisede alınan dersler
 - 5) Dięer (aıklayınız)
- (Bir stteki soruya cevabınız **Evet** ise) Almıř olduęunuz derslerin, sizi kaynařtırma eęitimi verebilme konusunda ne kadar yeterli kıldığını dřnyorsunuz?

5	4	3	2	1
Gayet Yeterli ()	Yeterli ()	Kararsızım ()	Yeterli deęil ()	Hi yeterli deęil ()

**APPENDIX B: The Pre-Service Teachers' Beliefs Related to Inclusion Scale-
Turkish Form**

Öğretmen Adaylarının Kaynaştırma Eğitimine Yönelik İnançları Ölçeği

Anket için **Doğru** ya da **Yanlış** cevap yoktur. Lütfen size en uygun gelen maddeyi işaretleyerek **tüm soruları** yanıtlayınız.

	Maddeler	Kesinlikle Katılmıyorum	Katılmıyorum	Kararsızım	Katılıyorum	Kesinlikle Katılıyorum
1	Özel gereksinimi olan çocukların okul öncesi sınıflarına dâhil edilmesi, o sınıftaki diğer çocuklar için de yararlıdır.	1 O	2 O	3 O	4 O	5 O
2	Kaynaştırma eğitimi, özel gereksinimi olan çocukların sosyal olarak bağımsız olmalarını destekler.	1 O	2 O	3 O	4 O	5 O
3	Okul öncesi sınıflarında yapılan çalışmalar, özel gereksinimi olan çocukların akademik gelişimlerini destekler.	1 O	2 O	3 O	4 O	5 O
4	Kaynaştırma eğitimi, özel gereksinimi olan ve olmayan çocuklar arasındaki bireysel farklılıkların anlaşılmasını ve kabul edilmesini kolaylaştırır.	1 O	2 O	3 O	4 O	5 O
5	Kaynaştırma eğitimi, özel gereksinimi olan çocukların özgüven gelişimini destekler.	1 O	2 O	3 O	4 O	5 O
6	Özel gereksinimi olan çocuklar okul öncesi sınıflarına yerleştirildiklerinde kendilerine yönelik “farklı” ve “başarısız” gibi ön vargılardan kurtulurlar.	1 O	2 O	3 O	4 O	5 O
7	Okul öncesi sınıflarına yerleştirilen özel gereksinimi olan çocukların sınıf düzenini bozma olasılığı yüksektir.	1 O	2 O	3 O	4 O	5 O
8	Özel gereksinimi olan çocukların sınıf içerisinde sergilediği davranışlar diğer çocuklar için olumsuz örnek oluşturur.	1 O	2 O	3 O	4 O	5 O

	Maddeler	Kesinlikle Katılmıyorum	Katılmıyorum	Kararsızım	Katılıyorum	Kesinlikle Katılıyorum
9	Özel gereksinimi olan çocukların okul öncesi sınıflarında davranış problemleri sergileme olasılıkları yüksektir.	1 O	2 O	3 O	4 O	5 O
10	Okul öncesi sınıflarında sunulan ortam, özel gereksinimi olan çocukların bilişsel ve davranışsal karmaşa yaşamasına yol açar.	1 O	2 O	3 O	4 O	5 O
11	Özel gereksinimi olan çocukların ihtiyaç duyabileceği fazladan ilgi, sınıf içindeki diğer çocuklar için bir dezavantaj oluşturur.	1 O	2 O	3 O	4 O	5 O
12	Özel gereksinimi olan ve olmayan çocukların beraber oldukları okul öncesi kaynaştırma sınıflarında sınıf düzeninin sağlanması zordur.	1 O	2 O	3 O	4 O	5 O

➔ Bana göre, aşağıda belirtilen özel gereksinimlere sahip olan çocuklar okul öncesi eğitim sınıflarında **eğitim görebilirler**:

	Maddeler	Kesinlikle Katılmıyorum	Katılmıyorum	Kararsızım	Katılıyorum	Kesinlikle Katılıyorum
1.	Özel Öğrenme Güçlüğü Olan Çocuklar	1 O	2 O	3 O	4 O	5 O
2.	Duygusal, Davranışsal ve Sosyal Uyum Güçlüğü Olan Çocuklar	1 O	2 O	3 O	4 O	5 O
3.	İşitme Yetersizliği Olan Çocuklar	1 O	2 O	3 O	4 O	5 O
4.	Görme Yetersizliği Olan Çocuklar	1 O	2 O	3 O	4 O	5 O
5.	Zihinsel Öğrenme Yetersizliği Olan Çocuklar	1 O	2 O	3 O	4 O	5 O
6.	Ortopedik Yetersizliği Olan Çocuklar	1 O	2 O	3 O	4 O	5 O
7.	Dil ve Konuşma Güçlüğü Olan Çocuklar	1 O	2 O	3 O	4 O	5 O
8.	Otistik Özellikler Gösteren Çocuklar	1 O	2 O	3 O	4 O	5 O
9.	Üstün Zekâ ve Üstün Yeteneği Olan Çocuklar	1 O	2 O	3 O	4 O	5 O
10.	Dikkat Eksikliği ve Hiperaktivite Bozukluğu Gösteren Çocuklar	1 O	2 O	3 O	4 O	5 O
11.	Uzun Süreli Rahatsızlıkları Olan Çocuklar	1 O	2 O	3 O	4 O	5 O


➔ Okul öncesi öğretmen adayı olarak aşağıda belirtilen özel gereksinimlere sahip olan çocuklara okul öncesi eğitim sınıflarında **eğitim verebileceğime inanıyorum.**

	Maddeler	Kesinlikle Katılmıyorum	Katılmıyorum	Kararsızım	Katılıyorum	Kesinlikle Katılıyorum
1.	Özel Öğrenme Güçlüğü Olan Çocuklar	1 O	2 O	3 O	4 O	5 O
2.	Duygusal, Davranışsal ve Sosyal Uyum Güçlüğü Olan Çocuklar	1 O	2 O	3 O	4 O	5 O
3.	İşitme Yetersizliği Olan Çocuklar	1 O	2 O	3 O	4 O	5 O
4.	Görme Yetersizliği Olan Çocuklar	1 O	2 O	3 O	4 O	5 O
5.	Zihinsel Öğrenme Yetersizliği Olan Çocuklar	1 O	2 O	3 O	4 O	5 O
6.	Ortopedik Yetersizliği Olan Çocuklar	1 O	2 O	3 O	4 O	5 O
7.	Dil ve Konuşma Güçlüğü Olan Çocuklar	1 O	2 O	3 O	4 O	5 O
8.	Otistik Özellikler Gösteren Çocuklar	1 O	2 O	3 O	4 O	5 O
9.	Üstün Zekâ ve Üstün Yeteneği Olan Çocuklar	1 O	2 O	3 O	4 O	5 O
10.	Dikkat Eksikliği ve Hiperaktivite Bozukluğu Gösteren Çocuklar	1 O	2 O	3 O	4 O	5 O
11.	Uzun Süreli Rahatsızlıkları Olan Çocuklar	1 O	2 O	3 O	4 O	5 O

APPENDIX C: The Big Five Personality Inventory- Turkish Form

Beş Faktör Kişilik Envanteri

Anket için **Doğru** ya da **Yanlış** cevap yoktur. Lütfen sizi en iyi tanımlayan rakamı her bir özelliğin yanına işaretleyiniz.

	Kendimi biri olarak görüyorum 	Kesinlikle Katılmıyorum	Katılmıyorum	Kararsızım	Katlıyorum	Kesinlikle Katlıyorum
1	Konuşkan	1	2	3	4	5
2	Başkalarında hata arayan	1	2	3	4	5
3	İşini tam yapan	1	2	3	4	5
4	Bunalımlı, melankolik	1	2	3	4	5
5	Orijinal, yeni görüşler ortaya koyan	1	2	3	4	5
6	Ketum/vakur	1	2	3	4	5
7	Yardımsaver ve çıkarıcı olmayan	1	2	3	4	5
8	Biraz umursamaz	1	2	3	4	5
9	Rahat, stresle kolay baş eden	1	2	3	4	5
10	Çok değişik konuları merak eden	1	2	3	4	5
11	Enerji dolu	1	2	3	4	5
12	Başkalarıyla sürekli didişen	1	2	3	4	5
13	Güvenilir bir çalışan	1	2	3	4	5
14	Gergin olabilen	1	2	3	4	5
15	Maharetli, derin düşünen	1	2	3	4	5
16	Heyecan yaratabilen	1	2	3	4	5
17	Affedici bir yapıya sahip	1	2	3	4	5
18	Dağınık olma eğiliminde	1	2	3	4	5
19	Çok endişelenen	1	2	3	4	5
20	Hayal gücü yüksek	1	2	3	4	5
21	Sessiz bir yapıda	1	2	3	4	5
22	Genellikle başkalarına güvenen	1	2	3	4	5
23	Tembel olma eğiliminde olan	1	2	3	4	5
24	Duygusal olarak dengeli, kolayca keyfi kaçmayan	1	2	3	4	5

	Kendimi biri olarak görüyorum 	Kesinlikle Katılmıyorum	Katılmıyorum	Kararsızım	Katılıyorum	Kesinlikle Katılıyorum
25	Keşfeden, icat eden	1	2	3	4	5
26	Atılgan bir kişiliğe sahip	1	2	3	4	5
27	Soğuk ve mesafeli olabilen	1	2	3	4	5
28	Görevi tamamlanıncaya kadar sebat edebilen	1	2	3	4	5
29	Dakikası dakikasına uymayan	1	2	3	4	5
30	Sanata ve estetik değerlere önem veren	1	2	3	4	5
31	Bazen utangaç, çekingen olan	1	2	3	4	5
32	Hemen hemen herkese karşı saygılı ve nazik olan	1	2	3	4	5
33	İşleri verimli yapan	1	2	3	4	5
34	Gergin ortamlarda sakin kalabilen	1	2	3	4	5
35	Rutin işleri yapmayı tercih eden	1	2	3	4	5
36	Sosyal, girişken	1	2	3	4	5
37	Bazen başkalarına kaba davranabilen	1	2	3	4	5
38	Planlar yapan ve bunları takip eden	1	2	3	4	5
39	Kolayca sinirlenen	1	2	3	4	5
40	Düşünmeyi seven, fikirler geliştirebilen	1	2	3	4	5
41	Sanata ilgisi çok az olan	1	2	3	4	5
42	Başkalarıyla işbirliği yapmayı seven	1	2	3	4	5
43	Kolaylıkla dikkati dağılan	1	2	3	4	5
44	Sanat, müzik ve edebiyatta çok bilgili	1	2	3	4	5

Katılımınız için teşekkür ederiz.

APPENDIX D: Turkish Summary

GİRİŞ

Dünya nüfusunun yaklaşık yarım milyardan fazlasının zihinsel, fiziksel ve duysal özel gereksinimleri oldukları bilinmektedir. Bu özel gereksinimleri olan bireylerin yaklaşık % 80'nin gelişmekte olan ülkelerde yaşamaktadır. Dünya üzerinde yaklaşık 140 milyon çocuğun; özel gereksinimlerinin olması ya da kız çocukların okula gönderilmemesi gibi çeşitli nedenlerle eğitim imkânlarından mahrum bırakıldıkları bilinmektedir (UNESCO, 2005). Bu engellemelere rağmen özel gereksinimli çocukların büyük bir çoğunluğunun genel eğitim sınıflarında diğer akranları ile birlikte eğitim öğretim imkânlarından faydalanabilmektedirler. Özel gereksinimi olan çocuklar genel eğitim sistemi içerisinde dört ayrı şekilde eğitim öğretimlerine devam edebilmektedirler. Bunlar sırasıyla; özel eğitim okulları, özel eğitim sınıfları, kaynak oda ve genel eğitim sınıflarıdır (McLeskey & Henry, 1999). Bu dört ayrı farklı eğitim uygulaması içerisinde genel eğitim sınıfları içerisinde gerçekleştirilen eğitim, kaynaştırma ya da kaynaştırma yoluyla eğitim olarak adlandırılmakta olup, özel gereksinimli çocuklar için en uygun eğitim şekli olarak kabul edilmektedir. Kaynaştırma yoluyla eğitim, sosyal adalet ilkesine dayanan genel eğitim sınıfları içerisinde tüm bireylerin zihinsel, fiziksel ve duysal özel gereksinimleri göz önünde bulundurulmaksızın aynı yaşlardaki akranları ile eşit eğitim öğretim imkânlarına sahip olmasını amaçlamaktadır (Loreman, Sharma, Forlin & Earle, 2005). Kaynaştırma eğitiminin felsefesi eğitimde fırsat eşitliğine dayanmakta olup, özel gereksinimli bireylerin tüm eğitim öğretim olanaklarına hiçbir sınırlama ve engelleme olmaksızın ulaşabilmelerini ve demokratik bir toplumun bir parçası olabilmeleri amaçlamaktadır (Akçamete, 1998). Özel gereksinimli bireylerin eğitim imkânlarına genel anlamda bakıldığında, günümüze değin özel gereksinimli bireylere yönelik pek çok farklı eğitim öğretim hizmetlerinin uygulamaya koyulduğu ve bunların sayısının artarak devam ettiği söylenebilmektedir (McLeskey & Henry, 1999). Farklı özel eğitim uygulamaları göz önünde bulundurulduğunda, kaynaştırma yoluyla eğitimin özel gereksinimli bireylere yönelik verilen eğitim öğretim hizmetlerinin kalitesinin artması yönünde

önemli bir alternatif çözüm yolu olmasının yanında, eğitim kuramlarında eğitim öğretim görmekte olan özel gereksinimli bireylerin sayısının artmasına da büyük katkı sağladığı bilinmektedir (Odom, 2000). Bunlar ek olarak kaynaştırma eğitimi eğitim öğretim imkânlarının zenginleştirilmesine olanak tanınmasının yanında, toplumun bireysel farklılıkların saygı ve hoşgörü ile karşılanması yönünde büyük bir kolaylaştırıcı etkiye sahip olduğu da bir gerçektir (UNESCO, 2005).

Kaynaştırma eğitimi özel gereksinimleri olan ve olmayan tüm çocukların akranları, öğretmenleri ve diğer tüm okul personeli ile sosyal ilişkiler kurmak sureti ile sosyalleşmeleri sürecine fayda sağlamaktadır. Kaynaştırma eğitiminin verildiği eğitim kurumlarındaki tüm bireyler birlikte çalışabilme imkânına sahip olmakla birlikte birbirlerine pozitif yönde tutum geliştirme imkânı da bulmaktadırlar (Odom, Buysse & Soukakou, 2011). Bunun yanında öğretmenlerin kaynaştırma eğitiminin bireysel farklılıklara olan farkındalığın artması için bir fırsat olduğu yönündeki inançları bilinmektedir. Kaynaştırma eğitimi özel gereksinimi olmayan çocukların başkalarının ihtiyaçlarına yönelik farkındalığının artması, başkalarına yardımcı olmayı öğrenmeleri ve özel gereksinimli arkadaşlarına rol model olarak onların sosyal ve akademik hayatlarına ışık tutacak şekilde istendik yönde davranış ve becerileri sınıf ortamlarında gösterebilmelerine de imkân vermektedir. Bu noktada özel gereksinimi olan çocuklar da kaynaştırma eğitimi ile bir grubun üyesi olarak kabul edilmeleri ve diğer arkadaşlarının gösterecekleri sosyal ve bilişsel örnek davranışlarla sosyal hayata daha hazır bir konumda başlama imkânına sahip olmaktadır (Lieber ve ark. 1998). Benzer şekilde özel gereksinimli çocuklar akranları, öğretmenleri ve diğer okul personellerinden gelebilecek ayrımcılıklardan, olumsuz tutum ve davranışlardan yine kaynaştırma eğitimi ile korunmuş olacaklardır (Odom, Buysse & Soukakou, 2011).

Bütün bu olumlu yönlerine rağmen, ilgili alan yazın göz önünde bulundurulduğunda kaynaştırma eğitimi öğretmen, aile, okul müdürü ve politikacılar açısından zor bir konu olarak değerlendirilmektedir. Bu noktadan hareketle öğretmenlerin kaynaştırma eğitimi içerisindeki rolü ve sorumluluklarına bakılacak olursa, günümüze kadar bir rol değişim sürecinin gerçekleştiği gözlenmektedir. Bu değişimin etkisiyle öğretmenleri özel gereksinimli çocukların ihtiyaçlarının daha iyi anlaşılması konusunda aslı

sorumlu olarak kabul edilmelerinin yanında, onlara çocukların gelişimsel düzeylerini göz önünde bulundurarak mevcut müfredatlarında bazı düzenlemeler yapmaları ve tüm çocukların etkileşim halinde bulunabilecekleri uygun eğitim ortamları düzenlemeleri konusunda da ekstra sorumluluklar getirmiştir (Lieber et al, 1997). Bu noktadan yola çıkarak kaynaştırma eğitiminin en önemli unsuru olarak öğretmenler ve öğretmenlerin kaynaştırma eğitimine yönelik sahip olduğu inançlar karşımıza çıkmaktadır (Baum & McMurray-Schwarz, 2003). Buna paralel olarak öğretmen adayları lisans eğitimlerine başlarken öğrenciler, sınıflar ve öğretmenlik mesleğine dair bir takım inançlarla başlamaktadırlar (Kagan, 1992; Pajares, 1992). Öğretmen adaylarının sahip oldukları bu inançların anlaşılması kaynaştırma eğitime yönelik inançların değiştirilmesi ve kaynaştırma eğitime yönelik standart uygulamaların geliştirilebilmesi bakımından çok önemlidir (Stoiber, Gettinger & Goetz, 1998). İnançlar, psikolojik bakımdan olduğuna sahip olunan ve hakkında doğru olduğuna inanılan fikir, önerme ve anlayışların tamamı olarak tanımlanır (Richardson, 1996). İnançların yargı ve değerlendirmelere dayalı olduğu konusunda genel bir görüş birliği vardır. Bireylerin inanç sistemleri ise mevcut inançları yanı sıra sahip oldukları tutum ve değerler tarafından şekillenmektedir. Bu sebeplerle bireylerin inançlarının anlaşılabilmesi için çeşitli gözlemler yanı sıra bireylerin ne söyledikleri ne yaptıkları ve ne planladıklarının da tespit edilmesi gerekli görülmektedir (Pajares, 1992). Özellikle öğretmenlerin sahip oldukları inançlar onların öğretmenlik uygulamaları noktasında çok önemli bir rol oynamaktadır (Pajares, 1992; Stoiber, Gettinger & Goetz, 1998). Öğretmenlerin sahip oldukları inançları kişisel hayat tecrübeleri, eğitim öğretim hayatlarından edindikleri tecrübeler ve lisans eğitimleri sırasında aldıkları öğretmenlik mesleğine dair aldıkları dersler ile şekillenmektedir (Richardson, 1996). Öğretmen adaylarının sahip oldukları inançların uzun süre kalıcı özellikte olması nedeni ile bu inançların belirlenmesi onların gelecekte gerçekleştirecekleri öğretmenlik uygulamalarına dair çok önemli çıkarımlar yapılmasına olanak vermektedir (Begum, 2012; Johnson & Hall, 2007; Nespor, 1985; Pajares, 1992). Pajares'e göre (1992) öğretmen inançlarının tespit öğretmenlerin davranışlarının ve onların öğretmenlik uygulamalarının arkasında yatan temel nedenlerin anlaşılması bakımından çok önemlidir. Öğretmen adaylarının gelecekteki gösterecekleri sınıf içi performansları bu eğitim programları doğrultusunda aldıkları lisans eğitimi süresince

şekillenmekte (Merdith et al, 2000) ve kaynaştırma sınıfların da eğitim verebilecek donanımda yetiştirmeleri bakımında önem arz etmektedir. Bu kapsamdan bakılınca öğretmen adaylarının sahip oldukları inançlarının belirlenmesi eğitim fakültelerinde uygulanmakta olan eğitim programlarının ve gerçekleştirilen uygulamalarının kapsam ve etkililiğinin değerlendirmesi bakımından önemlidir.

Öğretmen adaylarının sahip oldukları genel inançların yanında, kendilerinin öz-yeterliliklerine dair inançları da onların göstermiş oldukları davranışların ve sahip oldukları motivasyonlarının önemli bir parçası olarak kabul edilmektedir (Pajares, 1992).

Özellikle lisans eğitimi döneminde öğretmen adaylarının sahip oldukları inançlar daha esnek ve değiştirilebilir niteliktedir ve bu dönemde daha kolay değiştirilebilmektedir (Brownlee, Purdie & Boulton-Lewis, 2001). Bu noktada öğretmen adaylarının sahip oldukları inançların ortaya konulmasını ve sonrasında olumlu yönde değiştirilesi bir zorunluluk olmakla birlikte fakülte hocalarına bu noktada önemli sorumluluklar düşmektedir (Kagan, 1992; Pajares, 1992). Bir ülkenin geleceğini yetiştirecek olan öğretmen adaylarının lisans eğitime alınmaları noktasında onların öğretmenlik mesleğine yönelik sahip oldukları inançların bir seçim kriteri olarak göz önünde bulundurulması doğrultusunda düşünceler gündeme getirilmiştir (Rath, 2001). Çünkü öğretmenler ortaya koymuş oldukları tüm olumlu ve olumsuz davranışları ile öğrencileri için çok önemli birer rol modelidir. Çocukların farklılıkları erken yaşlardan itibaren ayırt edebilmeye başladıkları bilinmekle birlikte, onların sahip oldukları önyargıları ve ayrımcı davranışları öğretmenlerin rol modeller olarak farklılıklara karşı göstermiş oldukları saygı ölçüsünde olumlu yönde değişebilmektedir (Divrengi & Aktan, 2011). Bu bakımdan öğretmeler kişilik özellikleri ve davranış biçimleri ile öğrencilerine karşı ayrıca bir sorumluluk sahibidirler (Vorkapic, 2012). Öğretmenlerin kişilik özellikleri ayrıca öğrencilerin öğrenmeleri ve onlara verilen eğitimin etkililiği, çalışma becerileri, güdülenmeleri ve sınıf içi performansları bakımından da önemlidir (Stronge, 2007; Musgrave-Marquart, Bromley & Dalley, 1997; Hart, Stasson, Mahoney & Story, 2007). Kişilik, kişinin yaşamına yön ve biçim veren biliş, duyuş ve davranışların karmaşık bir organizasyonu olarak tanımlanmaktadır (John, Robins & Pervin, 2008). Öğretmenlerin sahip oldukları kişilik özellikleri onların gelecekteki

performanslarını etkileyen en önemli niteliklerden biri olarak göz önünde bulundurulmaktadır (Pigge & Marso, 1997; Stronge, 2002). Okul öncesi dönemden itibaren çocukların kişilik gelişimleri için ailelerinden sonra öğretmenleri ve okul ortamları çok önemli bir yere sahiptir (Hawkes, 1991). Bu sebeplerden ötürü okul öncesi dönemden itibaren öğretmenlerin kişilikleri dikkatli bir şekilde incelenmeli ve bu bulgular ışığında arzu edilen eğitim öğretim ortamlarının oluşturulmasına katkı sağlanılmalıdır (Nowak-Fabrykowski & Caldwell, 2002).

Çalışmanın Önemi ve Amacı

Okul öncesi eğitim ve özel eğitim gelişmeye devam eden iki önemli alan olmakla birlikte bu iki alanda çalışabilecek nitelikte öğretmen sayısının yetersiz olması uzmanlar arasında bir tartışma konusudur (Senel, 1998). 1983 yılında çıkarılan Özel gereksinimli bireyler hakkındaki kanun ile Türkiye’de kaynaştırma uygulamaları başlamış olup, özel gereksinimli çocuklara diğer akranları ile aynı sınıf ortamlarında eğitim görme imkânı verilmiş ve kaynaştırma uygulamaları özel gereksinimli çocukların eğitimi konusunda desteklenmiştir (Eğitim Reformu Girişimi-ERG, 2011). Özel gereksinimli bireyler hakkında çıkan bu kanun ile okul idaresine, öğretmenlere ve okullardaki rehberlik servislerine özel gereksinimli bireylere yönelik yasal sorumluluklar getirilmiş, bu sayede 1983 yılından itibaren kaynaştırma eğitiminden faydalanan öğrenci sayısı artarak devam etmektedir (Sucuoğlu, 2013). Kaynaştırma eğitimin başarılı olabilmesi noktasından öğretmenlerin sahip oldukları inançlar (Stoiber et al, 1998) ve kişilik özellikleri (Stronge, 2002) birer anahtar rol üstlenmekte ve verilecek eğitimin etkililiğini belirlemektedir (Decker & Rimm-Kaufman, 2008). Türkiye’de öğretmen adaylarının hem kaynaştırmaya yönelik inançları hem de kişilik özellikleri ile ilgili çalışmalar sınırlı sayıdadır. Bu noktadan yola çıkarak yapılan bu çalışma Ankara’daki biri özel toplam beş üniversiteden 907 okul öncesi öğretmen adayı ile gerçekleştirilmiştir.

Bu çalışmanın 4 ana araştırma sorusu bulunmaktadır.

1. Okul öncesi öğretmen adaylarının kaynaştırmaya ilişkin inançları nelerdir?

2. Okul öncesi öğretmen adaylarının kişilik özellikleri nelerdir?
3. Okul öncesi öğretmen adaylarının kaynaştırma ile ilgili ders alıp almamaları kaynaştırmaya ilişkin inançlarının üzerinde anlamlı bir değişime sebep olmakta mıdır?
4. Okul öncesi öğretmen adaylarının kişilik özelliklerinin onların kaynaştırmaya yönelik inançları üzerinde yordayıcı etkisi var mıdır?

YÖNTEM

Evren ve Örneklem

Araştırma evrenini, Ankara il merkezinde bulunan biri özel toplam beş üniversitede 2., 3., ve 4. sınıfa devam etmekte olan okul öncesi öğretmen adayları oluşturmaktadır. Araştırmanın katılımcıları kolaylık örnekleme yolu ile seçilmiş ve araştırmaya gönüllü katılmışlardır. Araştırmanın örneklemini 907 öğretmen adayından oluşturmaktadır. Katılımcıların çoğunluğunu kadınlar (94 %) oluşturmakta ve katılımcıların % 51.4' ü kaynaştırma eğitimi ile ilgili en az bir ders aldıklarını belirtmişlerdir.

Araştırmanın Yöntemi

Bu araştırmada nicel çalışmalarda kullanılan tarama yöntemi kullanılmıştır. Tarama yöntemi belli bir grubun belirli yönlerini tespit etmek amacıyla bilgi toplama metodu olarak tanımlanmaktadır (Fraenkel, Wallen & Hyun, 2012).

Veri Toplama Araçları

Çalışmanın verileri araştırmacı tarafından geliştirilen kişisel bilgi formu, Türkçe 'ye uyarlaması Sümer ve Sümer (2005) tarafından yapılan Beş Faktör Kişilik Envanteri, ve El- Ashry (2009) tarafından geliştirilen ve Türkçe 'ye uyarlaması araştırmacı tarafından yapılan Öğretmen Adaylarının Kaynaştırma Eğitime Yönelik İnançları Ölçeği kullanılarak toplanmıştır. Araştırmacı tarafından Türkçe' ye uyarlaması yapılan

Öğretmen Adaylarının Kaynaştırma Eğitimine Yönelik İnançları Ölçeğinin uyarlama sürecinde uzman görüşleri alınmış, pilot çalışması gerçekleştirilmiş ve ölçeğin geçerlilik ve güvenilirliği çeşitli istatistiksel analizlerle teyit edilmiştir. Ölçeğin iki faktörlü bir yapıya sahip olduğu kanaatine varılmıştır.

Veri Toplama Süreci

Uygulamalı Etik Araştırma Merkezi'nden ve katılımcı üniversitelerin rektörlüklerinden etik izinler alındıktan sonra Ekim 2014- Aralık 2014 tarihleri arasında mevcut çalışma için toplanmıştır. Katılımcıların gönüllülük esasına dayalı olarak çalışmaya katılımı sağlanmış ve çalışma için veriler sınıf ortamına araştırmacı tarafından toplanmıştır. Anketin doldurulabilmesi ortalama 25 dakika sürmüştür.

Veri Analiz Süreci

Bu çalışma için toplanan veriler nicel araştırma yöntemleri ile analiz edilmiştir. İlk ve ikinci araştırma soruları için betimleyici istatistiksel analizler, üçüncü ve dördüncü araştırma soruları için de çıkarımsal istatistiksel analizler gerçekleştirilmiştir.

BULGULAR

Araştırma sonuçları öğretmen adaylarının genel anlamda okul öncesi dönemde özel gereksinimli çocukların kaynaştırma eğitimine yönelik inançları; kaynaştırma eğitimin yararlarına yönelik yüksek düzeyde ($M= 4.12$) ve kaynaştırma sınıflarında sınıf yönetimine yönelik orta düzeyde ($M= 3.21$) pozitif inançlara sahip oldukları ortaya konmuştur. Çoklu regresyon analizi sonuçları öğretmen adaylarının yeniliklere açıklık ($\beta = .147, p = .000$), sorumluluk ($\beta = .126, p = .000$) ve geçimlilik ($\beta = .106, p = .004$) kişilik özelliklerinin kaynaştırmanın yararlarına yönelik inançları üzerinde etki büyüklüğü küçük olmakla birlikte istatistiksel olarak anlamlı bir yordayıcı etkisi olduğunu göstermiştir. Yine çoklu regresyon analizi sonuçları öğretmen adaylarının sorumluluk ($\beta = .094, p = .008$) kişilik özelliğinin kaynaştırma sınıflarında sınıf

yönetimine yönelik inançları üzerinde etki büyüklüğü küçük olmakla birlikte istatistiksel olarak anlamlı bir yordayıcı etkisi olduğunu göstermiştir.

MANOVA analizi sonuçlarına göre kaynaştırma eğitimi ile ilgi ders alan ($M= 4.19$, $SD= .49$) ve almayan ($M= 4.06$, $SD= .54$) okul öncesi öğretmen adaylarının kaynaştırmanın yararlarına ilişkin inançları üzerinde etki büyüklüğü küçük olmakla birlikte anlamlı bir değişime sebep olduğu sonucuna ulaşılmıştır. Yine MANOVA analizi sonuçlarına göre kaynaştırma eğitimi ile ilgi ders alan ($M= 3.29$, $SD= .69$) ve almayan ($M= 3.13$, $SD= .68$) okul öncesi öğretmen adaylarının kaynaştırma sınıflarında sınıf yönetimine yönelik inançları üzerinde etki büyüklüğü küçük olmakla birlikte anlamlı bir değişime sebep olduğu sonucuna ulaşılmıştır.

TARTIŞMA

Çalışmanın birinci araştırma sorusunda okul öncesi öğretmen adaylarını kaynaştırma eğitimine ilişkin genel inançları, özel gereksinimlerine göre hangi özel gereksinim sahibi çocuğun kaynaştırma eğitiminden faydalanabileceklerine yönelik sahip oldukları inançları ve yine özel gereksinimlerine göre kendilerini hangi özel gereksinim sahibi çocuklara yönelik eğitim verebilecek yeterlilikte görmelerine yönelik öz-yeterlilik inançları incelenmiştir.

Bu çalışmada öncesi öğretmen adayları kaynaştırma eğitimine yönelik sahip oldukları inançları özel gereksinim nedeni ne olursa olsun tüm çocukların kaynaştırma eğitiminden diğer akranları gibi faydalanabilmesi gerektiğine yönelik inançları ifade etmişlerdir. Öğretmen adaylarının ifade ettikleri bu inançları alan yazındaki daha önceki çalışma sonuçları ile benzerlik göstermektedir. Alan yazındaki daha önceki çalışmalara bakıldığında benzer şekilde öğretmen ve öğretmen adaylarının kaynaştırma eğitimine yönelik inançları, tüm özel gereksinim sahibi çocukların kaynaştırma eğitiminden faydalanabilmeleri gerektiği yönündedir. Alan yazındaki daha önceki çalışmalarda, öğretmen ve öğretmen adaylarının kaynaştırma eğitimine yönelik inançları; kaynaştırma eğitiminin özel gereksinimli çocukların iletişim

kabiliyet ve kapasitelerini artırdığı, kendi akranları başta olmak üzere öğretmenleri ve tüm okul personeli ile birlikte çalışabilme becerisi kazandırdığı ve okul öncesi eğitim döneminden itibaren akademik gelişimlerine pozitif yönde etki etkiye sahip olması nedeni ile kaynaştırma eğitime yönelik pozitif inançlara sahip olduklarını ifade etmişlerdir (Stainback & Stainback, 1992; Romi & Leyser, 2006; Burke & Sutherland, 2004).

Bu çalışmada öğretmen adaylarının hangi özel gereksinimli çocukların kaynaştırma eğitime katılabileceğine ilişkin inançları göz önüne alındığında, tüm özel gereksinimli çocukların kaynaştırma eğitime dahil edilmesi yönündeki inançlarının yanı sıra, dikkat eksikliği ve hiperaktivite bozukluğu olan çocukların en yüksek ortalamaya sahip olduğu ve kaynaştırma eğitiminden en üst düzeyde faydalanabileceklerine dair öğretmen adaylarının inançlara sahip oldukları görülmektedir. Öteki taraftan bu çalışma sonuçlarına göre zihinsel öğrenme güçlüğü olan çocukların en düşük ortalamaya sahip oldukları ve diğer özel gereksinim nedenlerine kıyasla daha düşük seviyede kaynaştırma eğitiminden faydalanabileceklerine dair öğretmen inançları bu çalışma kapsamında elde edilmiştir. Alan yazında yapılan daha önceki çalışmalarda öğretmen adaylarının kaynaştırma eğitiminden tüm özel gereksinimli çocukların faydalanabileceğine yönelik olumlu inançları olmakla birlikte (Cook, 2002), bazı çalışmalar spesifik olarak çocukların özel gereksinimlere yönelik öğretmenlerin görüşlerini araştırmışlar. Diken (2006) bu kapsamda öğretmen adaylarının zihinsel öğrenme güçlüğü olan çocuklara yönelik olumlu tutumlara sahip olduğu sonucuna ulaşmıştır. Öteki taraftan Semmel ve arkadaşlarının (1991) yaptıkları çalışmada öğretmenlerin özel öğrenme güçlüğü olan çocuklarla kaynaştırma sınıflarında çalışma noktasında zorluklar yaşadıklarını bunun sebebinin de kaynaştırma sınıflarında sınıf yönetimi konusunda yaşanan sorunlar olduğu şeklinde ifade edilmiştir.

Bu çalışmada okul öncesi öğretmen adayları kaynaştırma ortamlarındaki çocukların özel gereksinimleri göz önüne alındığında kendilerini hangi özel gereksinim sahibi çocuklara yönelik eğitim verebilecek yeterlilikte gördüklerine ilişkin öz-yeterlilik inançları incelenmiştir. Öğretmen adaylarının genel anlamda tüm özel gereksinim sahibi çocuklara orta düzeyde eğitim verebilecek öz-yeterlilik inancına sahip oldukları

sonucuna varılmıştır. Bu çalışma kapsamında okul öncesi öğretmen adaylarının kaynaştırma eğitimi kapsamında en yüksek düzeyde eğitim verebileceklerine dair öz-yeterlilik inancına sahip oldukları çocukların dil konuşma güçlüğü yaşayan çocuklar olduğu, en düşük düzeyde eğitim verebileceklerine dair öz-yeterlilik inancına sahip oldukları çocuklarınsa zihinsel öğrenme güçlüğü olan çocuklar olduğu sonucuna ulaşılmıştır. Öğretmenlerin öz-yeterlilik inançlarının yüksek düzeyde olması onların çocukların ihtiyaçlarının karşılamak ve yeni metotları denemek ve kullanmak için daha istekli olmaları sonucunu beraberinde getirir (Romi & Leyser, 2006). Bu noktadan hareketle okul öncesi öğretmen adaylarının öz-yeterliliklerinin düşük olmaması onların gelecekte özel gereksinimli çocukların ihtiyaçlarına cevap verebilmesi ve kaynaştırma eğitiminin başarılı bir şekilde uygulanması noktasında çıkarım yapılmasına imkan verebilmektedir.

Bu çalışmada “Öğretmen Adaylarının Kaynaştırma Eğitimine Yönelik İnançları Ölçeği” kullanılarak okul öncesi öğretmen adaylarının kaynaştırma eğitiminin yararları ve kaynaştırma sınıflarında sınıf yönetimi hakkındaki inançları araştırılmıştır. Bu ölçek 2 alt boyuttan oluşmakta olup, sırasıyla kaynaştırmanın yararlarına ve kaynaştırma sınıflarında sınıf yönetimine yönelik öğretmen inançları şeklinde adlandırılmıştır. Betimleyici analiz sonuçlarına göre ölçeğin iki alt boyutunun ortalamaları sırasıyla kaynaştırmanın yararları (M= 4.12) ve kaynaştırma sınıflarında sınıf yönetimi (M= 3.21) şeklindedir. Öğretmen adaylarının kaynaştırmanın yararlarına yönelik inançları için elde edilen bu çalışmanın sonuçları, ilgili alan yazındaki çalışmalarla tutarlılık göstermekte olup, öğretmen adaylarının çoğunluğunun kaynaştırmanın yararlı bir eğitim uygulaması olduğu yönündedir. Okul öncesi öğretmen adayları kaynaştırma eğitiminin özel gereksinimleri olan ve olmayan çocukların birbirlerinin bireysel farklılıkları anlamaları ve kabul etmelerini desteklediğine yönelik inançlara sahipler (Avramidis et al., 2000; Lambe & Bones, 2006; Martinez, 2003; Romi & Leyser, 2006; Yellin et al., 2003).

Kaynaştırma sınıflarında sınıf yönetimine ilişkin öğretmen inançları için elde edilen bulgulara göre, öğretmen adaylarının çoğunluğunun kaynaştırma sınıflarında sınıf yönetimine ilişkin orta düzeyde olumlu inançlara sahip olmalarına rağmen, okul öncesi

sınıflarındaki özel gereksinimli çocukların sınıf içerisinde davranış problemleri oluşturabileceği ve sınıf yönetimi konusunda yaşanabilecek zorlukların da göz önünde bulundurulması gerektiği ifade etmişlerdir. Alan yazındaki benzer çalışmalara bakıldığında Verne' nin (2013) yapmış olduğu çalışmada benzer sonuçlar elde edilmiş olup, özel okullarda çalışan öğretmenlerin kaynaştıramaya yönelik pozitif inançlara sahip olmalarına ve desteklemelerine rağmen özel gereksinimli çocukların sınıf yönetimini zorlaştıracak davranışları ile sınıf içerisinde diğer çocuklar için olumsuz örnek teşkil edebileceği ortaya konmuştur.

Okul öncesi öğretmen adaylarının kişilik özellikleri “Beş Faktör Kişilik Envanteri” kullanılarak tespit edilmiş olup sırasıyla; açıklık, sorumluluk, dışadönüklük, geçimlilik ve duygusal dengesizlik boyutlarından oluşmaktadır. Bu çalışma sonuçlarına göre öğretmen adaylarının duygusal dengesizlik boyutu dışında tüm faktörler yüksek ortalama değere sahip olmakla birlikte geçimlilik kişilik özelliği diğer dört kişilik faktöründen daha yüksek bir ortalamaya sahiptir. Bu sonuçlar Decker ve Rimm-Kaufman (2008) çalışması ile benzerlik göstermekte olup, açıklık, sorumluluk, dışadönüklük, geçimlilik kişilik özelliklerinin yüksek ortalamaya sahip olması öğretmenlik mesleğine girecek kişilerin kararlılık, bağımsızlık, merak duygusu yüksek, güvenilir, esnek ve sosyal birer olmasını ifade etmektedir. Bu adı geçen özellikler öğretmenlik mesleğini icra edecek kişilerde olması istenen özellikler olmakla birlikte, duygusal dengesizlik özelliklerinin düşük ortalamaya sahip olması benzer şekilde istenilen özellikler olup ağırbaşlı, vefakâr, güvenilir ve soğukkanlı olma gibi istenilen kişilik özelliklerine sahip öğretmen adayları olmalarını ifade etmektedir.

Okul öncesi öğretmen adaylarının kaynaştırma uygulamalarına ilgili ders alıp almamalarının onların kaynaştırmaya ilişkin sahip oldukları inançların üzerinde anlamlı bir değişime sebep olup olmadığına yönelik MANOVA analizi sonuçlarına bakıldığında, okul öncesi öğretmen adaylarının kaynaştırmanın yararlarına ilişkin inançları üzerinde etki büyüklüğü küçük olmakla birlikte anlamlı bir değişime sebep olduğu sonucuna ulaşılmıştır. Yine MANOVA analizi sonuçlarına göre kaynaştırma eğitimi ile ilgili ders alan ve almayan okul öncesi öğretmen adaylarının kaynaştırma sınıflarında sınıf yönetimine yönelik inançları üzerinde etki büyüklüğü küçük olmakla birlikte anlamlı bir değişime sebep olduğu sonucuna ulaşılmıştır. Bu çalışmanın

sonuçları Verne (2013)'nin okul öncesi öğretmen adayları ile yapmış olduğu çalışmanın sonuçları ile benzerlik göstermekte olup, kaynaştırma uygulamaları ile ilgili daha fazla eğitim almış olan öğretmen adayların daha olumlu inançlara sahip oldukları tespit edilmiştir. Romi ve Leyser (2006)'in özel eğitim öğretmenleri ve normal sınıf öğretmenleri ile yapmış oldukları çalışmada özel eğitim öğretmenlerinin kaynaştırmaya yönelik daha olumlu tutumlara sahip oldukları tespit edilmiş olup, bu farklılığın sebebinin özel eğitim öğretmenlerinin lisans eğitimleri sırasında kaynaştırma ile ilgili daha fazla sayıda ders almış olmaları ile ilişkilendirilmiştir.

Okul öncesi öğretmen adaylarının sahip oldukları kişilik özelliklerinin onların kaynaştırmaya ilişkin sahip oldukları inançları üzerinde yordayıcı etkisi olup olmadığına yönelik çoklu regresyon analizi sonuçlarına bakıldığında, öğretmen adaylarının yeniliklere açıklık, sorumluluk ve geçimlilik kişilik özelliklerinin kaynaştırmanın yararlarına yönelik inançları üzerinde etki büyüklüğü küçük olmakla birlikte istatistiksel olarak anlamlı bir yordayıcı etkisi olduğu görülmektedir. Yine çoklu regresyon analizi sonuçları öğretmen adaylarının sorumluluk kişilik özelliğinin kaynaştırma sınıflarında öğretmen adaylarının sınıf yönetimine yönelik inançları üzerinde etki büyüklüğü küçük olmakla birlikte istatistiksel olarak anlamlı bir yordayıcı etkisi olduğunu tespit edilmiştir.

Uygulamaya Yönelik Öneriler

Bu çalışma okul öncesi öğretmen adaylarının kaynaştırmaya yönelik inançlarının ve kişilik özelliklerinin arasındaki ilişkilerin tespit edilmesi noktasında bir ilk adım teşkil etmektedir (Decker & Rimm-Kaufman, 2008).

Öğretmen inançlarının kaynaştırma eğitiminin başarısını belirleyici bir etkiye sahip olduğu kabul edilmekle birlikte, öğretmenlerin kişilik özelliklerinin inançlarını yordayabilmesi noktasında öğretmen adaylarının lisans eğitimine alınmaları noktasında bir seçim kriteri olarak göz önünde bulundurulması daha nitelikli öğretmen yetiştirilmesi ve eğitim kalitesinin artması noktasında yarar sağlayabileceği düşünülmektedir.

Okul öncesi öğretmen yetiştirme programları göz önüne alındığında kaynaştırma uygulamaları özel eğitim derslerinin içinde birkaç haftalık bir yer bulabilmekte ve bu durum öğretmen adaylarının kaynaştırma konusunda donanımlı bir şekilde yetişmelerine imkân vermemektedir. Bu noktada kaynaştırma eğitime yönelik seçmeli dersler açılması ve kaynaştırma eğitiminin verildiği eğitim kurumlarında staj uygulamaları ile öğretmen adayları kaynaştırmaya yönelik daha donanımlı bir şekilde mezun olabilmeleri sağlanıp, kaynaştırma eğitiminin daha başarılı şekilde uygulanmasına destek olunabilir.

İleriki Çalışmalara Yönelik Öneriler

Bu çalışmada kullanılan “Öğretmen Adaylarının Kaynaştırma Eğitime Yönelik İnançları Ölçeği” ne ek olarak öğretmen adayları ile görüşmeler yapıp daha detaylı bilgiler ışığında öğretmen adaylarını kaynaştırmaya olan inançları tespit edilebilir. Aynı ölçeği özel eğitim dersinden önce ve sonra uygulayarak deneysel bir araştırma metodu uygulanıp dersin öğretmen inançlarına nasıl bir etki yaptığı tespit edilebilir. Ayrıca görüşmeye katılan öğretmen adaylarının kaynaştırmaya yönelik inançları aynı ölçek kullanılarak sonraki yıllarda tekrar değerlendirilip anlamlı bir değişim olup olmadığı varsa nedenleri araştırılabilir.

APPENDIX E: METU Ethics Committee Permission

UYGULAMALI ETİK ARASTIRMA MERKEZİ
APPLIED ETHICS RESEARCH CENTER



ORTA DOĞU TEKNİK ÜNİVERSİTESİ
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05.08.2014

Gönderilen : Y.Doç.Dr. Refika Olgan
İlköğretim Bölümü

Gönderen : Prof. Dr. Canan Özgen
IAK Başkanı

İlgi : Etik Onayı

Danışmanlığını yapmış olduğunuz İlköğretim Bölümü öğrencisi Celal İler'in
"Okul Öncesi Öğretmen Adaylarının Kaynaştırma Eğitimin İle İlgili
İnançları ve Kişilik Özellikleri Arasındaki Olası İlişkilerin İncelenmesi"
isimli araştırması "İnsan Araştırmaları Komitesi" tarafından uygun
görüldükçe gerekli onay verilmiştir.

Bilgilerinize saygılarımla sunarım.

Etik Komite Onayı

Uygundur

05.08.2014

Prof.Dr. Canan Özgen
Uygulamalı Etik Araştırma Merkezi
(UEAM) Başkanı
ODTÜ 06531 ANKARA

E.G.

APPENDIX F: Tez Fotokopisi İzin Formu

TEZ FOTOKOPİSİ İZİN FORMU

ENSTİTÜ

Fen Bilimleri Enstitüsü	<input type="checkbox"/>
Sosyal Bilimler Enstitüsü	<input checked="" type="checkbox"/>
Uygulamalı Matematik Enstitüsü	<input type="checkbox"/>
Enformatik Enstitüsü	<input type="checkbox"/>
Deniz Bilimleri Enstitüsü	<input type="checkbox"/>

YAZARIN

Soyadı : İLER
Adı : Celal
Bölümü : İlköğretim Okul Öncesi Eğitimi

TEZİN ADI : Pre-Service Early Childhood Teachers' Beliefs on Inclusive Education with respect to Their Self-Reported Personality Traits

TEZİN TÜRÜ : Yüksek Lisans	<input checked="" type="checkbox"/>	Doktora	<input type="checkbox"/>
Tezimin tamamından kaynak gösterilmek şartıyla fotokopi alınabilir.			<input type="checkbox"/>
Tezimin içindekiler sayfası, özet, indeks sayfalarından ve/veya bir bölümünden kaynak gösterilmek şartıyla fotokopi alınabilir.			<input type="checkbox"/>
Tezimden bir bir (1) yıl süreyle fotokopi alınamaz.			<input checked="" type="checkbox"/>

TEZİN KÜTÜPHANEYE TESLİM TARİHİ: