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APPROACHES TO VALUES EDUCATION IN PRIMARY EDUCATION: AN INSTRUMENT VALIDATION STUDY TO MEASURE TEACHERS' APPROACHES TO VALUES EDUCATION

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APPROACHES TO VALUES EDUCATION IN PRIMARY EDUCATION: AN INSTRUMENT VALIDATION STUDY TO MEASURE TEACHERS' APPROACHES TO VALUES EDUCATION

A DISSERTATION APPROVED FOR THE DEPARTMENT OF EDUCATIONAL PSYCHOLOGY

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Abstract

In the literature, the concepts values education, moral education, and character education are used interchangeably. Academic studies under these titles can be seen in many countries and several developments have recently been made in numerous countries to include values education in formal education programs apart from the hidden curriculum. The contribution of academic studies to the process of integrating values education into the formal education program is undeniable. The emphasis of this study was on the approaches of teachers to values education within the scope of the education programs. When the literature is examined, it is observed that some measurement tools on individuals' value orientations have been developed and what values teachers prefer to teach have been studied. However, no measurement tool to assess teachers' approaches to values education could be found in the literature. The aim of this study was to develop a multidimensional measurement tool aiming to measure primary school teachers' approaches to values education.

The scale development processes recommended by DeVellis (1991) were followed in this study. Firstly, an item pool was created by preparing a three-dimensional conceptual model based on the conceptual definitions and classifications. A group of eleven experts specializing in various fields evaluated the items in the item pool. Following expert advice, some items were eliminated, and a pilot study with a group of primary school teachers (*N*= 52) was conducted to analyze the items. As a result of the pilot study, it was decided to modify some items with low-reliability scores, and the study was conducted with a total of 619 primary school teachers (PreK-5 grade) from three different states after the necessary modifications.

After removing the missing values and outliers from the data set, it was divided into two parts. The first part (*N*= 283) was subjected to exploratory factor analysis (EFA), and the second part (*N*= 284) to confirmatory factor analysis (CFA). In the study, the validity of the

measurement tool (AVES) used to measure teachers' approaches to values education was determined as α= 841 for the traditional approach, .721 for the constructivist approach, and .887 for the critical approach. As a three-dimensional measurement tool comprised of nineteen items, AVES has shown to be a valid and reliable measurement tool. The results are limited to the characteristics of the study's sample group and the analysis programs used in the study. Therefore, AVES is open to test and improve the study's result by employing sample groups with diverse socio-cultural backgrounds.

Keywords: values education, approaches to values education, moral education, character education, teaching strategies in values education, classifications of approaches to values education.

Chapter One: Introduction

Background of the Study

Although debates on teaching values education in schools have been ongoing for several years, interest in values education has recently increased all over the world (Brady, 2011; Erbaş & Başkurt, 2020; Kaymakcan & Meydan, 2011; Lickona, 1999b). Diverse values education or character education programs have been implemented on national and international levels to tackle moral and social problems among young people. For example, Living Values Education, supported financially by UNESCO, is currently implemented in many countries, including the United States (Living Values Education, 2020). This growing interest has become the impetus precipitating recent discussion on the methods employed to teach values in formal education programs. One issue requiring particular emphasis pertains to the approaches favored by teachers while teaching values to children, designing classroom activities based on these approaches, and implementing educational materials. Consequently, ascertaining teachers' preferred approaches to teaching values will benefit the planning and execution of potent values education programs.

Many researchers world-wide have focused their academic interest on values education. Whereas some of the resulting studies are conducted at the local level, others are indeed cross cultural in nature. The European Values Study project was implemented to identify both similarities and differences in how thirty-two European countries teach values. As a result of this project, European countries have accelerated their development of appropriate materials, programs, and curricula for values education (Halman, 2001). On the other side of the world, however, Jones (2009) asserts that while Australian public schools are hesitant about teaching values explicitly, studies on values education witnessed a systematic and decisive increase following the Australian government's 2005 decision to incorporate values education in public schools. Likewise, educators and policymakers in Turkey have considered values education

since at least 2005–2006 when the Ministry of National Education's introduced values education into the elementary and middle school curricula for the first time (Ateş, 2017; Erbaş & Başkurt, 2020; Kaymakcan & Meydan, 2011).

In the United States, studies on values education are primarily carried out under the name of character education. The U.S. Department of Education provided funds to 45 states (and the District of Columbia) between 1995 and 2006 to promote character education programs under its Partnership in Character Education program. Through financial support to the pilot regions, states were encouraged to design and implement character education programs that would spur students' character development. Several states either made character education compulsory in schools or encouraged schools and school districts under their authority to implement character education (U.S. Department of Education, 2008).

Perspectives and approaches toward values education have evolved with the changing socio-cultural demographics of American society (Smith, 2013; Watz, 2011). Since American society valued conformity in the 1950s, traditional approaches like inculcating and modeling were adopted during that time. Values education became controversial as a result of the changing social structure and resulting social upheavals of the 60s and 70s (Smith, 2013). Questioning "whose values will be taught?" caused values education to lose momentum among educators. In the 1990s, however, values education once again became a topic of discussion among families and educators (Kirschenbaum, 1992).

Children begin to become aware of themselves and their environments in early years of school life, during which period, they develop moral values by assimilating the values and attitudes of their families, societies, and/or cultures (Hawkins, 2014). Teaching values during primary education is absolutely crucial considering children's developmental processes (Johansson et al., 2014; Ülavere & Veisson, 2015). Indeed, given its being a critical period with regard to children's personality development, primary education is an effective time to

teach children values (LePage et al., 2011). The ability to manage social relationships, to regulate one's emotions, and to build positive relationships with one's environment—all of which children gain during early years—are important for their socialization and academic achievement (Hemmeter et al., 2006; Nissen & Hawkins, 2010).

The main purpose of values education in primary education is to promote children embracing universal values. Since values can be successfully instilled in children if their education is conducted in accordance with a plan and purpose (Oruç, 2010), a goal-oriented, well-planned, and systematic educational approach that goes beyond individual learning through mere observation and imitation must be incorporated in any values education curriculum.

Two separate perspectives have gained prominence in teaching values. The first is that values education be included in the official curriculums and carried out through various teaching approaches. The second is that values education is not included in official curricula and not be carried out in a planned, systematic manner (Kupchenko & Parsons, 1987).

Social learning theory claims that individuals learn from their environment through observation and that role models in the environment influence individuals' behaviors (Williams, 1985). Accordingly, teachers' attitudes and behaviors play a critical role in students' internalization of values. This argument holds that teachers' behaviors, attitudes, and value preferences should be taken into account during classroom activities and while acting as a role model for children. According to Uzun and Kose (2017), teachers are primary actors in implementing curricula, classroom activities, and using educational materials in the classroom. In short, teachers play the most central role in effectuating educational policies and practices all while acting as role models for the values being taught to their students.

Values are not innate elements; individuals acquire them or create a value system by observing and learning from the environment (Bigge, 1971). Consequently, teaching values to

future generations requires a well-planned and purposeful education (Erbaş & Başkurt, 2020; Iyer, 2013) and there are various approaches and classifications that help students learn values in a systematic manner (Kupchenko & Parsons, 1987; Superka & Johnson, 1975).

Classifications for approaches to values education are addressed conceptually in several studies in the literature. Moreover, some researchers have endeavored to determine the approaches that teachers used in values education through qualitative study methods (e.g., interview and observation). However, most of the studies refrain from going beyond giving conceptual definitions. For instance, the classification by Superka and Johnson (1975) is one of the first examples of classifications for approaches to values education in the literature. In their study, the researchers discussed the approaches to values education under five headings (i.e., inculcation, moral development, analysis, clarification, and action learning). These five different approaches were compared over the variables of purpose, methods and teaching strategies, educational materials used, and classroom activities. The researchers explained the purpose and logic of each approach, whereby they addressed how these approaches might be employed in classroom activities while teaching values, how to help teachers in the use of educational materials, and each approach's pros and cons. Subsequently adding the emotional-rational approach to the quinary classification devised by Superka and Johnson, Kupchenko and Parsons (1987) developed a classification incorporating six distinct approaches to values education. In addition to including purpose, using educational materials, and benefiting from teaching strategies as Superka and Johnson had, the latter researchers added three variables (i.e., teacher–student roles, prominent values, general characteristics of approaches) to conduct more robust analyses.

Barman (1980) argues that, in reality, values education is provided every day in schools, regardless of whether it is intended or not. In making this assertion, Barman frequently criticized that teachers impose their values upon children during values education. Barman

argues that in Superka and Johnson's quinary classification, inculcation will not contribute to students' determining their own values or their related decision-making skills, thereby arguing that this approach does not offer any advantages to values education. Barman dwells on the other four approaches, claiming that science and scientific approach are predominant in American schools. After explaining the main argument of these approaches, the researcher explains through sample scenarios, what kinds of teaching strategies are appropriate for these four approaches and discusses how to plan classroom activities while teaching values to children.

Jones (2009) examined the policies adopted by the Australian government on values education, in which the researcher found that the Australian government has taken several instrumental steps and initiated various projects so that values might be explicitly taught in public schools. Jones has examined and compared the approaches to values education extant in the literature to further advance the field of values education. The researcher identified a total of 16 different approaches in the literature, which are covered under four categories in her study. These categories are labeled as conservative, liberal, critical, and postmodern and were compared using the following four variables: (i) the period in which the approaches emerged, (ii) the goal of educators, (iii) the role of students, and (iv) pedagogical practices. Following her analyses, the researcher established that civic and citizenship education, values inculcation, and character education—all of which are considered conservative approaches—are the most frequently preferred approaches to teaching values in public schools.

Brady (2011) identified four major and contemporary approaches to values education applied in schools in Australia. Beginning from the notion that teachers' own values affect in-class teacher–student relationships, Brady focused on four distinct approaches to values education (i.e., the trait approach, values clarification, the cognitive development approach, and role-playing) to determine teaching strategies that result in high-quality values education.

Explaining the theoretical background of each approach, the researcher discussed what kind of teacher-student relationships would be fostered in the classroom when each of these approaches is implemented.

Deeming it inadequate to divide approaches to values education into two categories (i.e., adaptation and autonomy), Carr (1983) put forward a third approach that he dubbed the approach of virtue. Whereas he asserted that adaptation required actors' adoption and affirmation of social acceptance in which individuals are characterized as heteronomous, autonomy highlighted individual's self-determination, freedom of thought, and decision-making abilities. This third approach asserts that making moral choices is an inherent aspect of human nature that transcends a set of predetermined values taught to an individual or even one's own value choices. This approach further asserts that virtues are embedded in individuals' characters and highlights the importance of motivating individuals to behave in accordance with their immediate conditions.

Ersoy and Şahin (2012) examined textbooks used in Turkish schools to teach social sciences to identify on which approaches each book based its values education instruction. After determining the criteria representing different approaches, the researchers employed content analysis to ascertain the extent to which the values taught in the textbooks under investigation comply with the determined criteria. Following their analyses, the researchers found that the values included in the textbooks were mostly taught using the so-called suggestion method, which happens to be a traditional approach. Although the analysis approach was made slight use of in these textbooks, moral reasoning, value clarification, and observational learning were absent in all of them. Erbaş and Başkurt (2020) used classroom observations to determine teachers' approaches to values education after conducting interviews with teachers to solicit which approaches they use while teaching values in life science classes. The researchers have observed that teachers generally utilize values inculcation, a known

traditional approach, in their classroom practices while teaching values to children. The observations further revealed that value analysis and moral reasoning were never used by teachers during classroom activities.

Thornberg and Oğuz (2013) divided the approaches to values education into three distinct categories, namely, the traditional, constructivist, and critical approach. In their study using interviews to examine which approaches teachers working in Turkey and Sweden employed whilst teaching values, these researchers made brief reference to the main features of these three approaches. Through the interviews conducted during the study the researchers concluded that both Turkish and Swedish teachers tended to make the most use of the traditional and the constructivist approach while teaching values. Similar to Thornberg (2008a), this triple classification was used to determine the approaches to values education utilized by teachers of different grade levels in Sweden. Similar results were obtained in this study, which found that teachers mostly used a hybrid traditional and constructivist approach when teaching values.

Studies addressing approaches to values education extant in the literature are mostly not empirical in nature, generally focusing instead on the definitions and characteristics of approaches to values education. A small number of empirical studies have attempted to identify teachers' approaches to values education through observations, interviews, or document analyses. However, the most significant deficiency of qualitative studies is that their findings have decreased ecological validity. This being the case, it would be beneficial to integrate quantitative studies to the literature.

Problem Statement

Teachers' in-class behaviors and activities influence the relationship between teachers and students (Brady, 2011), students' value choices and, by inciting them to use independent thinking and reasoning skills, internationalization of these values (Williams, 1985). Indeed, the

methods adopted by teachers have the power to impair students' practical internalization of values even in a values education program incorporating the most exceptional educational content. Knowing this, it becomes essential to understand teachers' value orientations and the approaches they follow while teaching values in order to develop appropriate materials and curricula. As Ryan and Bohin (1999) concluded that teacher contributions to students' character development cannot be ignored, education programs and curricula will need to be able to satisfy teachers' own needs. Curricula that teachers do not understand or do not adopt will be futile in practice. If, on the other hand, teachers strive to teach values using traditional approaches, their reasons should be investigated, and teachers should be encouraged to follow student-centered contemporary approaches in the classroom.

Various measurement tools have been developed to measure teachers' value orientations. Schwartz's (1992, 1994) Value Survey (SVS) is one of the most preferred of such measurement tools in determining an individual's value orientation (Küçük, 2016). Researchers have administered the SVS to many different fields of study, including that of education. In the United States, researchers have used the SVS to test the relationship between individual values and organizational citizenship behavior (Arthaud-Day et al., 2012), gender difference in value orientation in eight countries including the United States (Struch et al., 2002), and meta-analyses examining the relationship between personal traits and values (Parks-Leduc et al., 2015). SVS aims to understand the value orientations of individuals and helps researchers to recognize which values are essential in individuals' daily and professional lives. With value orientation surveys such as SVS, we are able to determine which values teachers care more about in their daily life and which values (e.g., honesty, respect, social justice, equality, self-discipline) teachers consider teaching children. Nevertheless, such surveys do not provide us information about how teachers design classroom activities while teaching values to children. Since any attempt to identify these variables must first determine teachers'

approaches to values education, it is imperative that scales to reveal teachers' approaches to values education be developed.

Erbaş and Başkurt (2020) found that although elementary school teachers stated that they employ constructivist approaches while teaching values in life science classes during interviews, researchers noted that teachers primarily followed traditional approaches to teach values to children in their classroom observations. Likewise, I reached similar conclusions during my own interviews with kindergarten teachers in a pilot study where I solicited their opinions and expectations on values education. In short, I determined that although teachers asserted that they were either unaware of the approach they used or that they adopted a constructivist approach while teaching values, in reality their methods more closely resembled traditional ones (Basyigit, 2019). Since these findings reveal a discrepancy between teachers' own perceptions and the methods or techniques, they actually employ in values education, it now becomes essential to use validated measurement tools to ascertain what approaches teachers actually use to teach values.

Since I have yet to find any validated scales measuring teachers' approaches to values education, I have assumed there to be an essential gap in the literature. Determining teachers' approaches to values education would render it possible to gain a better comprehension of: (1) teachers' classroom teaching methods and techniques used for values education, (2) teachers' relationships with students, (3) how teachers benefit from educational materials, and (4) how teachers employ formal education curriculum in classroom activities while teaching values. Consequently, developing an instrument to assess values education teaching approaches would help guide policymakers in future curricular reforms and formulation. For example, if it is discovered that teachers give primacy to traditional approaches, teacher seminars can be planned to encourage them to adopt student-centered approaches.

Purpose

The philosophy, methods, and techniques of each approach, teacher-student relationships, and classroom practices may differ depending on teachers' approaches to values education (Jones, 2009). Consequently, teachers should be aware of these approaches and teach values in a way that takes into account children's affective and cognitive levels (Güneş, 2015; Williams, 1985).

Three different understandings shape current approaches to values education. The first consist of what may be called traditional approaches that aim to instill the desired values determined by the society or authority in children whereas the second consist of constructivist approaches in which children actively construct their own values (Erbaş & Başkurt, 2020; Kirschenbaum, 1992; Williams, 1985). Similar to constructivist approaches are critical approaches, which place students at the center and encourage their active participation. While the principal difference between constructivist and critical approaches is that while the individual creates his/her own value system at the center of the constructivist approach, the center of the critical approach are social problems, whose solution children find through active engagement (Jones, 2009; Thornberg & Oğuz, 2013).

Defining teacher approaches to values education serves a useful function. Many factors such as the teaching strategies that teachers use while teaching values to children, their communication with students, methods of adapting educational materials to classroom activities, and the creation of a classroom atmosphere are affected by how teachers approach values education and teaching values. Thus, identifying approaches to values education will enable researchers and policy makers to form opinions regarding these variables. However, it is critical to clearly understand whether one approach has superiority over another. The aim of identifying approaches to values education should be to identify those that are used infrequently or not at all in the classroom and to encourage teachers to conduct studies on the inclusion of

these approaches in their classroom activities. Because all approaches have unique advantages and disadvantages, trying them all to a certain extent within the classroom should be considered a factor that will improve the quality and efficiency of values education.

This study aims to develop a scale to reveal teachers' approaches to values education in primary education. To this end, the scale (AVES) was developed, whose validity and reliability were then tested with PreK–5 teachers in the USA.

Significance of the Study

Values education is a component extant in all countries' education systems, regardless as to whether it is part of the hidden or formal curriculum. Teachers instruct values to children implicitly or explicitly (Halstead, 1996; Thornberg & Oğuz, 2013). Particularly in the early years of education, children consider their teachers role models and are influenced by their attitudes and behaviors (LePage et al., 2011; Williams, 1985). Consequently, teachers' in-class attitudes and behaviors carry considerable weight in values education (Carr, 2011; Sanger & Osguthorpe, 2013; Thornberg & Oğuz, 2013). Executing values education in public schools in a planned, programmed, and purposeful manner requires that policymakers analyze and revise policies accordingly. Nevertheless, to obtain data that will serve this purpose, empirical studies should be carried out using measurement tools whose validity and reliability have been empirically established. Approaches to values education scale (AVES) strives to determine teachers' approaches to values education. The fact that no such measurement tool has been found in the literature makes this study significant. It may be assumed that AVES will contribute to the literature and act as the impetus for researchers to develop subsequent measurement tools for this purpose.

The present study also raises awareness about the existing approaches to values education in addition to developing an instrument for measuring teachers' approaches. It is essential that conscious steps be taken while organizing seminars for teachers and while

developing educational activities and materials, as this will help ensure that values education is carried out effectively. School district administrators in different states can collect empirical data by using AVES to revise values education policy and curricula and any empirical data collected can then be provided to help guide policymakers in their decisions as to which policy revisions will be beneficial for the field of education.

Research Questions

The purpose of the study was to develop a measurement tool to ascertain the approaches of teachers in primary education while teaching values in the classroom. Based on this purpose, the research questions of the study are as follows:

1- Does AVES consist of three dimensions?

2- Is AVES a valid scale for assessing teachers' approaches to values education in primary education?

3- Is AVES a reliable scale for assessing teachers' approaches to values education in primary education?

Definitions of Terms

Value. Values, as a concept, have different meanings in different disciplines. Whereas in common parlance, the word value is generally understood to be equivalent to some numerical figure or is used to indicate that something is considered important to one or more individuals, values take on a more specific meaning when used within the scope of values education. Halstead and Taylor (2000) describe values as the principles or general opinions guiding our behavior. In other words, values are the standards that determine desirable and well-accepted behaviors.

Values education. Values education means to use a specific pedagogical approach to teach children the values espoused by society through common consensus. Values education can be incorporated in formal education by adhering to a certain plan and curriculum, or it can also be

performed implicitly apart from official curricula and within what is called implicit curricula. However, the planned and purposeful transfer of values to children as part of an official education curriculum will lead to more effective, productive, and lasting learning.

Character education. Character education is the effort to consciously teach values or virtues, and has three goals: good people, good schools, and a good society (Lickona, 1999c). Including a planned and programmed conduct of character education in schools seeks to reduce moral problems experienced both in schools and greater society, as one of the goals of character education is to support children's character development.

Moral education. Althof and Berkowitz (2006) describe moral education as the effort to improve the moral cognitive structures of individuals in the school environment, based on the moral development theories of Piaget and Kohlberg. Through moral education, it is expected that children learn the behaviors deemed appropriate and acclaimed by society and manifest them in their own lives. In short, moral education is the effort to promote the moral development of children.

Approaches to values education. It is possible to teach values in two ways; the first is to do so in a planned manner as part of the formal curriculum and the second is to do so in an unplanned way as part of the implicit curriculum (Kupchenko & Parsons, 1987). Several approaches, each with its own distinct characteristics, have been proposed for teaching values in classroom activities in a planned manner. Approaches to teaching values are classified by how they visualize the teacher-student relationship, the use of educational materials, the planning of classroom activities, and the role of the teacher and student while teaching values in the classroom.

Social emotional learning (SEL). SEL is the process of acquiring social and affective skills by which individuals can regulate their relationships with themselves and others so as to increase their life productivity (Cefai & Cavioni, 2014). Through SEL programs, students'

social and affective competencies are supported by nurturing a positive learning environment in the school. In addition to supporting individuals to develop their emotions and social relationships, SEL programs aim to alleviate behavioral problems experienced in schools and to support children exhibiting problematic behaviors. When viewed from this aspect, character education programs are regarded as a facet of social affective learning programs.

Chapter Two: Literature Review

Values and Values Education

Value is a concept that suggests what is considered moral behavior in a social context, and values permit us to perceive our environments and to make judgments regarding our relationships with those environments (Veugelers & Vedder, 2003). Values are a part of human movements and relationships (Aspin, 2007), and they shape our behavior and can lead to ideal thinking (Özensel, 2003). What is indicated by ideal thinking is how individuals should behave in the society and the potential to represent appropriate behaviors to adapt to the society. Briefly, values are standards that guide individuals to behave appropriately in the society.

Veugelers and Vedder (2003) define values education as "value forming education." Here, the word "forming" is specifically chosen to emphasize the pedagogical dimension in values education. According to Berkowitz (2011), values education is the activities carried out in school with a pedagogical understanding to support children's ethical and pro-social development. Thornberg (2008b) states that values education is understood by teachers as an effort to teach children how to behave with others and how to be good people.

Ülavere and Tammik (2017) emphasized that values education is included in educational practices either implicitly or explicitly and cannot be isolated from the school environment. Teaching values explicitly refers to educational practices that are included in the official curriculum and are carried out within a plan. Implicitly given values education

means the teaching of values with daily practices that are included in the hidden curriculum and are not based on the official program or a plan (Thornberg, 2016).

Values education is accepted as a component of affective education. Affective education is generally concerned with individual and social development (Martin & Reigeluth, 1999). Lovat and Clement (2008) stated that quality education is an active process where teachers and students perform knowledge-making with a critical and reflective approach and where students develop their identities. In other words, quality education supports the entire development of children including social, emotional, ethical, and spiritual development.

In primary education, values education is provided within the scope of social emotional learning. Values education aims to aid students in developing decision-making abilities, evaluate the results of their behaviors, and plan their actions. In short, values education is "... about helping students develop dispositions to act variously" (Aspin, 2007, p. 39). In other words, values education is not just the process of transferring values to students. On the contrary, values education means providing the capabilities to children so that the students can control their behaviors, make decisions about themselves, take responsibility for their decisions, and draw conclusions about their behaviors.

Values education can be briefly defined as an education which involves guiding children to organize their behaviors and attitudes in a way that they can adapt to the society. In values education, character development of the individual is supported, and opportunities are provided for the individual to practice the virtues (e.g., honesty, responsibility, respect) necessary for the establishment and maintenance of social order. In this context, we could discuss two aspects of values education. The first one is to assist individuals to gain positive behavioral characteristics in order to ensure that they are involved in the social adaptation

process, and the second one is to support the process of creating a social order and social structure.

The Source of Values Education

There are various opinions regarding the source of values. Two common views argue that values are rooted in religion, or they originate from social traditions and customs. If we look at the history of Western countries, we can see that values education is not based on religious foundations (Davis, 2006). However, Etherington (2013) points out that the reason as to why values education is not given at an adequate level, especially in public schools, is that values education is not based on a theological foundation. According to Etherington, we cannot make young people more ethical by giving them only values education. It is possible to train moral generations if values education is given with a religious reference. This position is quite controversial. In fact, there are concerns about which religion should be put at the center of education in multi-religious societies, and what kind of reactions this type of education would yield in societies that do not include religious education in public schools such as United States. Therefore, there is currently a primary need to reflect values in school environments upon which everyone can agree, and which are not suggestive of any religious references.

LePage et al. (2011) conducted a longitudinal study consisting of qualitative and quantitative research methods to reveal the thoughts of K-8 teachers in Turkey and the United States about being moral, moral education, and the moral development of children. In this study, a survey consisting of qualitative and quantitative questions was distributed as a data collection tool. Based on random sampling method, 2,200 primary and secondary school teachers working in Turkey and United States were invited to participate in the study. One of the most striking findings of the study is that Turkish teachers stated that family, social values, and religious beliefs shape their values, and American participants responded

similarly, stating that family, religion, and friends had an impact on their value systems. Another noteworthy finding of the study is that Turkish participants emphasized that global values should be taught from kindergarten onwards.

Values Education, moral education, and character education are terms that are often used interchangeably (Berkowitz, 2011; Thornberg & Oğuz, 2013). In fact, values education was used in the past as a synonym for moral education and religious education. However, values education is referred to in the United States as character education (Etherington, 2013). Whatever the name, the basic aim of these educational practices is to positively improve children's character (Berkowitz, 2011).

Prominent Values to Teach to Children

There are several studies in the literature regarding what values should be taught to children in values education. For example, LePage et al. (2011) conducted a comparative study investigating the opinions of Turkish and American elementary school teachers on the definition of morality and moral development. The researchers found that Turkish teachers emphasized social, global, and humanistic values as well as patriotism, and particular attention was given to the values of honesty, respect, and justice. American teachers, however, emphasized the importance of making judgments based on values as well as discriminating between what is right and wrong.

Thornberg and Oğuz (2013) conducted a similar study with 52 Swedish and Turkish classroom teachers (26 Swedish and 26 Turkish teachers). In this study, the researchers tried to determine which values teachers prefer to teach to children and which methods they use in values education. A semi-structured interview form was used as a data collection tool to shed light on teachers' opinions regarding values education. The researchers reported that Turkish and Swedish teachers emphasized respect, kindness, empathy, helpfulness, honesty, not harming others, self-discipline, and self-control among the values that they found valuable to

teach children. One of the deficiencies in this study was that how and to what extent the social and cultural differences between these two countries affect teachers' preferences for values and values education were not adequately addressed. If we accept that social and cultural variables and variables related to the educational system affect the thoughts and behaviors of individuals living in that society, this necessitates a comprehensive analysis of the sociocultural infrastructure of the two countries.

In various studies, the values that teachers find important to teach to their students may vary due to cultural and social differences. However, almost all societies agree that universal values, such as respect, love, tolerance, honesty, responsibility, and sharing, should be taught, especially in primary education. We can say that values education is an important component of education. Children may gain a lot of benefits such as adaptation to the social life, developing personality, and promoting academic progress by practicing values in schools.

Importance of Values Education

The contribution of values to children's character development is undeniable (Tirri, 2011). Through values education, social values are instilled in individuals and their adaptation to society is supported. Therefore, teaching children the values to which society attaches importance is a necessity (Cihan, 2014).

Values education helps young generations adapt to the societies in which they live and the changing world order, which is among schools' most important tasks. Especially among countries that serve as host to large numbers of immigrants and are culturally diverse, values education is necessary in terms of providing social peace and providing children with the skills they need to live together (Coombs-Richardson & Tolson, 2005). Values education is also important for raising children to become good citizens and ethical individuals (Johansson et al., 2014). Teachers find it necessary to provide values education in schools in order to

facilitate child development in terms of displaying appropriate behaviors for social rules and expectations, social acceptance, and social adaptation (Thornberg & Oğuz, 2013). In fact, many families think that there are positive changes in their children's behavior and relationships at home and in school due to values education (Lovat et al., 2011).

Ekşi (2003) argues that character education and academic learning are not separate entities, but rather they support and promote each other. According to the author, students are more inclined to study and succeed in schools where character education is conducted. Lovat et al. (2011) state that an educational environment in which values education is taken into consideration will strengthen student-teacher relations and positively contribute to the academic achievement of children by positively influencing the state and behavior of students.

Benninga et al. (2006) sought to determine whether character education had an effect on academic achievement in 120 elementary schools in the state of California. These schools, which provided character education, were evaluated with the help of a rubric prepared according to six predetermined criteria (these criteria include whether schools teach basic values, the active involvement of families and other communities, whether all school staff are involved in the process, and whether the school provides opportunities to students to display moral behavior). In this evaluation, the relationship between character education and academic achievement, which was evident via data from standardized tests, was examined. It was concluded that there is a positive correlation between character education and academic achievement.

There are not enough studies on the relationship between values education and academic success. However, based on extant studies, the following conclusion can be reached: With the reduction of student discipline problems experienced in schools through values education, schools and the education community can devote more time to improving

the quality of education and various education practices. In addition, students can be encouraged to be responsible and self-disciplined through these programs, which in turn improves their academic achievement. Although there is no concrete evidence of any direct effect of values education on academic success, we can say that, through values education, harmonious social relations are established, and students' academic success is affected as their self-awareness increases.

Character Education

Ekşi (2003) defines character education as "the common name of the effort to provide basic human values to the growing new generation, to create sensitivity and awareness towards values and to transform them into behavior through implicit or formal programs" (p. 79). For a quality character education in the schools, character education programs should (1) include a good character education theory, (2) address the emotional domain, and (3) be turned into behavior (Lickona, 1993).

Character education aims to assist individuals in developing virtues. In other words, the goal of character education is to promote basic human values in future generations (Davis, 2006). Lickona (1999a) asserts that character education is the deliberate effort to cultivate values. Teachers teach ethical values to children and encourage them to act moral in the classroom and in the society by means of character education (Freeman, 2014). Character education or values education aim to address society's moral and social problems and to encourage the young generation to develop the skills necessary to successfully cope with these difficulties. Berkowitz and Grych (2000) highlight the fact that the new models in character education focus more on relevant cognitive development despite the significant role emotions play in character education.

In order to develop effective character education programs, we should monitor and evaluate children's character development. However, this evaluation process requires a

certain amount of time and effort. Lickona (1999a) proposes three different assessment methods for character education. The first is the observation and reporting of children's character development in the school environment (e.g., questionnaire, self-report). The second is to monitor student's out-of-school behavior by applying a self-report survey, and the third method entails monitoring the child's lifelong behavior after graduation. This third evaluation method naturally necessitates longitudinal studies and evaluations of individuals in their institutions or social environments after graduation. In fact, examining the long-term social effects of character education rather than the assessment of instantaneous individual behaviors will yield more accurate results.

Moral Education

Moral education refers to the process of instilling moral values in children. Moral values can be defined as socially shaped patterns of behavior that emerge in our own lives and our behaviors and attitudes toward others (Johansson et al., 2011). Tonga (2016) indicates that trust, sincerity, honor, pride, and human dignity serve as examples of moral values. Values education is also closely related to moral development, critical thinking, and critical pedagogy. While values education focuses on the values that need to be taught to the child, moral development focuses on cognitive processes. Critical thinking helps introduce values education into children's learning environments and activities through analysis and argumentation (Veugelers, 2000).

The purpose of moral education in schools is to promote behaviors that contribute to a healthy society (Davis, 2006). The teaching of moral values or moral pedagogy is done with the aim of improving children's moral awareness, reasoning, understanding, and behavior. In other words, moral pedagogy encourages and supports children to gain multiple perspectives through which to view life (Johansson et al., 2011). Especially in multicultural societies, this approach is very important because cultural and religious differences mean that some

behaviors will be considered either wrong or right, major or insignificant, depending on the individual's culture and religion. Therefore, teaching children that there may be multiple truths in a community rather than one truth is necessary. Thus, cultural and religious conflicts can be reduced and substituted with social peace.

Moral Development in Children

Moral development is the process of forming a value system guiding individuals on how to behave within a society (Çam et al., 2012). In other words, the intended meaning of moral development is not about engraving values or rules into individual minds. Moral development is the transformation of values or rules within a cognitive structure based on environmental factors and cognitive development (Duska & Whelan, 1975). Kohlberg defines moral development as an increasingly awareness-focused process related to the nature of moral rules (Çiftçi, 2003).

Researchers working in the field of moral development will become familiar with or work from four grand theories. Behaviorists argue that moral development is linked to moral behaviors exhibited and call attention to the importance of social reinforcers in moral development. According to the psychoanalytic approach, however, moral development takes place when intra-individual conflicts find balance within the Freudian theory of personality development. The most controversial approach in moral development, the theory of cognitive development, comprises the most literature pertinent to the field. According to this approach, moral development occurs parallel to cognitive development and consists of hierarchical stages. Finally, the social learning theory emphasizes the role of the social environment and models in moral development.

Kohlberg (1963) argues that moral internalization, moral concepts, and their structure are collectively parallel to cognitive development. Even though different approaches (e.g. the behaviorist and psychoanalyst approaches) address moral development in different ways, all

approaches suggest that the conscious of adults starts to develop in the early childhood period (aged 5 – 8). This section discusses the moral development perspectives of two major theories of learning (cognitive development theory and social learning theory) and of the leading theoreticians. An overview is provided regarding the strengths and weaknesses of the moral development arguments of each theory. This overview also addresses each theory's contributions to the literature with respect to character development and values education.

Cognitive Development Theory and Moral Development

Cognitive development theory has two basic features that come to the forefront in the moral development process. First, this theory contends that the stages of moral development are linked to different and distinguishing properties. Second, this theory focuses on moral judgment and reasoning rather than on moral behavior. Cognitive development theory considers a person at the upper stages of moral development as more ethical than a person at the lower stages of moral development (Köylü, 2003). Being more ethical can involve simply exhibiting moral behaviors via one's own volition and inner motivation, independent of external factors.

When discussing the cognitive approach in moral development, two theoreticians come to mind: Piaget and Kohlberg. The conceptualizations of these two theoreticians regarding moral development have inspired many researchers. Moreover, Kohlberg's discussion on moral dilemma has contributed to character education and values education coming to the fore again in many countries, including the United States (Leming, 1993; Lickona, 1993).

Piaget's Moral Development Approach

Piaget attempted to understand moral development in children by observing children's interactions with one other in the context of a game and by giving them sample stories and scenarios. Moral development goes through phases and is hierarchical in parallel with

cognitive development (Çam et al., 2012; Fleming, 2006). Piaget defines the notion of morals as obeying and respecting the rules that are at the core of sense of rights. According to Piaget, the moral concept of young children (aged below 7) is founded on obeying the rules and avoiding punishment. However, this concept changes with an increase in age and this is due to changing environmental conditions (Kohlberg, 1963). Piaget observed children from various age groups while playing games and they attempted to determine the children's cognitive orientation towards the game rules. From these observations, he went on to argue that there are two stages to moral development. The first stage is called the heteronomous stage in which the rules are determined by an external source (God, parents, the government) where they are believed to be unchangeable given their sacred status. The second stage is called the autonomous stage in which the children are aware of their own autonomy and the rules are determined by mutual consent. If necessary, they are believed to be changeable by the individual (Duska & Whelan, 1975; Peters, 1960). Children hold the belief that moral rules are sacred and unchangeable just like the game rules in the heteronomous stage. At this stage, the child demonstrates a self-centered approach (the sense of obeying the rules strictly) when implementing moral rules by mimicking observed behaviors (Duska & Whelan, 1975). Piaget thinks that mutual respect is the key to progressing to the autonomous stage that follows. In this stage, the children can differentiate between their own point of view and that of others, therefore an increase in the self-centered approach is observed (Kohlberg, 1963).

According to Piaget and Inbelder (1969), children before the age of 7 take their rules from a single authority that they deem to be sacred or immune within the framework of a one-sided respect. When playing games, children in the pre-school period (ages 5-6) are mostly self-centered whereas they demonstrate a more cooperative behavior pattern from the age of 6 onwards. However, rules retain their sacred status in this period and these rules can never be changed by the individual (Duska & Whelan, 1975). Thus, according to Piaget's

definition, children in the pre-school period are within the heteronomous stage. However, as they age, children grasp that rules are made through a social contract and that they are, in fact, changeable. Moral emotions are also linked with an external authority that is deemed to be sacred and this includes a sense of obedience. This turns into a mutual respect within the society over time (Piaget & Inbelder, 1969).

Moral Stages of Kohlberg's Moral Development Theory

Kohlberg's moral development theory is based on Piaget's moral theory (Fleming, 2006; Rich & DeVitis, 1985). Piaget argues that individuals determine their moral structure within the social life of the society in which they live. Kohlberg suggests that moral development is the discovery of universal moral principles. Piaget and Kohlberg derive their theories from hypothetical events in their studies (Çam et al., 2012; Fleming, 2006). Piaget notes that thought and motion interact within moral development whereas Kohlberg focuses on how individuals create their internal reasoning about hypothetical events on moral grounds. Kohlberg focuses more on moral reasoning (Kavathatzopoulos, 1991).

Kohlberg (1974, 1984) attempted to show how children generate reasoning related to moral issues by telling children from different age groups stories with dilemmas and asking them questions. As a result of the children's answers to the questions, Kohlberg argued that moral development is composed of three levels. In the first level (pre-conventional), individuals obey the rules or expectations due to external factors (e.g., to avoid punishment). In the second level (conventional), individuals accept the rules determined by others (society or an authority) by internalizing them. In the last level (post-conventional), individuals define their own values based on the principles that they have determined for themselves from the rules or through the expectations determined by others (Kohlberg, 1984).

The stages of moral development have a hierarchical order. The individual passes through each stage in parallel with their cognitive development, affected by the environment.

However, not all individuals reach the last stage. Many individuals remain at the conventional level (Kohlberg, 1974).

Even though the ideas put forward by Piaget and Kohlberg are mostly accepted in the literature, they have been subject to criticism in many aspects. The criticism of Piaget is mostly due to the fact that the stories he used are too complicated for children to clearly understand as well as being distant from children's experiences. On the other hand, the children can give answers in both stages (heteronomous and autonomous) (Çam et al., 2012). This makes it more difficult to understand in which stage the child resides. Moreover, both Piaget and Kohlberg have been criticized for having a gender bias since both conducted studies with the sample made up of mostly boys. Langdale (1993) points out that these studies may yield different results when conducted with female participants. For example, Piaget observed that both girls and boys prefer to make themselves busy with different activities while playing games. Boys behave in a more competitive and rule-based way compared to girls, whereas girls have a more reconciliatory attitude.

According to Turiel, Kohlberg confused the moral and the social conventional domains. These two domains are different from one another and develop independently (Ekşi, 2006). Social conventions are behavioral patterns that regulate the interactions among individuals in social settings and are related to the social context. However, ethics are not related to social contexts or social regulations. Ethics are shaped within the individual within the framework of the concept of justice (Nucci & Turiel, 1978). Therefore, a moral behavior can sometimes go beyond the limits defined in accordance with social rules. Nucci and Turiel (1978) conducted a study, claiming that preschool children have the ability to distinguish the conventional domain from the moral domain. As a result of the observations made in 10 preschools and the interviews carried out with 42 children attending these schools, Nucci and Turiel concluded that even very young children are able to distinguish between the

conventional domain and the moral domain. However, Turiel has been criticized for his inability to clearly state whether the moral and the conventional domains are distinguished in different cultures in similar ways and at similar ages and for making a firm distinction between the conventional and moral domains (Çam et al., 2012).

The moral development theory of Kohlberg has been criticized in terms of its theoretical, practical, and religious aspects. Regarding the theoretical aspect, this theory has been criticized due to the fact that moral judgment and moral behavior are distant from each other (Fleming, 2006). The concept of emotion is neglected. Moreover, the argument of Kohlberg suggests that his study results may be universal. This has been discussed since he violated principles related to cultural, social, and gendered objectivity in his methodology. Other prominent criticisms are the bias of the researchers and individualism resulting from the methods used in the data collection process (Çiftçi, 2003). Kohlberg argues that children behave according to their benefits and interests regarding their moral behavior. However, this phenomenon has been criticized by several researchers. It has been observed that children develop skills such as values of empathy, helping each other and sharing from a very young age in a manner that is not based on benefits and interests (Nunner-Winkler, 2007). Cognitive development theory has shaped a new concept in moral development by arguing that moral and cognitive development progress parallel to one another and by trying to establish a stage-based and empirical description of the individuals' transition from the heteronomous to the autonomous period. Even though both Piaget and Kohlberg have been criticized in many aspects, both have made a great contribution to the literature on moral development. Studies following on from moral development have centered on either supporting or criticizing especially Kohlberg’s studies. When we examine Kohlberg and Piaget’s theories, it can be noted that the moral development of children in primary education

can be reinforced through games, by making use of stories with sample events and by forming environments in which they can interact with their friends and surrounding adults.

Social Learning Theory and Moral Development

Bandura carried out studies on social learning, social reinforcement, and modeling behaviors, and he examined how each of these influenced the manner in which children's moral judgments are shaped. Bandura addressed moral development and the learning and teaching of values as a matter of social learning (Gürel, 2014).

Social learning theory argues that human behaviors can be explained via the constant interaction among individual, behavior, and environment. Bandura (1977) rejected the notion that the individual and the environment independently affect behavior. Mutual interaction among individual and environmental factors leads to the formation of individual behaviors. Humans can learn by observing people's behaviors and the consequences of these behaviors. In addition, symbols (verbal and imagined) can give guidance to individuals' future behaviors. In other words, individuals can have cognitive control over their behaviors by arranging their environmental conditions at a certain level. The challenges associated with external factors do not prevent the individual from having a decisive effect on his or her own behaviors.

According to Bandura, just as we take into account both the individual and the environmental conditions when explaining human behaviors, we should consider these two factors when addressing moral behaviors (Gürel, 2014). Bandura asserted that individuals' moral decision making is based on several external factors beyond age-related cognitive development and that, in this process, moral reasoning is shaped by modelling and environmental conditions.

Exposure to divergent modelling can alter moral judgments in several ways.

By favoring certain judgmental standards, models increase the salience of

> morally relevant dimensions. The views they express additionally provide justifications for reweighing various factors in making decisions about the wrongness of given acts. In areas of morality, for which society places a premium on acceptable attitudes, public opinions may differ substantially from those that are privately held. Expression of moral convictions provides social sanctions for others to voice similiar opinions. Divergent modeling can thus effect changes in moral judgments through attentional, cognitive, and disinhibitory mechanisms. (Bandura, 1977, p. 46)

Bandura (1977) believed that the stages of moral development put forward by Piaget and Kohlberg were not practically feasible. Assuming that different environmental variables affect individuals' decision-making processes, Bandura argued that it is hard for a person to be definitively placed within a single stage of moral development. Bandura and McDonald (1963) criticized the stage theoreticians (i.e., Piaget and Kohlberg) for overemphasizing intraindividual dynamics in the moral development process and argued that interindividual factors (e.g., modelling) are also influential in individuals' moral development.

Bandura and Mcdonald (1963) maintained that childrens' moral judgment may not be explained only in terms of age, as Piaget claimed, and that the surrounding social models are also influential in shaping children's moral judgment. To test these assumptions, the researchers conducted an empirical study with 78 boys and 87 girls between the ages of 5 and 11. The researchers divided the experimental group into three and randomly assigned children to these groups. In the study, the children were told several stories based on the moral judgments developed by Piaget; the researchers recorded the moral judgment statements children made regarding these stories. The children in the first group observed the models and, upon exhibiting moral behaviors, both the child and the model were reinforced. In the second group, the children

observed the models, and the moral behavior model was reinforced but the child was not. In the third group, the children were not shown any such models, but the child was reinforced upon exhibiting a moral behavior. The researchers concluded at the end of the study that the children's subjective morality increased with age; however, the children's social environment and the model behaviors influenced the increase. Additionally, children from all age groups made statements of subjective moral judgment (intentional moral judgment) and objective moral judgment (consequential moral judgment). It can be concluded, based on the research findings, that children's transition from the heteronomous period to the autonomous period in their moral development is affected by their social environment and the observed model behaviors. In addition, a child can simultaneously demonstrate the characteristics of both heteronomous and autonomous periods.

Cowan et al. (1969) argued that Bandura and Mcdonald committed theoretical and methodological errors in their study. For example, Piaget had not made a clear statement in his studies that indicated that the stages are age dependent. Additionally, the models can affect things differently in different methodological and experimental environments. As such, Bandura and Mcdonald did not comment on how the model influences the child's moral decision-making mechanism or what this means.

The biggest contribution of social learning theory in explaining moral development is that is has brought attention to the assumption that individuals' moral development is affected to a certain degree by environmental factors and models. A strength of this approach is that it emphasizes the mutual relation of the individual and the environment without overlooking the freewill of the former. In short, neither the teaching of values nor the development of character occurs outside of an environmental context. Individuals adopt within their freewill and cognitive

assessment processes the values agreed to according to their environments and the people living within those environments, and they internalize these values.

Social Emotional Learning

School has an important mission, which is to prepare young generations for the future and to help them acquire and experience the qualifications they need to become individuals that fit into society. Therefore, schools both help young people to acquire necessary academic knowledge and skills as well as support their social and emotional development so that they can exhibit behaviors as responsible and respectful individuals (Durlak et al. 2011; Greenberg et al., 2003).

Social and emotional education focuses on helping young individuals to acquire the skills they need to understand themselves and others, to overcome social and academic difficulties, to make the right decisions, to assume responsibility for the decisions they have made, and to empower their social relationships (Cefai & Cavioni, 2014). In a nutshell, social emotional learning (SEL) is a complementary factor intended for the development tasks affecting the academic success of the child in the period that begins with preschool and continues into adulthood (Denham, 2015). Collaborative for Academics, Social and Emotional Learning (CASEL), which has long led academic studies for the development of SEL programs and for their successful integration into school environments, defines SEL as such:

> Social and emotional learning involves the processes of developing social and emotional competencies in children. SEL programming is based on the understanding that the best learning emerges in the context of supportive relationships that make learning challenging, engaging, and meaningful; social and emotional skills are critical to being a good student, citizen, and worker; and many different risky behaviors can be prevented or reduced when multi-year, integrated efforts develop students' social and emotional skills (CASEL, 2013, p. 9).

As can be understood from this definition, SEL aims to cultivate a positive education environment in order to support and develop students' social and emotional competencies. SEL programs include several components, including character education, deeper learning, emotional intelligence, school climate, positive behavior support, and violence prevention (CASEL, 2013; Merrell & Gueldner, 2010; Weissberg et al., 2015). Weissberg et al. (2015) argue that social emotional learning does not provide a sufficient advantage to students regarding their behaviors and academic success unless the SEL programs are well coordinated by district and national administrators and unless they are adequately observed and evaluated. Therefore, all stakeholders are responsible for supporting and developing SEL programs in educational environments.

Williford and Wolcott (2015) argue that the positive relationships that exist between the teacher and students will reduce students' problems, encourage children's development, and increase academic success. In addition, they claim that SEL programs aimed at supporting the relationships between teachers and students will be useful during the pre-school period. Bierman and Motamedi (2015) state that while the behavior management and instrumental conditioning models established the theory behind SEL programs in 1970s, different theories and models, such as the social learning theory, social information processing models, and self-regulation and attachment theories, are also taken into consideration in the development of pre-school SEL programs today. Researchers point out that the implementation of these programs at the pre-school level results in an increase in positive social behaviors and the development of emotional understanding and self-regulation skills among students, and it also leads to decreases in the number of off-tasks and negative behaviors among students.

SEL programs aim to facilitate students' development of five basic social and emotional competencies from early childhood through the high school years (CASEL, 2005). These five basic social and emotional competencies as follows: (1) Self-awareness, which means one's

ability to be aware of himself or herself (emotions, personal goals and values) as well as his or her strengths and weaknesses. The individual is aware of his or her own competencies and can assess these in a realistic way. (2) Social awareness, which means being aware of others and being able to show empathy toward others. Individuals possessing this competence know that other people may have different perspectives. They are aware of and show respect for cultural similarities and differences. (3) Self-management, which refers to individuals' abilities to regulate their emotions and behaviors. Individuals possessing this competence can effectively regulate their emotions, thoughts, and behaviors in different situations, and they can thus increase their levels of academic success by adapting themselves to school. (4) Relationship skills, which involve individuals' abilities to manage their relationships with other individuals and with other social groups. In order to be able to establish and sustain healthy relationships with others, individuals need to be an active listener, cooperate, resist social pressure, resolve conflicts, and ask for and offer help whenever needed. (5) Finally, responsible decision-making, which refers to the individuals' abilities to express constructive preferences in their behaviors and social interactions in different contexts. Those possessing this competence know to respect others, and they assume responsibility for the results of the decisions they have made (CASEL, 2005; CASEL, 2013; Denham, 2015; Merrell & Gueldner, 2010; Weissberg et al., 2015).

Children interact with their teachers and classmates while learning in a school environment. Therefore, they need to be able to control their emotions and behaviors in a social environment and to establish positive relationships with others. Students who have acquired SEL competencies are observed to participate more in classroom activities, to have developed positive attitudes in the school environment, to be accepted among their peers, and to receive positive feedback from their teachers (Denham, 2015). In addition, individuals who acquire these competencies in a school environment will adapt to social environments, like the school

environment, and enhance their academic performance by exhibiting positive attitudes toward themselves and others, establishing positive relationships, and possessing the values of respect and responsibility (Greenberg et al., 2003; Weissberg et al., 2015).

SEL is a very broad concept that involves different programs such as character education, citizenship education, and civic education. Certain SEL programs directly involve specific goals and acquisitions such as character education (e.g., second step) or civic education. Therefore, SEL programs are closely linked to values education and character education programs.

Value Orientations

Teachers' attitudes and behaviors have a significant impact on children, particularly during primary education. At this young age, children first learn values from their families, as parents serve as their role models. When children reach school age, teachers, in addition to parents, become role models.

Primary education is the most critical period regarding the formation of the child's behaviors and attitudes (Johansson et al., 2014; Ülavere & Veisson, 2015). According to Carr (2009), in order to be a good teacher, one must possess values such as calmness, patience, honesty, fairness, and compassion. In addition, one must possess knowledge regarding the subject matter at hand and must be capable of managing the classroom. Furthermore, teachers share with students their professional experience and character traits.

Teachers are responsible for children’s academic and character development (Cihan, 2014). Teachers must therefore create learning environments aimed at improving children's character development and advancing children’s academic achievements (Brady, 2011). A child who feels safe and receives positive feedback from those around him/her learns to respect the teachers and classmates and acts in cooperation with friends during in-class activities (Coombs-Richardson & Tolson, 2005). As such, teacher's value preferences have an

impact on both the creation of a positive classroom atmosphere and children's positive behaviors since the children adopt the teacher as their role model. It is thus worth investigating teachers' value preferences and considering these value preferences when working to design education programs.

Some measurement tools aimed at identifying teachers' value orientations were developed in the literature. However, the most preferred ones among value orientation measurement tools, the intercultural validity and reliability of which have been tested, are the Schwartz Value Survey and Rokeach Value Survey. Information on these two measurement tools and studies carried out in the literature will be provided in the next section.

Schwartz Value Survey

Values can be defined as the criteria that guide the behaviors of individuals in a social circle and guide them in evaluating the events and their behaviors (Schwartz, 1992). According to Schwartz, values indicate what is important in people's lives. Stating that every person may have different values, Schwartz notes that values that are important for some people may not be important for others (Küçük, 2016). Therefore, individuals can make different value choices according to their personal characteristics and environmental conditions.

Schwartz (1992) identified 10 universal value types as well as the sub-values included in these 10 value types, as a result of the research conducted on the content and structure of value orientation in more than 60 countries. Schwartz addresses value judgments according primarily to two categories: individual and social. Individual value judgments serve our personal goals. The value types associated with individual value judgments have to do with power, achievement, hedonism, stimulation, and self-direction. Benevolence, tradition, and conformity are social values. Universalism and security can be linked to both individual and

social values since they serve both purposes (Schwartz, 1992; Schwartz, 1996; Schwartz & Bilsky, 1987).

Schwartz (1992, 1996) divided 10 universal value types into four categories. Power and achievement values fall into the "self-enhancement" category, and stimulation and self-direction fall into the "openness to change" category. The value of hedonism falls into both the self-enhancement and openness to change categories. Universalism and benevolence values fall into the "self-transcendence" category, while conformity, security, and tradition values constitute the "conservation" category. The self-enhancement category conflicts with the self-transcendence category because self-enhancement focuses on the pursuit of the individual's own goals. Self-transcendence is about looking after the interests of the whole society. The openness to change category, which is about acting independently, thinking, feeling, and being open to new experiences, conflicts with the conservation category, which is about self-control and resistance to change (Schwartz, 1992).

Universal values are associated with three different needs. These include individuals' biological and social adaptation needs and groups' happiness and survival needs (Schwartz, 1994). Values are high-level structures that direct attitudes and behaviors (Schwartz, 1996), and they serve as the criteria individuals use to characterize events and other people, including themselves, and to select and justify their own actions.

Arthaud-day et al. (2012) used the SVS measurement tool to test the relationship between the individual values and organizational citizenship behavior of 582 university students in the U.S. Results revealed that the group environment influences the value expressions of individuals. This finding shows the influence of the environment on the embodiment of values in individuals and individuals' value orientations. The social learning theory attracts attention of the environment on human beings. Individuals form their value

systems under the impact of the environment in which they live. The research emphasizes the impact of environment on value preferences of individuals to a certain extent.

Fırat and Açıkgöz (2012) used the Schwarts Value Survey (SVS) to reveal elementary school teachers' perceptions relating to value systems. Researchers aimed at identifying whether there are differences between the value systems of teachers according to their genders, ages, fields, and the type of school (public school or private school) they are working in. A total of 902 elementary school teachers employed in Turkey participated in the study. Researchers revealed that there are statistically significant differences between male and female participants in different dimensions of the survey. The researchers stated that the age variable influenced the value orientations of the teachers, as well. In another study, Yılmaz (2009) tried to identify the value orientations of elementary school teachers through such variables as gender, years of seniority, and marital status using SVS. In this study the researcher found out that there are statistically significant differences between the value preferences of teachers based on gender, years of seniority, and marital status.

Whether males and females are at different conditions in terms of establishing their value systems or the effect of gender on value orientations has been addressed in many studies. Struch et. al. (2002) carried out a cross-cultural analysis with the data collected from K-12 teachers and university students from eight countries including the U.S to find out gender factor in value orientations. In this study, SVS was used as the data collection tool. As a result of the analysis, researchers pointed out to the effect of gender on value orientations. Gender difference did not have a statistically significant influence in all cultures but in some cultures. According to research findings, interpretation of values by individuals in America does not display a statistically significant difference in terms of the gender factor. This study draws attention to the significance of cultural differences while investigating the value

orientations of individuals. In a nutshell, researchers should pay special attention to the influence of cultural differences on individuals' value systems.

These studies indicate that different variables serve to determine individuals' value orientations, that is, what some individuals consider a key or primary value others may not. In addition to variables, such as age, gender, and educational background, professions can also affect value orientation. The next section will provide information on Rokeach Value Survey (RVS) which is cross-cultural validity and reliability have been tested like SVS and which is frequently used in the literature to identify value orientations of people from different occupational groups.

Rokeach Value Survey

Values are standards guiding individuals' behaviors in different situations or circumstances (Rokeach, 1973), and basic components determining the behaviors and attitudes of individuals **(**Coombs-Richardson & Tolson, 2005). Therefore, one of the factors underlying individuals' behaviors and attitudes is their value orientations or value systems. Value orientations of individuals must be investigated to understand behaviors and attitudes. Considering the influence of behaviors and attitudes of a teacher on children, the significance of the identification of the value orientations of teachers is better understood.

In addition to a theory that handles the nature of values in a cognitive structure, Rokeach also developed a value orientation identification instrument for determining the value orientations of individuals from diverse occupational groups (Johnston, 1995). 18 terminal values and 18 instrumental values are present in the survey developed by Rokeach (Rokeach, 1973). While terminal values refer to the values the individual aims to achieve, instrumental values refer to instrumental values used to achieve desired targets (Ozmete, 2007). Rokeach (1973) organized the terminal values as follows: sense of accomplishment, inner harmony, mature love, salvation, self-respect, true friendship, wisdom, a comfortable

life, an exciting life, happiness, pleasure, social recognition, world of beauty, equality, freedom, world at peace, family security, and national security. Instrumental values, on the other hand, are as follows: ambitious, broadminded, capable, courageous, imaginative, independent, intellectual, logical, self-controlled, cheerful, clean, obedient, polite, responsible, forgiving, helpful, honest, and loving.

The values to which individuals attach importance vary from culture to culture, from society to society, and even from institution to institution. For example, Akiba and Klug (1999) conducted a study with 41 Japanese university students and 49 American university students to investigate the impact of cultural similarities and differences on human values. In this study, the Rokeach Value Survey (RVS) was used as a data collection tool. Researchers found that American students preferred primarily individualistic values, while Japanese students oriented toward collectivistic values**.**

Coombs-Richardson and Tolson (2005) used the RVS to conduct a study with 79 Australian and 88 American elementary and middle school teachers. According to this study, the teachers of both countries emphasized democratic values such as family safety, happiness, and freedom. As for the differences between values preferences, the researchers found that countries are influenced at a certain rate by historical, social, and even religious contexts.

Ozmete (2015) used RVS to test the influence of the gender factor on individuals' value orientations. 140 male and 120 female students in a high school in Turkey were included in the study. In this study, it was expressed that a sense of accomplishment, happiness, independence, honest, family, and education values were the values most valued by high school students. Another important finding revealed by the study is that male and female students have different values. The fact that the gender variable is a distinct variable is also emphasized in the study similar to the relevant studies.

Studies carried out using SVS and RVS provides us with information on the value orientations of individuals in many different fields. The society and culture influence the value systems of individuals. Such variables as gender, age, socio-economic level, as well as cultural differences, also influence the value orientations of individuals. Therefore, these variables need to be considered while conducting studies investigating the value orientations of individuals.

Approaches to Values Education

Schools are not places isolated from community values. Since teachers play a central role in teaching values to children and in guiding their character development (Jones, 2009), education policymakers need to develop policies to ensure that the values education program in place is carried out in a planned and systematic manner. This need encourages us to inquire what approach is best suited to teach values.

According to Carr (1983), values education at school can be provided in one of two ways: (1) within the hidden curriculum and (2) via social education. The hidden curriculum is the implicit moral education modeled by teachers in daily situations when a teacher intervenes by rewarding or punishing students for a behavior. Social education, on the other hand, is the explicit moral education taught as part of the official curriculum on different social issues (e.g., affairs, sex, health, hygiene, career) that may or may not be taught as an independent class, and, if not, may be incorporated in another class like social studies (Carr, 1983). Arthur (2014) states that although approaches to character education can vary depending on people's worldviews, character education programs will yield more potent results when integrated into the curriculum as a whole and administered in a manner that covers school life.

There are two general attitudes that determine what approach to values education will be employed. The first entails that teachers teach pre-defined values to children whereas the second entails that teachers provide children with environments wherein they can develop their

own values (Carr, 1983; Goodman, 2000; Halstead, 1996; Veugelers & Vedder, 2003). In the former, teachers and teachers' values are central whereas in the latter, teachers act as guides for students so that they can experience and transform values into behavior.

There are multiple approaches to teaching values to young generations that are broadly divided into three main categories: the traditional approach, the constructivist approach, and the critical approach.

Traditional Approach

The traditional approach holds that society's moral values are to be transmitted through the inculcation of adults in order to discipline children and ensure that they are well-behaved (Thornberg, 2008b; Thornberg & Oğuz, 2013). According to the traditional approach, values have a continuous, permanent nature that are not limited to a specific time and place. Accordingly, schools are responsible for inculcating values in children. In other words, the desired values are instilled in the child in this approach. Giving advice is another method available to educators in traditional approaches (Williams, 1985). Teachers who adopt this approach give advice to children and provide explanations on what is and is not appropriate to do in their social environment. These recommendations include the unconditional acceptance of those behaviors accepted by society.

In this approach, role modeling, the influence of external factors, and, most importantly, a teacher-centered understanding are emphasized (Brownlee et al., 2016). In the traditional approach, (1) the values deemed appropriate to teach to the children are determined by an authority (i.e., teacher, school, society) and (2) these pre-determined values are instilled in students (Lickona, 1991). In this approach, students passively absorb information and the teacher's role is to transfer values as an authority (Jones, 2009). Students adapt to society by acquiring the values inculcated in them (Carr, 1983). Schools determine the values deemed appropriate for children's development and provide them with the opportunity to practice these

values through the school's rules (Arthur, 2014). By acting in compliance to school rules, children learn how to act appropriately in society.

Jones (2009) stated that in the traditional approach, children are not free to follow their own path of moral development. An external force predetermines those values that are appropriate for children to learn. Methods used in the traditional approach include direct teaching, service learning, teacher modeling, reward and punishment, imitation, instruction, and use of rules to regulate behavior (Arthur, 2014; Jones, 2009).

The traditional character education approach followed in the United States takes religion as its reference. However, some studies did not find a relationship between the concept of morality held by individuals taught through a traditional approach and individuals' behaviors (Arthur, 2014). These findings eventually led to the criticism that individuals do not internalize values in traditional approaches. Another criticism is that teachers' inculcation of those values accepted by authorities in multicultural and multiracial societies will undermine children's decision-making skills and their adaptation process as they age (Kirschenbaum, 1992).

Some researchers, such as Halstead (1996) and Jones (2009), state that both character education programs endeavoring to rear individuals who value serving their society and citizenship education programs aiming to produce citizens who embrace democratic values may also be considered to be based in a traditional approach.

In brief, the traditional approach regards teachers as authority figures in the class and presupposes a hierarchical relationship between students and teachers. Teachers inculcate the values accepted by the family, society, or state authority in children by incorporating the values and virtues judged most appropriate for students to learn into class work, which imparts a political role to values education.

Constructivist Approach

In the constructivist approach, the creation of an atmosphere in which children uphold the principle of mutual respect is cornerstone (DeVries et al., 2000; DeVries & Zan, l994). The primary aim in this approach is for children to develop autonomy instead of blind obedience to perceived authority figures and to adopt lifelong learning principles. An environment in which authoritarian education and a hierarchical teacher-student relationship prevail is not conducive to producing students who behave and think autonomously in their intellectual and moral lives (Hildebrandt & Zan, 2014). The fundamental premise underlying the constructivist approach is that individuals have neither the same level of intellectual reasoning nor environmental conditions. Therefore, each individual perceives, constructs, and internalizes values in the context of his/her surroundings to the degree that their cognitive skills allow (Williams, 1985).

The constructivist approach that children are active individuals who "construct" their own moral development. Establishing a democratic classroom environment and promoting democratic participation can be achieved via this approach (Thornberg & Oğuz, 2013), as it encourages children to be actively involved in social relations instead of being passive receivers (Goodman, 2000; Thornberg, 2008b).

While children construct their own moral understandings and assume responsibility for their moral behaviors in this approach (Brownlee et al., 2016), teachers act as facilitators and collaborators who help children discover their own values as opposed to imposing others' values on them (Solomon et al., 2001). Teachers are not value transmitters; they are instead guides who assist their students to construct their own values (Veugelers, 2000).

Contrary to the traditional approach, schools should provide a democratic environment where students can easily express themselves in the constructivist approach. In other words, the constructivist approach offers moral autonomy to students (Carr, 1983) through which children have the opportunity to realize themselves during values education (Jones, 2009). In

a sense, teachers aid children to forge their own identifies by nurturing a classroom environment conducive to helping them build their own value systems. Hence, children gain awareness of themselves while simultaneously developing their capacity to express themselves.

As a result, values education should support children's self-actualization processes. Likewise, the aim of values education under this approach is to empower children to develop their own frameworks for morality and construct their values. Although social issues are discussed in constructivist classrooms, individual development, not social structures, are given precedence (Jones, 2009).

In line with this approach, teachers may use individual and group work, discussions, and self-analysis methods while teaching values (Jones, 2009). Furthermore, children are provided the opportunity to experience moral issues and behaviors in the classroom (Hildebrandt & Zan, 2014).

One central assumption of constructivism is that since children during early years, Piaget asserts, are still in their heteronomous period they initially lack the cognitive skills necessary to assist them in constructing their own values (DeVries et al., 2002). Some researchers, such as Lickona and Goodman advocate that since children do not have the skills required to develop their own values and value systems during early childhood, adults need to identify the values that are suitable for them. Some researchers, such as DeVries and Hildebrandat, reject this opinion and instead advocate that teachers can create a classroom environment that facilitates the autonomous development of values in children even during early childhood. However, as DeVries et al. (2000) remark, autonomy is not an element that appears all of a sudden. To help children think and behave autonomously, teachers must first provide them experiences in the classroom.

The constructivist approach differs significantly from traditional approaches as it presents an autonomous understanding that allows children to construct their own values. Contrary to the traditional approach in which values identified by a teacher or an external authority are dictated to children, constructivism, as it pertains to values education, is a child-centered approach where teachers act as guides.

Critical Approach

The critical approach focuses on children's involvement in social issues and political activism. This approach may be associated with values education through our social relations and our contact with others (Thornberg & Oğuz, 2013). As is the case in constructivism, students are active in values education. Where the critical approach differs from constructivism is that the former places social problems like social injustice and social inequality in the center and supports students' active participation in solving these kinds of problems (Jones, 2009).

The critical approach endeavors to increase children's awareness of social inequality and social injustice in an effort to eliminate social problems' detrimental effects (Brownlee et al., 2016; Jones, 2009). Children's analysis of social events that engender conflicts in society helps them develop an understanding of social equality and social justice. It is of critical importance that teachers design classroom activities based on this approach so that children may become sensitive to social issues, especially at early ages (Brownlee et al., 2016).

This approach questions values education's latent existence in school rules and hidden curricula (Thornberg, 2008a). Thornberg found that teachers employed traditional and constructivist approaches in their classroom values education instruction, and the critical approach was not used during related activities. The introduction of classroom rules to discipline children during values education is a remnant of the traditional approach. Through classroom rules, teachers might unconsciously imbue children with the notion that the rules imposed by an authority should be followed instead of giving precedence to seeking social

equity. To effectuate a change in this understanding, teachers must be made aware that different approaches can be reflected in educational practices during values education.

Similar to constructivism, the critical approach is student-centered, with teachers acting as facilitators (Jones, 2009) who help students to become aware of social problems and to devise appropriate solutions as part of their values education instruction. More importantly, teachers encourage students to be actively involved in the solutions they devise. The beliefs and practices that early childhood teachers' display in the classroom are particularly influential in children's continued values education instruction (Brownlee et al., 2016).

Table1

General Features of Approaches to Values Education

	Traditional Approach	Constructivist Approach	Critical Approach
Objective	Ensuring that students display appropriate behaviors in society, can adapt to society, and become good citizens.	Encouraging students to construct their own value preferences and supporting them to internalize values and turn them into behaviors.	Increasing students' awareness of social problems and encouraging them to seek solutions to social problems.
Student's Role	Passive receiver	Active learner, constructs his/her own value systems	Active learner, seeks solutions to social problems
Teacher's Role	Transmitter	Facilitator, cooperative, guide	Facilitator, guide
Characteristics of the Approach	Heteronomy, social adaptation, inculcation, exhorting	Autonomy support, internalization of the values that children constructed	Discussing social problems and taking action for a solution

Similar Approaches in the Literature	• Character Education Approach (Halstead, 1996) • The Approach of Adaptation (Carr, 1983) • Conservative Approach (Jones, 2009) • Values Inculcation (Kupchenko & Parsons, 1987, Superka & Johnson, 1975) • The Trait Approach (Brady, 2011)	• Values Clarification (Halstead, 1996; Kupchenko & Parsons, 1987, Superka & Johnson, 1975) • The Approach of Autonomy (Carr, 1983) • Liberal approach (Jones, 2009; Habl, 2017) • Moral Development Approach (Kupchenko & Parsons, 1987, Superka & Johnson, 1975) • Cognitive Development Approach (Brady, 2011)	• The Just Community Approach (Halstead, 1996) • Participatory Learning for Moral Values (Johansson et al., 2011) • Action Learning Approach (Kupchenko & Parsons, 1987; Superka & Johnson, 1975)

In addition to these three main approaches to values education, there are different sub-approaches. The following section provides detailed information about different sub-classifications in values education approaches by connecting to the three approaches discussed above.

Different Classifications Toward Approaches to Values Education

Approaches to values education were addressed with a comprehensive perspective within three categories in the previous section. However, it is seen that approaches to values education are classified in different ways in the literature. These approaches can be associated with the triple classification and regarded as sub-approaches. Different classifications toward approaches to values education will be addressed in this section.

One of the frequently referred classifications in the literature is the quinary classification categorized by Superka and Johnson (1975). According to this classification, the approaches:

1. Values inculcation: In this approach, different values (e.g., social, political, moral, individual) are transferred to children, and the goal is to facilitate internalization. In this approach, values are rules or standards of behavior originating from society or culture. The basic argument of this approach is that there are certain values that are universal, and these cannot be gained via individual analysis or clarification. On the contrary, it is necessary to inculcate these values to children.
2. Moral development: The main purpose of this approach is to support students so that they can perform moral reasoning, which enables them to think about and discuss value preferences. This approach generally focuses on moral values. Kohlberg's moral development and Piaget's moral judgment theories form the basis of this approach. In addition, unlike the value inculcation approach, learners play an active role. Kupchenko and Parsons (1987) suggested that teachers should bring planned activities to the classroom and should make intraclass arrangements to ensure the active participation of students. Additionally, teachers do not impose anything on students.
3. Value analysis: This approach aims to help students rationally justify the values they adopt using logical thinking and scientific research processes. In contrast to moral development approach, this approach emphasizes social values rather than personal moral dilemmas. The basis of this approach is formed by the views of rational and experimentalist philosophy. According to Kupchenko and Parsons (1987), teachers adopting this approach support children's active participation in the conflicts between different groups in society to build an independent and democratic society. Children are encouraged to develop logical thinking and use scientific methods to solve social problems.
4. Values clarification: This approach aims to help students or children to become more aware of and reflect on their own value preferences by raising their logical thinking and emotional awareness. Children should also learn to respect the value preferences of others.

According to this approach, the individual has an active role in relation to the environment and society. One of the criticisms directed at values clarification is that the things that children deem valuable, desire, approve, or prefer are not clear. In this approach, the values preferred by individuals cannot be necessarily generalized to the population at large (Aspin, 2007). According to Boyer (1977), the most important factor in values clarification approach that teachers must avoid imposing the values that they adapted to children. Teachers should not make a judgment while using education materials or teaching values with classroom activities.

5. Action learning: The action learning approach aims to provide children with opportunities to experience their own values. According to this approach, values emerge through interactions between society and the individual.

Values clarification refers to helping students to become more aware of their own values and the values of others from a critical thinking and emotional standpoint, and to be able to communicate in a healthy way with others about values and then to behave according to their chosen values (Reimer et al., 1983; Superka & Johnson, 1975).

Kohlberg (1974) recommended teachers who are concerned about imposing their own values on children to prefer the values clarification approach while teaching values. Accordingly, children can realize in classroom discussions that (1) they have their own values, (2) others can have different values and, (3) children can tolerate value differences. However, Kohlberg noted that values clarification approach cannot be a goal for moral education because values will become relative and everyone will have a specific values hierarchy.

Values clarification approach has also been criticized because it denies the effect of teachers' behaviors and attitudes on children. This approach overlooks the effect of the content and methods used by the teacher on the values internalization process of children.

Accepting that children can construct their own values leads to ignoring the role of the teacher in values education. Thus, this approach includes extreme relativity with this perspective (Williams, 1985).

In values inculcation, the individual must learn about and internalize the values determined by society and culture in the process of identity building and socialization. In this approach, the expectation is that common values of society and the values accepted by adults are also accepted by students (Superka & Johnson, 1975).

According to Kupchenko and Parsons (1987), values inculcation approach includes identification and socialization processes. Individuals sometimes acquire the values determined by society or authority subconsciously. This approach is society-centric and the socialization processes of individuals are supported with the inculcation of values to children. Being a role model can be regarded within this approach. In this approach, the teacher explains how to or how not to behave in public to children. The student is in a passive role in this approach and follows the teacher's instructions, answers questions, and modifies his/her behaviors by observing teachers.

Brady (2011) also proposes four distinct approaches for values education:

1. The trait approach: This approach focuses on developing pre-determined values or qualities by using either direct or indirect methods. This approach is similar to the traditional approach.
2. Values clarification: In this approach, students are encouraged to identify and comprehend their own values. Hence, the inculcation of a value is not desired, it is expected that the children develop the values themselves. Values clarification refers to the clarity of the values and ensuring individual satisfaction (Kirschenbaum, 2000). Hence, values clarification and the constructivist approach are based on the same basic principles.

3. Cognitive development approach: This approach is based on Kohlberg's moral autonomy theory. According to this approach, teachers ask students to explain the situation by telling stories that involve a dilemma. Teachers avoid imposing their personal views and judging the responses of students.
4. Role-playing: In assuming the role of another person, students step outside of their accustomed roles and are thus able to consider given events from a different perspective.

Johansson et al. (2011) distributed an online survey of two open-ended questions to 379 teachers working in early childhood education in Australia. The aim of the survey was to gain insight into the teachers' understanding of moral pedagogy and the practices they employed to teach moral values. They found that teachers preferred primarily the "engaging children in moral activities" approach in teaching moral values. According to this approach, children are active in the process through various activities, but in this approach, the reflection of values by children is minimal. The second most preferred approach was "teaching practices for transmitting moral values." In this approach, as in the traditional approach, the teacher is the authority and transmits values to the child by inculcating them. These approaches were followed by "engaging children in building meaning" and "participatory learning for moral values" approaches. These two approaches are similar to the constructivist approach. In the former, students actively participate in the process and make sense of moral values by means of problem-solving, discussion, and reflection. In the latter, teachers and students develop a new moral understanding together and put it into action. This latter approach is similar to the critical approach and Superka and Johnson's (1975) action learning approach. In fact, by discussing social problems, a new solution is sought to ensure social peace. Thus, the environment and the individual are in a mutual relationship in the formation of moral values.

Lisievici and Andronie (2016) conducted a study by comparing traditional moral education with the values clarification approach. In this study, the researchers investigated how the values clarification approach was understood by the teachers and whether using this approach was more efficient than the traditional approach. A total of 91 teachers from middle and high schools in a region of Romania participated in the study. First, the teachers were subjected to a training program that included values clarification methods, and then they were tasked with using these methods in classroom practices to educate their students. The teachers' opinions were obtained in writing, and the collected data were evaluated via content analysis. According to the results, the teachers found the values clarification approach to be more effective and efficient than the traditional discursive approach. In addition, the participants stated that the learning environment became fun and motivating. According to the result of this study, the active participation of students in the learning process helps them constitute their own values and internalize them, as well as increasing their motivation to putting the adopted values in action by enriching their learning environments.

In the section above, we see that there are different approaches to values education and the approaches in the literature are categorized in various ways. Yet, all these approaches can be included in the triple classification, stated previously. The traditional approach where the teacher is at the centre and inculcate values to students, the constructivist approach where students actively participate in the learning process and determine their own values, and finally, the critical approach where social problems, inequalities, and the awareness of the student are taken into consideration, provide a framework to all of the above-mentioned approaches.

Instrument Development

Whereas researchers make observations to gather information about people, objects, events, or processes in social sciences, these observations must be quantified to produce a

sound scientific explanation and to render data significant (DeVellis, 1991). Kerlinger (1973) likens measuring to a game we play with objects and numbers. Since the game has certain rules, the numbers we assign to events and objects in the game must also be bound to a rule. In a similar vein, we make quantifications based on a rule to understand objects and events and then to obtain scientific data in the social sciences. In short, researchers obtain empirical data about people and events through quantitative and qualitative measurements (Morgado et al., 2017).

Measurement instruments consist of variables that enable researchers to discover latent variables or constructs unobtainable through observation but that we determine based on theories extant in the literature. In the social sciences, Researchers derive variables for the phenomenon that they aim to measure primarily through theories in the literature. Theories help us conceptualize the phenomenon being measured (DeVellis, 1991).

Since running a factor analysis of data obtained from a poorly planned study may cause several problems, researchers conducting studies requiring factor analysis should pay attention to the principles determined for factor analysis from the very beginning of the study. As determined by Comrey (1973), these principles are (i) defining the aim of the study, (ii) determining variables, (iii) selecting the suitable sample group, and (iv) analyzing data appropriately. Morgado et al. (2017) conducted a meta-analysis with 105 instrument development studies and reported their limitations under ten categories; the three most prevalent categories were limitations in studies' sample groups, methodology, and psychometrics. These same researchers argued that limitations arising during the instrument development stage weaken the psychometric findings obtained from the instrument, complicate its future implementation, and limit the generalizability of the data obtained from it.

The steps recommended by DeVellis (1991) were followed during while developing of the Approaches to Values Education Scale (AVES) prior to factor analysis. These steps proceeded as follows:

Deciding what to measure and the purpose of the measurement. Knowing the construct that will be measured while developing the scale will help determine the content it will incorporate. First, the limitations of the domain to be measured should be well defined and extant theories in the literature will help the researcher determine this domain. According to Hinkin (1995), it is first necessary to operationalize the unobservable construct (or latent variable) accurately and reliably in order to discern the relationship between the construct under investigation and the variables assumed to make up this construct.

Generating an item pool. After determining the purpose of the scale and what it will measure, an item pool should be formed in the second step. Formulating a large item pool during this step will be useful in the subsequent steps. What is important here is that items accurately reflect the latent variable or factor otherwise the researcher may encounter serious problems during the analysis and interpretation stages (Warner, 2013). Two paths can be followed at this stage (Hinkin, 1995); items may be written using either a deductive approach based on extant theories in the literature or an inductive approach based on participants' opinions and answers. Another option is to combine both methods.

Defining the format for the scale. More than one format exists for preparing measurement instruments. One of the most commonly preferred formats is the Likert scale in which statements are written as declarative sentences and answers contain different degrees of agreement or endorsement of the same interval. This format is mostly used to measure participants' opinions, beliefs, and attitudes.

Creating an expert panel to review items. Obtaining expert opinions is an important step to ensure the instrument's content validity (Warner, 2013) and to guarantee that the statements are clear and understandable. The items to be included in the scale should reflect the domain examined in the study (Hinkin, 1995).

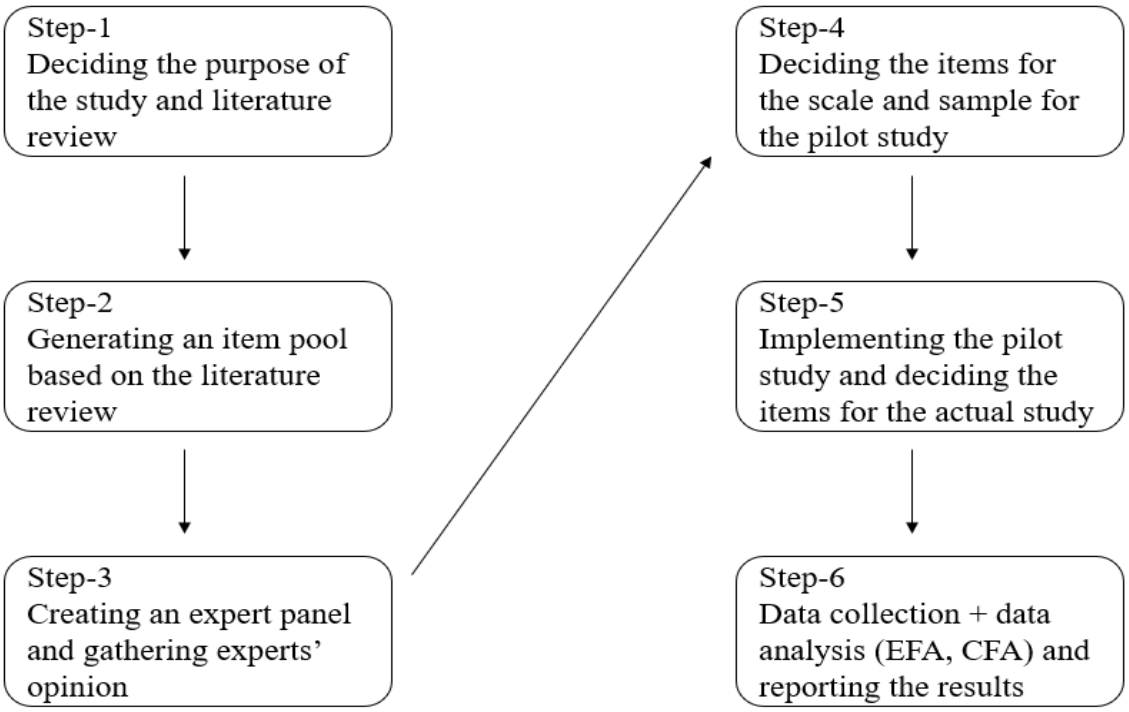
Determining the items to be included in the instrument and sample selection. Here, the researcher uses the feedback to decide which items to include in the measurement tool. One factor that must absolutely be considered while deciding upon items is whether or not to include negative items (reverse items) in order to prevent response pattern bias (Hinkin, 1995). After deciding upon the instrument's items, a suitable sample size is determined, and the data collection process begins.

As there is no absolute number of participants for factor analysis (Warner, 2013), researchers have suggested various sample sizes in different studies. For example, Tinsley and Tinsley (1987) stated that five or ten participants per item are sufficient to run an exploratory factor analysis (EFA) and that 300 participants are a sufficient number. According to Comrey (1973), 50 participants will be very poor, 100 will be poor, 200 will be fair, 300 will be good, 500 will be very good, and 1,000 will be excellent. Comrey (1988) stated that 200 participants might be sufficient when items are fewer than 40. Hinkin (1995), however, argues that 150 participants might be sufficient for EFA if the correlation between items is strong. Kline (1994) stated that the sample size must be sufficient to obtain reliable factors and to ensure that the sample adequately represents the population. According to the same researcher, if the factor construct can be formed clearly, 100 participants will be sufficient to conduct an EFA.

On the other hand, 200 participants are suggested for confirmatory factor analyses (Hinkin, 1995; Russell, 2016).

Figure 1

The Development and Implementation Steps of AVES



The purpose of this study is to develop a reliable and valid measurement instrument to identify the approaches used by teachers in primary education while teaching values in the classroom. Although different classifications are used to describe approaches to values education in the literature, the most comprehensive and inclusive of these classifications is the above-described ternary classification consisting of the traditional, constructivist, and critical approaches. A total of 53 potential items were prepared based on the definition of this ternary classification found in the literature and the general features of these approaches for AVES. A pilot study was run to test the scale's content validity which will then be further audited by a panel of experts. The items to be included were decided upon by asking experts of different fields to score the candidate items in the instruments and to state their suggestions for modification, if any. The resulting instrument was sent to primary education teachers who will be asked to give their opinions on items' comprehensibility, clarity of the statements, how long it took them to complete the instrument, and what the instrument aims to measure. A demographics form soliciting participants' characteristics in addition to AVES was sent to

teachers both during the pilot and actual study. The demographics form serves two purposes in this study; the first is to obtain information about the participants' general characteristics whereas the second is to use the variables it includes form in follow-up studies. The internal reliability analyses of the items included following the pilot study was run and the final version of the scale was decided upon. Later, both AVES and demographics form were sent electronically to primary education teachers working in public schools in different states of the United States, and data was obtained from those teachers volunteering to participate in the study. Though it is impossible to specify a definite sample size at this stage, I attempted to collect the greatest amount of data possible. Following the data collection process, an EFA and CFA were used to determine the instrument's validity. Detailed information and explanations about the data collection and analysis processes were presented in the methodology section.

Chapter Three: Methodology

Research Design

A cross-sectional survey design was used as the research design in this study. "A survey design provides a quantitative description of trends, attitudes, or opinions of population or tests for associations among variables of a population, by studying a sample of that population" (Creswell & Creswell, 2018, p.147). In a survey study, researchers select a sample from the target population "to discover the relative incidence, distribution, and interrelations of sociological and psychological variables" (Kerlinger, 1973, p. 410).

Participants

The population in this study composed of PreK–5 teachers actively employed in public schools in various states of the United States. Given that the United States consists of 50 separate states and that each state has its own distinct characteristics, data was collected from several states so that the sample group might represent a diverse socio-cultural group. In ascertaining the states to be included in the study, I considered the availability of electronic

access to the target participants, seek to ensure that both states that incorporate mandatory character education in their public school curricula (e.g., California, Nebraska) and do not mandate character education in public schools (e.g. Oklahoma) as well as states of diverse political backgrounds and social variables were included. Hence, by validating the instrument in many diverse states, the results of the study may be further generalized to the wider United States. Furthermore, the study's participants were required to (1) work in public schools and (2) be PreK–5 teachers.

A total of 619 primary school teachers working at public schools from three different states participated in the study. The link of the online survey created with the Qualtrics survey program was sent to the teachers' official email addresses to invite them to the study. The teachers' official e-mail addresses were obtained from the official web pages of the schools and the States' department of education. The statistical data on the demographic information of the teachers who participated in the study are given in the table below.

Table 2

Demographic Information of Participants

Characteristic		Pilot (*N*=52)	Large Group *(N=619)*
Gender			
	Male	3 (5.7%)	38 (6.1%)
	Female	47 (90.3%)	566 (91.4%)
	N/A	2 (3.8%)	15 (2.4%)
Ethnicity			
	African American	2 (3.8%)	10 (1.6%)
	Asian	3 (5.7%)	7 (1.1%)
	American Indian	8 (15.3%)	36 (5.8%)
	Caucasian	34 (65.3%)	500 (80.8%)
	Hispanic	2 (3.8%)	32 (5.2%)

	Other	3 (5.7%)	25 (4.0%)
Age			
	20-25	7 (13.4%)	50 (8.1%)
	25-30	11 (21/1%)	112 (18.1%)
	30-40	16 (30.7%)	194 (31.3%)
	40-50	7 (13.4%)	108 (17.4%)
	50 Above	9 (17.3%)	145 (23.4%)
	N/A	2 (3.8%)	10 (1.6%)
State			
	California	-	51 (8.2%)
	Oklahoma	52 (100%)	398 (64.2%)
	Nebraska	-	160 (25.8%)
	N/A	-	10 (1.6%)

According to Table 2, it is seen that the teachers included in the study have quite a wide range of sociocultural variety in terms of ethnicity and location. Considering the gender of the participants, the male participants were 6.1%, while the female participants constituted the majority with 91.4%. The teachers included in the study were 80.8% Caucasian, 5.8% American Indian, 5.2% Hispanic, 1.6% African American, 1.1% Asian, and 4% were of other ethnic backgrounds. When the age variable of the participants is examined, it is seen that most participants are in the 30-40 age range with 31.3%. As for the rest of the participants, 23.4% were age 50 and older, 18.1% were between the 25-30 age range, 17.4% were between the 40-50 age range, and the lowest participant ratio was between the 20-25 age range, with 8.1%. When examining in which states the teachers participating in the study work, the state of Oklahoma comes first with 64.2% with Nebraska in second place with 25.8%. The lowest participation was from California with 8.2%. Detailed information on the demographic characteristics of the participants is shown in the table (see Appendix A).

Factor analysis is an essential step in instrument development studies. For factor analysis to yield valid and reliable results, it is essential that as many participants as possible be included in the study. Although the literature does not have a single definition as to what constitutes the necessary number of participants, the study strived to reach as many participants as possible.

Instrument Development Process

Issues related to the stages involved in the scale development process were mentioned in the previous sections. This section detailed the steps to be taken regarding development of AVES.

Identifying Construct Domain. I reviewed the approaches to values education in the earlier chapters. After examining the literature, I discerned that researchers categorize approaches to values education differently. As a result, I decided to use a ternary classification that divides approaches into traditional, constructivist and critical approaches, (Thornberg, 2008b; Thornberg & Oğuz, 2013) to develop AVES.

Generating an Item Pool. After deciding that the ternary classification is the most suitable classification for the study, an item pool consisting of 53 potential items was created in accordance with the definitions and general features of these approaches. Among these 53 items, 18 were associated with the traditional approach, 18 with the constructivist approach, and 17 with the critical approach. Moreover, negatively worded items were added under each approach to prevent response pattern bias. I intended that each candidate item in AVES should be associated with only a single approach.

Before moving on to the item writing stage, I reviewed the literature that discussed approaches to values education. These studies consisting of approaches to moral education, character education, and values education (Brady, 2011; Jones, 2009; Kupchenko & Parsons, 1897; Superka & Johnson, 1975; Thornberg & Oguz, 2013) conceptualize approaches to values

education with different classifications. I examined these conceptual approaches according to six sub-dimensions found in the literature (instructional methods, teacher's role, student's role, purpose, classroom rules, and source of values). Placing similar approaches in the appropriate category within three dimensions (traditional, constructivist, and critical approach), I evaluated conceptual definitions according to these categories (see Table 1). I identified the theoretical and conceptual commonalities of these approaches to values education and started the process of writing items.

Although the six sub-dimensions I utilized in the item writing phase include the sub-dimensions of conceptual classifications available in the literature, they were created by considering the findings of some qualitative studies on approaches (Thornberg, 2008a; Thornberg & Oguz, 2013). For instance, Thornberg (2008a) discussed approaches to classroom rules and values education and teacher attitudes, thus I also discussed these as sub-dimensions. I made an item pool by ensuring that at least two items related to each of the six identified sub-dimensions were available within the item pool.

Creating Expert Panel and Expert Review. To provide evidence for the content validity of the 53 potential items for AVES, an Item Evaluation Form (IEF) was prepared so that ö experts of various fields could evaluate and provide feedback. Content validity refers to the extent to which the items in the scale represent the domain sought to be measured (DeVellis, 1991). In other words, content validity is the theoretical description of the measured domain by using observed variables (Kerlinger, 1973). A 5-point Likert-type form was prepared (5 represents excellent, 1 represents not applicable) to obtain expert opinions who took into consideration item clarity, the extent to which they represented the construct domain, and their suitability for primary education teachers. The IEF (see Appendix B) also includes two open-ended questions soliciting the experts' opinions on what they thought the study would measure and the content of the instrument.

A total of 53 items prepared for AVES were reviewed by 11 experts. Broken down by department, this corresponded to three professors and two doctoral students from the field of learning sciences, one professor from early childhood education, one professor from primary education, one measurement and evaluation doctoral student, one doctoral student of educational policies, and two professors who have made academic publications on values education. Based on these experts' opinions, some items were modified and a total of 36 items—12 for each approach—were selected for testing in a pilot study. In light of the opinions of the expert panel, I concluded that AVES aligns with the purpose for which it was designed, thereby allowing us to confirm its content validity.

Pilot Study. Based on the experts' feedback, some items were removed/added or modified. After that, I ran a pilot study with 52 participants. A demographics form (see Appendix C), AVES and a scale evaluation form (see Appendix D) were sent to primary education teachers who are working at a public school in Oklahoma. In this additional form, participants were asked to note what they believe the survey items strive to measure, whether the items are clear and understandable.

I first ran a pilot study with 52 primary school teachers after which I analyzed the resulting data with SPSS. After examining Cronbach's Alpha (α) scores for each dimension as a whole, I examined individual items' inter-item correlations, which allowed me to detect items that contributing to lower alpha. As items with low correlation values in the same dimension might cause problems during analysis, I made necessary modifications to alleviate any possible related issues. For example, the item "I would provide children with a list of classroom rules so they follow the rules" included in the pilot study that represented the traditional approach was modified to read "I would give children a list of classroom rules determined by the authority" (see Appendix E for detailed modifications). Following the analysis, I determined that there was no need to remove any item from the scale.

One of the questions in the form seeking to evaluate the scale (AVES) asked participants to state what they believed the items in AVES aimed to measure. Here, most participants stated that AVES sought to ascertain which approaches teachers used to teach children values. For example, one participant responded to this question as follows: "Maybe the difference in approach to values education in relation to social issues from teachers who are traditional versus teachers who utilize a more constructivist style." Another participant articulated that AVES evaluated teaching strategies and curricula employed while teaching values, adding the following:

> I think the items in this survey aim to measure the instructional strategies that K-5th grade teachers most commonly use, especially when teaching values. I could see how teachers could be expected to start teaching values as part of the curriculum, and this study could be to see what the most common strategies would be to teach them.

Since participants' answers to this question revealed that they believe AVES to be a scale that measures what it was designed to, I concluded that it fulfills both face and content validity requirements. Similarly, many participants responded that the items and instructions were clear and easily understood. For example, a participant answered the open-ended question addressing this aspect of the scale as follows: "The directions were very clear. No suggestions." Another participant answered the same question as: "All items were clear and thought out. It was easy to answer the questions accurately according to my opinion."

Data Collection

Research authorization (Fowler, 2009) was received from the Institutional Review Board (IRB) at the University of Oklahoma before starting the data collection process for the study (see Appendix F for IRB permission). After obtaining permission from the IRB, the demographic items and an evaluation form were electronically sent together with AVES to 52

primary education teachers' official e-mail addresses for the pilot study. The pilot study was scheduled to take approximately two weeks, after which the data collected was analyzed and items finalized accordingly.

As soon as the data collection and data analysis processes of the pilot study were completed, an electronic form containing the final version of AVES and demographics items were sent to the official e-mail addresses of teachers who are participating in the instrument validation study. Participants were required to sign an electronic consent form before filling out the electronic survey form. Participants were also notified that some randomly chosen participants will receive an Amazon gift card.

Instruments

Approaches to Values Education Scale (AVES). AVES was developed by the researcher to collect data in this study. The first version of AVES (see Appendix G) consisted of 53 potential items divided into three theoretical dimensions and six sub-dimensions. After subjecting the scale to a panel of experts and running a pilot study, I selected a total of 36 items to include in the scale (see Appendix I). The first dimension is the traditional approach and contains 12 items representative of the traditional approach as described in the literature. These items include:

- I would advise children after class activities, so they behave appropriately in society.
- I would transmit values that families consider important.
- I would teach values to have children obey the rules of their society.

The second theoretical dimension consists of 12 items considered represent of the constructivist approach. These items include:

- When I read stories with certain values to children, I would have them share their opinions with each other.

- I expect children to participate actively in class activities to interpret certain values.
- I would utilize values to have children discover their own moral principles.

The third theoretical dimension is composed of 12 items representing the critical approach. These items include:

- I would utilize values to have children become active agents in solving race/gender inequality.
- I would facilitate children's role-playing activities to have them discuss social justice.
- When I read stories with certain values to children, I would guide them on discussing the importance of social equality.

The items in the scale were represented in six sub-dimensions labeled as (i) instructional methods, (ii) teacher's role, (iii) student's role, (iv) purpose, (v) classroom rules, and (vi) source of values. AVES is a 5-point Likert-type scale (strongly disagree, disagree, somewhat agree, agree, and strongly agree) (Warner, 2013).

Teachers' Approaches to General Teaching. This survey attempted to determine the approaches that teachers followed while teaching a general subject to children. Like AVES, this survey includes items representing three different approaches. The items do not specifically pertain to values; instead, they seek to ascertain the approaches teachers generally use while teaching a subject. The survey included a total of 14 items and each approach consists of four items. For example, one of the items in the survey for the traditional approach is: "My role in the class is to transfer knowledge." One of the items used for the constructivist approach is: "I use visual materials in my class to guide children in interpreting what they learn." An item pertaining to the critical approach is: "After I read stories to children, I guide them on discussing what kind of social issues they can learn from the story." This survey was in the form of a 5-point Likert-type scale (strongly disagree, disagree, somewhat agree, agree, and

strongly agree). The mean scores of AVES and this second survey were analyzed to determine whether any similarity or difference existed between teachers' approaches to values education and the approaches they use in general education.

Short Scenarios. Short scenarios were yet another instrument used to conduct parallel analysis and to find out the predictive validity of AVES. For this study, six short scenarios aimed at determining which of the three approaches teachers would be most likely to use in the face of hypothetical situations. Each of these short scenarios represents one of the six sub-dimensions of AVES (i.e., instructional methods, teacher's role, student's role, purpose, classroom rules, and source of values). After reading the short scenarios, the participants were asked to mark an item under each scenario that best represents their own thoughts from the three approaches. A parallel analysis was conducted between these two instruments regarding the mean scores of participants' responses to the scenarios and the answers they gave to the AVES.

Schwartz Portraits Values Questionnaire (Short List). Schwartz defined values as the criteria shaping individuals' behaviors in social life. Individuals evaluate both their own behavior and the situations they encounter in a given social environment through their own values (Schwartz, 1992). The Portraits Values Questionnaire (PVQ) was developed based on Schwartz's theory of values to determine what values affect individuals' behaviors. The survey developed is accepted as a valid measurement tool in the literature that has been tested in different societies and cultures (Schwartz et al., 2001). PVQ contains a total of 40 items designed to represent 10 different constructs included in four separate value type categories presented by Schwartz (Schwartz, 1992; Schwartz, 1996; Schwartz & Boehnke, 2004). PVQ was used to test the discriminant and convergent validity of AVES. As AVES consists of three theoretical structures, PVQ involves some items representing these similar three theoretical constructs. The conservation category—one of the categories in the PVQ—corresponds to the

traditional approach dimension in AVES. It includes conformity and tradition, and security value types within the *Conversation* category (Arthaud-Day et al., 2012; Schwartz et al., 2001). The values in this category emphasize the importance and follow-up of social practices and common values by individuals. At this stage, individuals are expected to behave in accordance with social norms and expectations (Arthaud-Day et al., 2012; Schwartz, 1992). For example, one of the items in the PVQ under this category is: "It is important to him/her always to behave properly. He/she wants to avoid doing anything people would say is wrong." This item was expected to have a high correlation with AVES items under the traditional approach and a low correlation with items under the constructivist and critical approach. *Openness to change* is another category included in PVQ. Including self-direction, stimulation, and hedonism value types, this category highlights individuals' autonomous behavior and free thought (Schwartz, 1992). The constructivist approach in AVES and the self-direction value type exhibit similar characteristics. For example, an item appertaining to self-direction in PVQ reads: "It is important to him/her to make his own decisions about what he/she does. He/she likes to be free to plan and to choose his/her activities for himself/herself." Accordingly, items regarding self-direction in the PVQ were expected to have a high correlation with those pertaining to the constructivist approach in AVES and a low correlation with those characteristics of the traditional and critical approach. The last theoretical dimension of AVES—the critical approach—has similar characteristics with the *self-transcendence* in the PVQ. This category includes such value types as universalism and benevolence (Arthaud-Day et al., 2012; Schwartz et al., 2001). Universalism emphasizes being sensitive to others and nature (Schwartz, 1992) and includes a person's consideration for the well-being of others and sensitivity to social problems (Arthaud-Day et al., 2012). An item in the PVQ of this value type is as follows: "He/she wants everyone to be treated justly, even people he/she doesn't know. It is important to him/her to protect the weak in society." Therefore, items related to the

universalism in the PVQ were expected to have a high correlation with those related to the critical approach in AVES and a low correlation with those related to the traditional and constructivist approach. PVQ is a 6-point Likert-type scale– (not like me at all, not like me, a little like me, somewhat like me, like me, very much like me).

Social Desirability Scale. Social desirability bias means that the participants involved in studies in the field of social sciences display attitudes and expressions that are likely to be accepted by their society or other individuals. The tendency of participants to give socially desired answers in self-reporting surveys causes their answers to be skewed. This adversely affects the reliability of results obtained in social studies (Crowne & Marlowe, 1960; Kwak et al., 2019; Miller, 2012). Consequently, several scales have been developed to determine whether there is a social desirability bias in social sciences studies. One of the most accepted of these in the literature is the Marlowe-Crowne Social Desirability Scale (Crowne & Marlowe, 1960) and was used in many studies. The 13-item short form of the Marlowe-Crowne Social Desirability Scale tested for reliability by Reynolds (1982) was used in this study. One of the items in this scale is as follows: "I'm always willing to admit it when I make a mistake" (Reynolds, 1982). Since people do not always admit mistakes easily, an answer of an item as being true for oneself indicates the existence of social desirability bias in this participant with regard to this item. For the most part, individuals prefer to ignore their mistakes. Another item is: "I am sometimes irritated by people who ask favors of me." A person answering this item as being false for him/herself also indicates a social desirability bias. Reynolds' (1982) short version of this survey was used to determine whether participants exhibited a social desirability bias to the items in the AVES.

Demographics. The demographics form includes questions soliciting participants' age, gender, education levels, ethnicity, years of service, and the grade level they teach. This form

was used to identify the characteristics of the participants included in the study and to provide information for future studies about the current sample group.

Qualtrics© web-based survey research software was used during the data collection process. The data collected was transferred to SPSS after which the data analysis process was initiated.

Data Analysis

A factor analysis can be performed to (1) combine measured variables into a single factor, (2) develop or test a theory (Kahn, 2006; Tabachnick & Fidell, 2013; Warner, 2013), (3) analyze factor scores to make decisions or use data for other statistical analysis (Kahn, 2006; Warner, 2013), or (4) provide an operational definition for factors (Tabachnick & Fidell, 2013).

Both an EFA and CFA will be run to test the instrument's construct validity. Construct validity refers to the relationship between the observed variables and the theory where observed variables occur. In short, construct validity seeks to determine whether the instrument measures the characteristics desired to be measured (DeVellis, 1991). Cronbach's α scores were reviewed for the scale's reliability analysis, as Cronbach's α is one of the most preferred methods used to ascertain the reliability of a measurement tool (DeVellis, 1991). Before analyzing the data, both skewness and kurtosis values were examined to decide whether the data set was normally distributed.

Before proceeding to the data analysis, participants' responses to the survey were transferred from Qualtrics© to SPSS 24. Using SPSS, missing data were identified and those cases containing missing data were excluded from the dataset. Since one of the objectives of psychological measurement tools is to use observed variables to make inferences about latent variables, missing data, present major challenges to making inferences about latent variables (Hohensinn & Kubinger, 2011; Russell, 2016). As such, the listwise method was used to delete

missing cases. However, if the missing data equal 5% or more of the entire data set (from a small to moderately sized data set), deletion of missing data may negatively affect analysis results (Tabachnick & Fidell, 2013). Additionally, I performed a frequency analysis using SPSS to detect missing data (Warner, 2013), which were then be removed manually. Considering that "cases with standardized scores in excess of 3.29 are potential outliers" (Tabachnick & Fidell, 2013, p. 73), I also generated SPSS to examine the univariate and multivariate outliers. I therefore checked z-scores to detect outliers in my dataset. Finally, I examined the correlation matrix to determine whether variables exhibit multicollinearity. I first ascertained that the determinant value is greater than .00001 after which I was ensure that no variable's correlation is between .80 and .90 (Field, 2018).

Exploratory Factor Analysis (EFA)

The primary objective of performing an EFA is to reveal latent variables so as to explain the covariance between a group of variables. Moreover, EFA reveals to what extent variables united under a factor are related to that factor (Kahn, 2006). In other words, "in exploratory analysis the aim is to explore the field, to discover the main constructs or dimensions" (Kline, 1994, p. 7).

According to Kahn (2006), the following steps should be performed to obtain sound EFA results: (1) The demographics of the sample should be reported in detail since EFA results may differ depending on each sample's characteristics. (2) Descriptive statistics (e.g., means, standard deviations) for variables should be shared in the analysis section and detailed information about the correlation matrix presented. (3) The researcher should explain the factor extraction method. (4) Factor retention criteria (e.g., Kaiser's criterion) should be clarified. (5) Eigenvalues and variance percentages for the factors should be presented. (6) A detailed explanation should be presented about the factor rotation. (7) Structure coefficients, including their cutoff value, should be defined in the analysis section.

Since both humans and human psychology are complex structures, the effect of genetic and environmental variables on human psychology, attitudes, and behaviors should not be ignored while running EFA analyses (Kline, 1994). Accordingly, information about such variables as participants' age, gender, education level, and years of service obtained through the demographics form was reported in a table. Also, descriptive statistics such as means and standard deviations were shared.

To decide the number of factors, I first examined how many factors can be extracted from the data. Accordingly, I generated Principal Axis Factoring (PAF) with unrotated factor solution during this stage. This study strived to ascertain how 37 variables are related to three factors. Based on Kaiser's criterion, latent variables with an eigenvalue of 1 and above were considered a factor (Kahn, 2006). Subsequently, I used the web page developed by Patin et al. (2017) for parallel analysis during which the eigenvalues were examined on random data over the same number of participants and variables (Kahn, 2006). Although statistical programs show us that a certain number of factors remain in data analysis, the final decision belongs to the researcher (DeVellis, 1991).

Most of the time, researchers decide how many factors to extract from the data by reviewing the theories in the literature (Kahn, 2006). The purpose of each study and the dimensions' conceptual definition influences the final decision on the number of factors (Comrey, 1973). Accordingly, I performed principal axis factoring (PAF) to extract factors as is the most preferred method in the behavioral and social sciences (Warner, 2013) and provides shared variance by ignoring unique variance errors in a dataset (Tabachnick & Fidell, 2013). Researchers in the social sciences prefer PAF because they need to understand the shared variance in observed variables to produce latent variables (Warner, 2013). Finally, since another method recommended in determining the number of factors is to examine the scree

plot graph (Cattell, 1966), a scree plot graph was requested while analyzing data on SPSS, which was interpreted to decide the number of factors to retain.

It is very difficult to state that there is no relationship between variables in the social sciences. Generally, variables are expected to be related to each other if they are examined in the social sciences (Costello & Osborne, 2005). If a measurement tool is produced in the field of education or psychology, the oblique rotation method is recommended for use in deciding the number of factors (Gable & Wolf, 1993), as it is understood that approaches toward values education are to some degree related to each other. For example, we know from the definitions that whereas the constructivist and critical approaches are student-centered in nature and also teachers may use all three approaches while teaching values to children. Consequently, ProMax rotation was used to produce factors to increase factors' interpretability. If, after the ProMax rotation, the factors are uncorrelated, they remain the same after the rotation. Nevertheless, if there is a correlation among factors, the ProMax rotation will reflect that (Kahn, 2006; Russell, 2016). On the other hand, researchers need to report the results of the pattern matrix and the factor correlation matrix if they choose to use oblique rotation as a factor rotation method (Tabachnick & Fidell, 2013).

Upon completion of the factor rotation process, I decided whether the data are suitable for running an EFA by first looking at the values obtained from both the Kaiser-Meyer-Olkin (KMO) Test and Bartlett's Tests of Sphericity. Then, after studying variables' eigenvalues, I reviewed which variables were categorized under which factor. Observed variables that combine under one factor will have a stronger correlation after excluding variables with a factor load below .30 (Kahn, 2006). Factor loadings higher than .60 indicate that the variable is strongly related to the factor whereas factor loadings greater than .30 indicate moderately strong relationships, regardless as to whether the relationship is positive or negative (Kline, 1994). Tabachnick and Fidell (2013) recommend a minimum of .32 for loading criterion.

Furthermore, overlapping variables appearing in more than one factor were deleted throughout EFA (Warner, 2013). I examined the factor loadings, factor intercorrelation matrix and display factors' correlations in a table. Any items with a factor loading less than .32 were deleted.

Confirmatory Factor Analysis (CFA)

CFA assesses how well a postulated factor structure (based on EFA results or conceptual definition of the domain) fits the observed data (Russell, 2016). Briefly, a CFA is performed to verify the hypothesized factor structure resulting from an EFA or theory-based model and to ascertain which variables are compatible with which factor (Kahn, 2006).

While developing AVES, items were prepared according to the ternary classification (i.e., traditional, constructivist, critical) in the literature. Assuming that the ternary classification is supported by statistical data from an EFA, the resulting structure was confirmed through the CFA. In summary, I considered the CFA results to decide the extent to which empirical data fit the proposed factor model. I used the Maximum Likelihood (ML) method while executing the CFA, as it is one of the most preferred methods when the ML sample size is adequate, the model is accurately determined, and the observed data display multivariate normal distribution (Schermelleh-Engel et al., 2003). Prior to analyzing the CFA results, I reviewed the multivariate normality test results and finalized the analysis method.

I used AMOS 26 software to run the CFA as it offers three types of information about the factor model: (1) standardized regression weights, (2) modification indices, and (3) model fit indices (Yaslıoglu, 2017). The following parameters were computed to determine how well the observed data fit the model: (a) the chi-square ($\chi 2$) to degrees of freedom ratio (CMIN/DF), (b) comparative fit index (CFI), (c) goodness of fit index (GFI), (d) Tucker-Lewis index (TLI), and (e) root mean square error of approximation (RMSEA). While researchers usually prefer to look at TLI, CFI, GFI, and RMSEA values at the beginning of the analysis, other values should also be considered while making any modifications. CMIN is a parameter used to

determine whether a model differs significantly from a true model (Hu & Bentler, 1999; Kline, 2016). CFI and TLI are the incremental fit indices. CFI and TLI compare the fit of the hypothetical model to the null model's parameters. In other words, the differences between the covariance matrix estimated by the model and the null model's covariance matrix are compared (Brown, 2006; Kahn, 2006). GFI is one of the absolute fit indices and it shows us how well the model fits or reproduces the data. GFI is useful to measure the proportion of variance accounted for by the estimated population covariance matrix (Tabachnick and Fidell, 2013; Whittaker, 2016). RMSEA is an index of the differences between the sample covariance matrix and the model covariance matrix (Brown, 2006; Hooper et al., 2008). Usually, if most of the indices display a good model fit, it is likely that the model will suit the observed data (Schreiber et al., 2006).

The data entered into SPSS were transferred to AMOS, where I tested the relationship between the latent variables and the observed variables under the three latent variables in the hypothesized model. The CFA diagram created by AMOS helped me to visualize the relationship between observed variables and factors. CFA does not provide researchers with an idea on how to construct the model; the researcher constructs one using the theoretical knowledge acquired from the literature and confirms whether this model is suitable for running a CFA (Schumacker & Lomax, 2010).

A statistically significant chi-square($\chi 2$) means that the difference between the assumed model and the empirical data is significant and that model fit is poor (Khan, 2006). Chi-square test results are expected to be $p > 0.05$ (Schumacker & Lomax, 2010). Nevertheless, since the chi-square is strictly linked to the sample size, it may be questionable to decide the model by solely looking at chi-square results (Khan, 2006). Consequently, the value received by dividing the chi-square value by the degrees of freedom can be considered instead (Gable & Wolf, 1993). Tabachnick and Fidell (2013) accept $\chi 2/df = 2$ whereas Wheaton et al. (1977) accept

$\chi 2/df = 5$. CFI, GFI, and TLI values are acceptable if they exceed .90 (Hu & Bentler, 1999; Russell, 2016). While the RMSEA value is expected to be less than .05 (Hu & Bentler, 1999), some sources accept this value up to .08 (Kahn, 2006).

If the parameters do not show a good fit with the model after making modifications, then all modifications must be reported and a new model conforming to the theoretical construct should be formulated (Schreiber et al., 2006). Different models throughout the CFA were tested several times to verify the model until a stable construct was validated. Some observed variables which are weakly correlated with the factors in the model were eliminated.

Ethical Issues

The guideline suggested by Fowler (2009) was followed to administer the study in an ethical manner. Accordingly, the research authorization was obtained from the IRB. In the entire research process, the steps delineated by the IRB were followed to ensure that the research causes no harm to the participants. Participants were informed about the purpose of the study and what they are expected to encounter. They were made aware that participation is completely voluntary, that all personal information of those willing to participate in the study and their answers to the survey will be kept confidential, and that absolutely none of their personal information will be shared with any third party. The target participants were notified that those who do not wish to participate in the study will receive no repercussions. Participants were asked to read and approve the electronic signed consent form before completing the survey. The target participants were also be notified in the recruitment e-mail that if they do volunteer to participate in the study, they will be entered into a drawing in which randomly selected individuals will receive an Amazon gift card.

Chapter Four: Results

Data Screening

Before starting the EFA, I determined that there were some missing values in the dataset by conducting missing value analysis on SPSS. Due to the MCAR value being significant (p= .002), I first checked if the missing values were systematically distributed in a pattern by examining the missing values patterns diagram and doing a manual screening on the dataset. I interfered with the missing values by applying the listwise deletion method for the missing values. Listwise deletion is a method in which all of the data that belong to the variable are removed from the dataset in the case that a missing value is found in any of the variables (Warner, 2013). Schafer (1997) expressed that removing the variable that contains missing values from the dataset is a reasonably acceptable method in cases that the missing value ratio is low (< 5%). Tabachnick and Fidell (2013) expressed that any procedure applied to randomly distributed missing values that make up 5% or less of the dataset will provide similar results to other methods. As a result of the frequency analysis (Warner, 2013), I determined that 27 variables involved missing values and I removed these variables from the dataset. There was no significant data loss (4.3%) due to the fact that the variable rate in the dataset involving missing values was less than 5% (Tabachnick & Fidell, 2013). Since missing values can cause serious problems during the CFA phase, I removed the variables containing missing values before starting EFA and CFA. At this stage, the remaining variable number decreased to N=592.

After the missing values were removed from the data analysis, I examined the z-scores of the variables to determine if there were any outliers in the dataset. After reviewing the z-scores of the variables, I also examined extreme cases' histograms. After all, I determined twenty-five univariate outliers in the dataset. Tabachnick and Fidell (2013) note that cases with z-scores more than 3.29 are potential outliers. After identifying all cases with z-scores more

than 3.29, I excluded the values at the opposite ends of the extreme cases histogram from the dataset. Tabachnick and Fidell (2013) also stated that the researcher should decide whether outliers should be excluded from the dataset. When making this decision, I made sure that cases with z-scores of more than 3.29 were also values on the extreme cases histogram that were far removed from other cases. Outliers are factors that reduce the statistical power of the outliers dataset, and their exclusion from the outliers dataset contributes to the statistical significance of the results (Tabachnick & Fidell, 2013). More efficient results can be obtained as a result of factor analysis of the dataset by cleaning it from outliers. The variables containing outliers are irrelevant to other variables and thus, these variables are unreliable. This is because these variables account for very little of the variance (Tabachnick & Fidell, 2013). Thus, variables containing outliers were removed from the dataset, thus reducing the number of variables to *N*=567. By dividing the number of variables by two, I conducted EFA with the first half (*N*=283), and CFA with the second half (*N*=284).

Immediately before starting the data analysis, I reverse coded the negative items (5=1, 1=5) (Gable & Wolf, 1993; Warner, 2013). Before examining the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy and Bartlett's test of sphericity values, I reviewed the correlation table where the correlations of the items were included in order to determine whether the dataset I reserved for EFA was suitable and provided univariate normality. Tabachnick and Fidell (2013) state that if there is no value above .30 in the correlations of the items with other items, it would not make much sense to perform factor analysis. Therefore, I removed *TA1, CS2, CRA9, CS10* and *CRA12*, which had a correlation of less than .30 with other items on the correlation matrix (Field, 2018). After this stage, it was observed that the KMO value was at .865 (meritorious) level, which is sufficient for EFA (Kaiser, 1974). The Bartlett's test of sphericity was found to be statistically significant ($p < .000$; $x^2 = 3894.10$). This shows that the dataset is suitable for factor analysis (Tabachnick & Fidell, 2013).

Additionally, the correlation between observed variables on the correlation matrix being less than .80 shows that multicollinearity is not a problem (Tabachnick & Fidell, 2013). Field (2018) states that a determinant value of more than ".00001" is proof that multicollinearity does not exist. The determinant value was found as 5.696E-7. In conclusion, I decided that the existing dataset was suitable for EFA.

Exploratory Factor Analysis (EFA)

Researchers have conducted factor analysis in order to develop a theory or test an existing theory. Using EFA attempts to determine how many factors can be obtained from a group of variables and to what extent these variables are related to a factor (Kahn, 2006). In this study, it was aimed to test the theoretically developed ternary approach to values education (traditional, constructivist, and critical approach). Although theory gives us a specific number of factors, EFA was conducted in this study to determine the relationship between the variables and their corresponding factors and the correlation between the variables. Tabachnick and Fidell (2013) stated that it is suitable to conduct EFA if the goal is to develop a theory, and suitable to conduct CFA if the goal is to test a theory. Although a theory is being tested in this study, it was deemed necessary by the researcher to conduct both EFA and CFA, since this theory had not been developed with EFA before and remained in the conceptual dimension. In summary, while the underlying process that will reveal the correlation between the variables with EFA was exposed, the consistency of the correlation between the variables with the CFA and the hypothetical factor construct was tested (Tabachnick & Fidell, 2013).

Firstly, I conducted a factor analysis to determine the factors to retain by analyzing the dataset reserved for EFA (N=283). During the EFA phase, determining how many factors can be retained from the dataset before forcing SPSS to a specific number of factors provides certain advantages to the researcher. Although the theory that is the subject of the research

requires a three-factor model, determining whether the data at hand supported the three-factor solution was done by conducting an analysis with unrotated factor solution in SPSS which provided convenience in the later stages of the analysis. By conducting principal axis factoring (PAF) with unrotated factor solution, it was useful to interpret the EFA results accurately and to see whether the collected data and the theory under investigation were compatible in the early stages of the analysis. At this stage, I tested how many factors could be retained from the dataset in an unrotated factor solution, without changing the default settings of SPSS. SPSS indicated that seven factors with eigenvalues greater than 1.0 (Kaiser's criterion) could be retained according to the dataset. The number of factors that were obtained with PAF method, eigenvalues and total variance rates that are accounted for are shown in the table below.

Table 3

Total Variance Explained by using PAF (unrotated)

Factor	Total (Eigenvalues)	% of Variance	Cumulative %
1	7.073	22.815	22.815
2	5.247	16.927	39.472
3	2.023	6.625	46.267
4	1.408	4.542	50.809
5	1.287	4.153	54.962
6	1.194	3.852	58.814
7	1.031	3.326	62.140
8	.941	3.034	65.175
9	.829	2.676	67.850

Examining Table 3, it is seen that there are seven factors with an eigenvalue greater than “1.0”. Additionally, the scree plot graph (Cattell, 1966) is another criterion that is taken into account when determining the number of factors. The scree plot graph is important in terms of providing a visual output that separates major factors from minor factors. However,

despite that there are criticisms that there may be subjectivity in the interpretation of the graph, this method has been used in many studies in deciding the number of factors (Ledesma & Valero-Mona, 2007). When the scree plot graph below is examined, it can be seen that the dataset supports three-factor solution. On the other hand, observing Table 3 shows that the first factor accounts for 22.815%, the second factor accounts for 16.925% and the third factor accounts for 6.625% of the total variance. Cumulatively, the first three factors account for 46.267% of the variance.

Figure 2

Scree Plot Test Result (N=283)

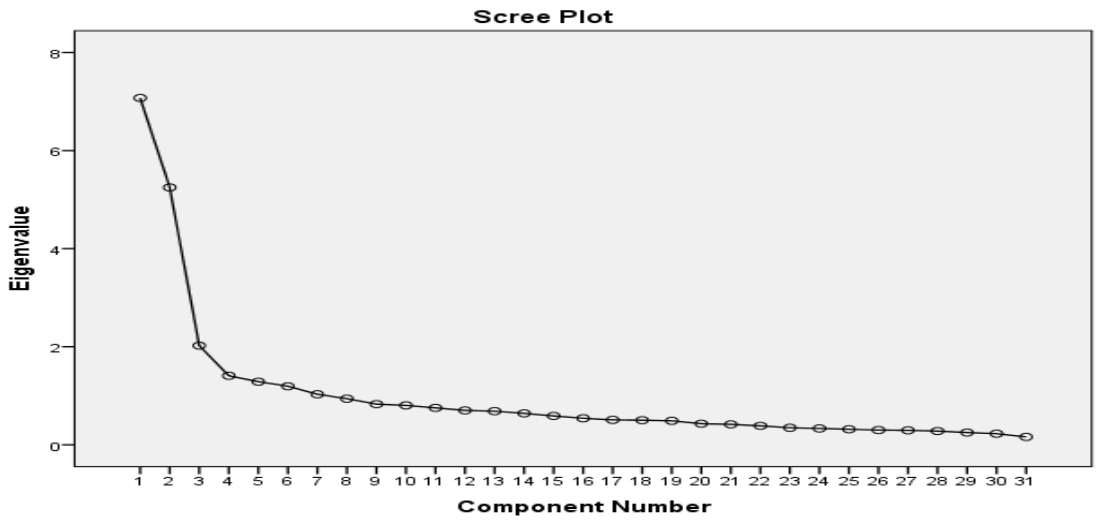


Figure 2 shows that at least one factor (factor 1) is dominant and there is a breaking point after the third factor and the other factors become horizontal. We can say that the scree plot test result also supports a three-factor solution being suitable for the dataset. However, it is deemed appropriate to conduct a parallel analysis in order to test these results (Kahn, 2006). For this purpose, I conducted a parallel analysis through an internet-based application developed by Patil et al. (2017). For the parallel analysis, I filled the variable number as 31,

the sample size part as 283, and chose the type of analysis part as the principal component. The comparison between the parallel analysis and PAF (unrotated) eigenvalues is shown in the table below.

Table 4

Parallel Analysis Results

Factor	Eigenvalues Parallel Analysis	Eigenvalues PAF-Unrotated
1	1.785	**7.073**
2	1.654	**5.247**
3	1.574	**2.023**
4	**1.501**	1.408
5	**1.443**	1.287
6	**1.387**	1.194
7	**1.339**	1.031
8	**1.291**	.941
9	**1.250**	.829

As a result of the parallel analysis, it is seen that the first three eigenvalues obtained from PAF-unrotated factor solution are greater than the first three eigenvalues obtained from the parallel analysis. This result approves the establishment of a three-factor solution. Although the statistical data are important criteria in deciding on the number of factors, the aim of the researcher and the theoretical framework of the model are also important to determine the number of factors (DeVellis, 1991). According to the theoretical framework underlying this study, due to aiming for a three-factor construct, and the model being supported by statistical data, I decided the number of factors as three and conducted the EFA on SPSS in accordance with the three-factor solution.

In social sciences, it is generally accepted that there is a relationship between variables at some point (Costello & Osborne, 2005). For example, the constructivist approach and critical approach have common points due to being student-centered and ensuring the active

participation of children to the learning process. Thus, it can be said that there is a relationship between the variables. Therefore, the principal axis factoring (PAF) was preferred with promax rotation in this study as an extraction method. Also, apart from PAF being a frequently preferred method in social sciences (Warner, 2013), due to PAF taking the common variance (communality) of the variables into account (Tabachnick & Fidell, 2013), it was thought to be the most suitable method for the study. This is because the main purpose of this study is to determine the communality of the variables collected under a factor. PAF dwells on communalities of variances, regardless of unique variance errors (Kahn, 2006). Within this scope, I continued the analysis by using PAF as extraction method with promax rotation (Kahn, 2006; Russell, 2016). Factor rotation is conducted to make the solution more interpretable (Tabachnick & Fidell, 2013). Promax rotation is a rotation type that is preferred if it is presumed that there is a correlation between the variables. If there is no correlation between the factors, promax rotation works as orthogonal rotation, if there is a correlation between the factors, it works as oblique rotation (Kahn, 2006; Russell, 2002). I used .32 as the loading criterion, as recommended by Tabachnick and Fidell (2013). By identifying the factor loading as .32, the aim was to exclude items with a low factor loading from the model so that items in the model can more strongly represent factors. Since the items with a low factor loading will be insufficient to explain the variance, they are an obstacle to achieving robust and accurate results. Thus, the aim was to obtain more efficient and verifiable results for CFA by excluding the items with low factor loading from the model in the EFA process. These adjustments revealed the best interpretable statistical results for me. I used the pattern matrix in analyzing the results. This is because, when oblique rotation is preferred, the pattern matrix is taken into account and not the correlation matrix (Kahn, 2006; Tabachnick & Fidell, 2013). As a result of the analysis made after these adjustments, the communalities values and factor loading values of the variables are shown in the table below.

Table 5

Communalities and Factor Loadings of the Items (PAF-Promax Rotation)

Items	M	SD	C	*N*	F1	F2	F3
CRA1	3.69	.851	.400	283	.016	.584	.077
CS1	4.08	.746	.327	283	.113	.074	.407
TA2	3.55	.911	.381	283	.610	.041	.027
TA3	3.27	.962	.402	283	.596	.245	-.214
CRA2	4.19	.760	.324	283	.143	.487	.086
CS3	3.88	.785	.305	283	.175	.180	.386
CRA3	3.99	.816	.605	283	-.152	.695	.126
TA4	3.50	.991	.597	283	.771	-.092	.059
TA5	3.09	1.022	.414	283	.640	.065	-.056
CS4	3.97	.858	.385	283	-.060	-.211	.717
CRA4	3.81	.885	.383	283	-.031	.404	.293
CS5	4.02	.767	.494	283	-.098	.020	.691
TA6	3.63	.895	.443	283	.624	.208	-.026
CRA5	3.84	.994	.620	283	-.070	.782	.013
CS6	4.31	.675	.381	283	.039	.097	.552
TA7	3.16	1.080	.535	283	.727	-.140	.059
CRA6	3.93	.854	.531	283	-.029	.782	-.099
CRA7	3.96	.841	.762	283	.004	.956	-.163
TA8	3.66	.862	.564	283	.751	.021	-.020
CS7	4.17	.703	.357	283	.187	.028	.537
CRA8	4.11	.690	.469	283	.048	.329	.436
CS8	4.33	.715	.396	283	-.040	.069	.589
TA9	2.43	1.208	.331	283	.577	-.032	-.031
CS9	3.97	.709	.315	283	-.088	.078	.513
CRA10	3.66	.937	.076	283	-.137	.026	.235
TA10	2.85	1.148	.310	283	.547	-.078	-.096
CS11	4.10	.822	.143	283	-.164	-.061	.383
CS12	4.15	.626	.354	283	.049	.009	.585
TA11	3.68	.948	.393	283	.627	-.056	.018
CRA11	4.01	.822	.471	283	.013	.594	.142
TA12	3.67	1.093	.139	283	.563	-.192	.136

Extraction method: Principal Axis Factoring. Rotation Method: Promax. Items sorted by size, items with values < .32 suppressed to ease interpretability. M=Mean, SD= Standard Deviation, C= Communality, *N*= Number of variables, F1= Factor 1, F2= Factor, F3= Factor 3.

Table 5 shows that *CRA10* has no factor loading above .32 so I decided to delete it. Cross-loading occurred in *CRA8* due to loading both in factor 2 and in factor 3 (Comrey, 1973).

Thus, *CRA8* was also removed from the measurement tool. Child (2006) recommends deleting items that have a communality value < .20. Since items with low communalities values do not contribute to the explanation of variances sufficiently, it is recommended to exclude them from the measurement tool. Because there is no commonality between items with a low communality value and other items in the same factor, they do not contribute enough to explaining the factor or construct. Thus, excluding items with low community values from the model allows for more robust and accurate results. In factor analysis, it is focused on variables with high communality values (Tabachnick & Fidell, 2013). Hence, *CS11* (.143) and *TA12* (.139) were deleted due to having quite low communality values. It is seen that the remaining items are placed under the factor they should be, in a single factor and with a factor load of over .32. I conducted the analysis once again after removing the problematic items from the measurement tool. In the study, factor 1 was named as the traditional approach, factor 2 as the critical approach, and factor 3 as the constructivist approach, in accordance with the conceptual definitions of the theory. The correlation matrix of the factors is shown in the table below.

Table 6

Factor Correlation Matrix (N=283)

Factor	1	2	3
1	-	.059	.066
2	.059	-	.553
3	.066	.553	-

Extraction Method: Principal Axis Factoring. Rotation Method: Promax with Kaiser Normalization.
Factor Labels: 1-Traditional Approach, 2-Critical Approach, 3-Constructivist Approach.

When we look at Table 6, it is seen that there is low correlation between factor 1 (traditional approach) and factor 2 (critical approach), and between factor 1 and factor 3 (constructivist approach). However, there is a rather high and positive correlation (.553) between factor 2 and factor 3. These results conform to the conceptual definitions of these

approaches and the ternary model in the literature. As stated above, the constructivist approach and the critical approach also have a close relationship with each other theoretically, due to being contemporary approaches centering on the student. As for the traditional approach, it departs from the other two approaches in theory due to harboring an understanding that centers on the teacher or instruction (Thornberg, 2008; Thornberg & Oğuz, 2013; Williams, 1985). It is seen that the statistical results in the table above support this theoretical distinction.

In summary, the EFA was performed by analyzing the data from 283 primary school teachers using the principal axis factoring method with the promax rotation through the SPSS. Firstly, the missing values and the outliers in the dataset (*N*=619) were determined and removed. The remaining dataset was divided into two for EFA and CFA. Afterwards, PAF was carried out with an unrotated factor solution in order to retain the number of factors that can be obtained from the first half of the dataset (*N*= 283). As a result of PAF (unrotated) analysis, the scree plot test and parallel analysis, it was decided that a three-factor solution in accordance with the theory would be suitable for the dataset. The analysis continued with the PAF method with promax rotation by limiting with .32 factor loading criterion, since it was theoretically thought that there was a relationship between the conceptual structures and the aim of the study was to focus on the common variances of the variables and to determine which variable was collected under which factor and to determine the correlation of the variables with other variables under the same factor. Some items were deleted on the resulting pattern matrix, due to reasons such as having no factor loading under any factor, loading in more than one factor, or having a low communality value. In conclusion, due to the three-factor solution put forth by the theory, the first factor is named as the traditional approach. This factor was reduced to ten items from twelve items as a result of EFA. The second factor was named the critical approach. This factor was reduced to eight items from

twelve items. As for the third factor, it was named as the constructivist approach and this factor was reduced to nine items from twelve items. Thus, a three-factor model with 27 items was revealed.

Confirmatory Factor Analysis (CFA)

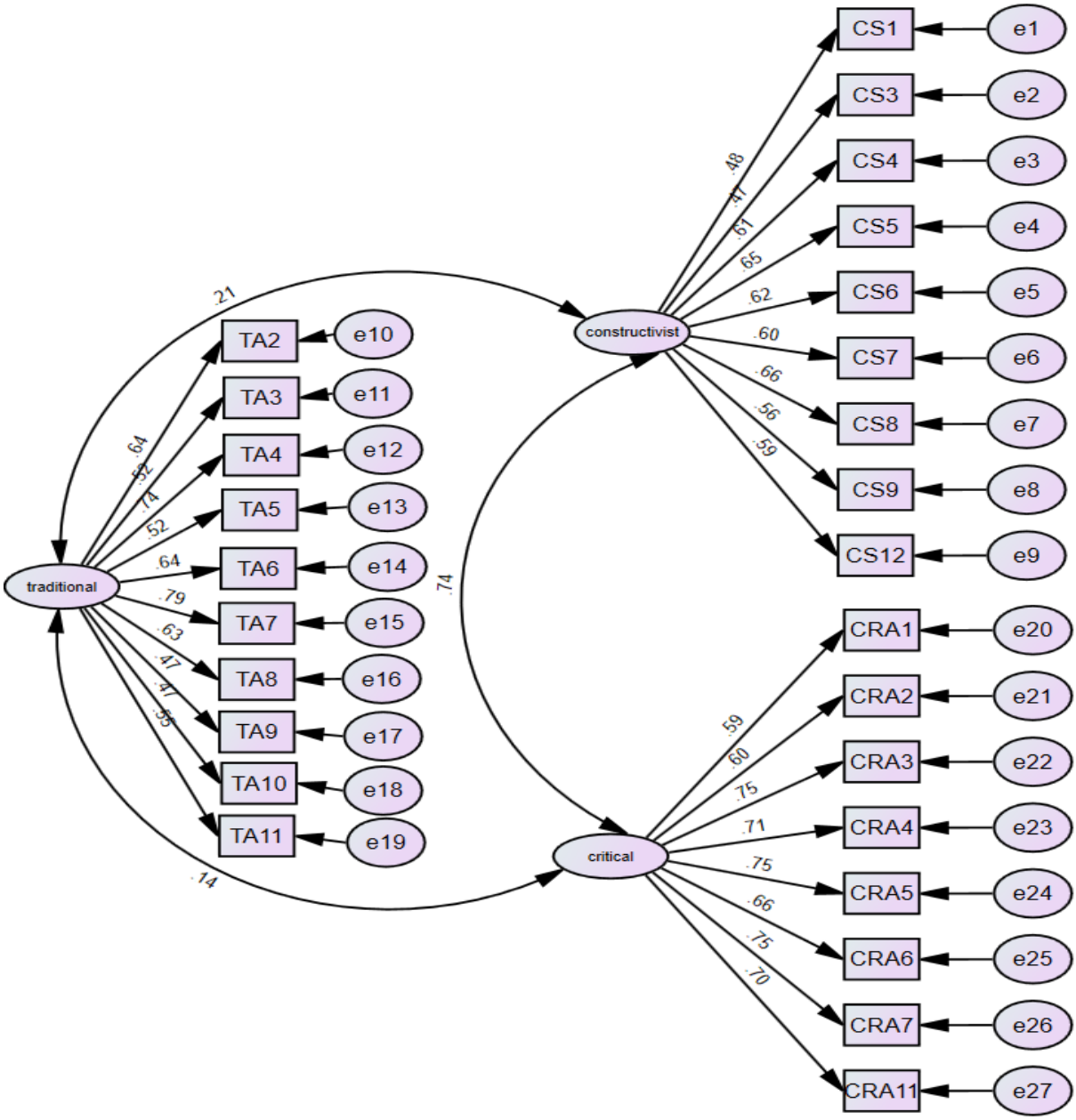
Despite the fact that researchers begin EFA with a conceptual model, they do not decide the relationship between observed variables and latent variables (factors). The aim is to determine the relationship between the observed variables and factors in EFA. In CFA, researchers test the model to examine how much and how well observed variables in the model developed during the EFA process reflect the factor (Thompson, 2004). The theoretical model was not tested before, so EFA was firstly performed and the relationship between observed variables and factors was revealed. Furthermore, observed variables that did not have a sufficient communality value (<.20) were removed through the EFA. Hence, the three-factor model consisting of 27 items derived from theory and developed through EFA was tested as to whether the model would be confirmed.

Initially, I created a three-factor model with 27 items by using AMOS 26, and I examined the factor loadings of the observed variables with the related factor, as well as the correlation between the factors (see Figure 3 for the initial model). For CFA, I employed the second part of the dataset (N=284). As a CFA method, I used the Maximum Likelihood (ML) method. In cases where the dataset has multivariate normality, the ML estimation method is the most widely employed method (Jackson, 2009; Kahn, 2006; Tabachnick & Fidell 2013). Furthermore, the ML approach is the most widely employed approach in terms of ease of use, interpretability, and the richness of the suitability test results (Schumacker & Beyerlein, 2000). The CMIN, GFI, TLI, CFI, and RMSEA indicators were considered as model fit values. These model indices are the most commonly shared indicators among researchers through their research (Jackson, 2009). Since the chi-square goodness of fit test findings of

the initial model were statistically significant so the exact-fitting model was rejected (Tabachnick & Fidell 2013), χ^2 (321) = 679,290 p< .000. Nevertheless, since the chi-square test is so closely related to sample size, it can be problematic in many studies (Jöreskog, 1969). As a result, when assessing model fit, researchers focused primarily on other model fit indices (Asempapa, 2016).

Figure 3

Initial Three-factor Model with 27 Items (N=284)

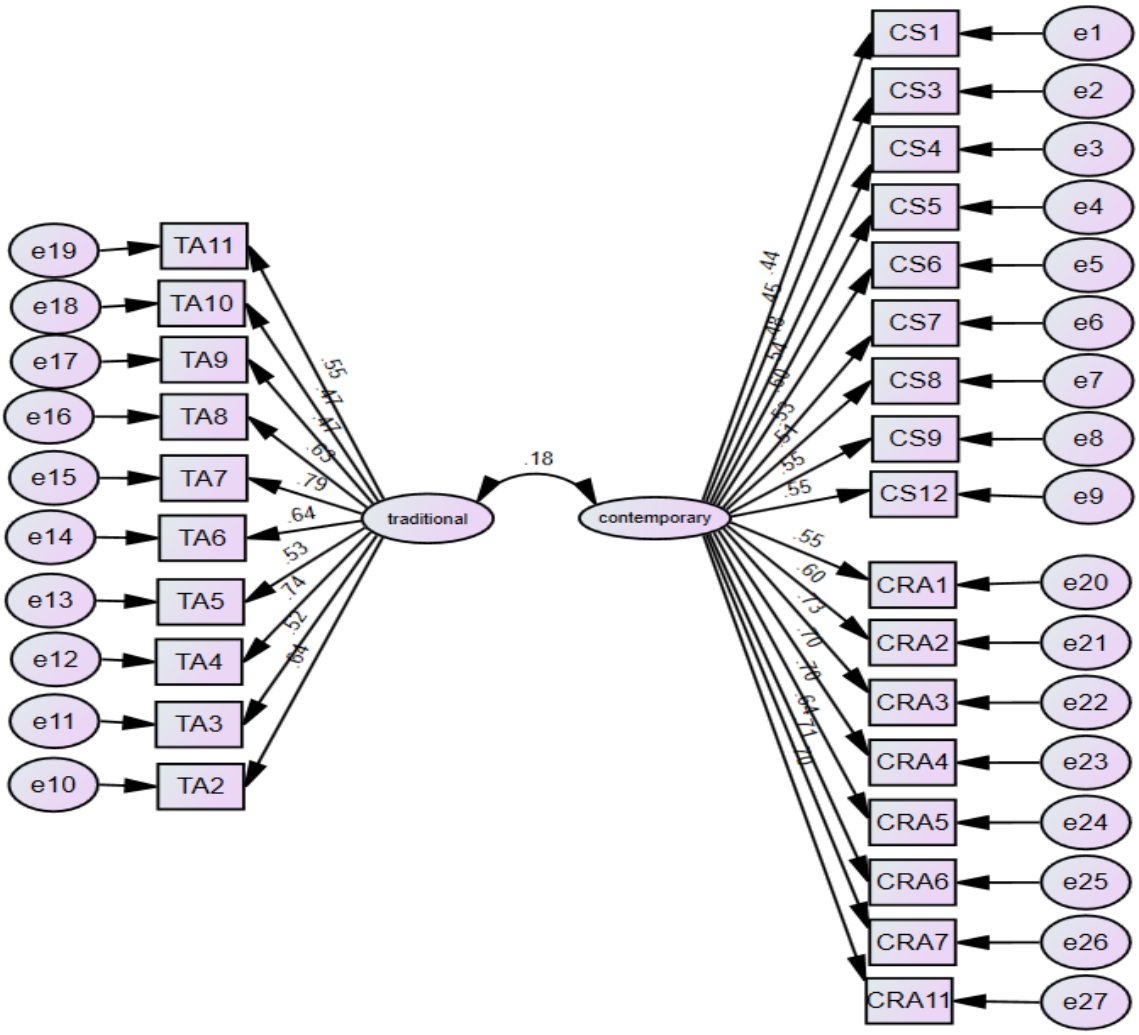


When I examined the initial model's fit indices, I found that GFI= .839, CFI= .870, and TLI= .858. These values indicate a poor model fit. RMSEA= .063 was considered to be an acceptable model fit. It is clear that the model was far from being an acceptable model fit. The traditional approach and the constructivist approach have a correlation value of .21, as shown in Figure 3. The traditional approach and the critical approach have a correlation value of .14. The correlation coefficient between the constructivist and critical approaches is .74. If there is a high correlation (.50 or higher) between the two factors, the researcher may create a second-order factor to explain these two factors (Kahn, 2006). If the two factors are highly corelated, then these two factors can be considered to represent the same or similar construct. In factor analysis, the main goal is to determine whether theoretically identified factors are separated from each other. So, if the correlation of two factors is high, this relationship should be focused on and further tested to determine whether these two factors represent different constructs. The purpose of the second-order factor is to provide a more parsimonious account for the correlations among the first-order factors (Brown, 2006). Since there was a high correlation between the constructivist and critical approaches, I examined another model by creating a second-order factor between constructivist and critical approaches (see the model Appendix J). I re-examined the model fit indices after including the second-order factor. The chi-square goodness of fit test results and the model fit parameters of the second-order model did not change. At this point, I decided to run a two-factor model (see Figure 4) by combining the observed variables of the constructivist and the critical approach in order to examine whether the model fit parameters yield better results. I labeled the second-order factor in the three-factor model and the second factor in the two-factor model as the contemporary approach. The reason why I preferred the concept of "contemporary" for the second factor is that both the constructivist and the critical approaches encourage student's active participation in the

learning process. Therefore, I entitled the second factor as the contemporary approach because it fits the description of the student-centered approaches.

Figure 4

Two-factor model with 27 Items (N=284)



The chi-square goodness of fit test results of the two-factor model was statistically significant; χ^2 (323) = 781.689, p<.000 so the exact-fitting model was rejected. The model fit values were as follows; GFI= .799, CFI= .833, TLI= .819 and RMSEA= .074. The

parameters of the two-factor model indicated worse results compared to the three-factor model. I also computed the chi-square test value and the degrees of freedom for determining the chi-square difference between the models. The chi-square differences between the two-factor model and three-factor model results were x^2 (2, *N*=284) = 109.103 and, the exact *p*-value for the analysis was ".00001". The result was significant at $p < .05$ which indicates the three-factor model is better than the two-factor model. The Akaike information criterion (AIC) is also used to compare different models in terms of how well a model fits the data (Stone, 1977). The model which has a smaller AIC value indicates the better model (Schreiber, 2006). The AMOS output provides the AIC value of the models. The AIC value of the three-factor model was 786.586 and the AIC value of the two-factor model was 891.689 on the AMOS output. The results of both the chi-square difference and the AIC indicated that the three-factor model was more suitable for the data than the two-factor model. Therefore, I maintained CFA with the three-factor model.

Firstly, the initial three-factor model's parameters did not yield an acceptable model fit. Therefore, some modifications were required to have acceptable model fit values. There were no missing values in the dataset because I removed the missing values before the EFA. Initially, I checked the assessment of the normality table on the AMOS output to see if the dataset had univariate and multivariate normality. I found that the dataset provided univariate normality because the skewness and kurtosis values were in the range of +2 and -2 (Lomax & Hahs-Vaughn, 2012). On the other hand, the multivariate kurtosis value was 160.607 (critical ratio, c.r. = 34.676 > +1.96). If the dataset violates multivariate normality, researchers may follow the bootstrapping procedure to deal with multivariate non-normality. The bootstrap method enables estimation of the sample distribution of almost any statistic using only very simple methods for assigning measures of accuracy to sample estimates (Efron & Tibshirani 1994; Varian 2005). Firstly, I generated bootstrapping strategy to find out the standard errors

of the model. Then, I checked the Bollen-Stine bootstrapping significance value. I set 500 for the bootstrapped sample size and 95% confidence level to generate the procedure. I could not find any real difference between the bootstrap standard errors of the models when testing the parameters. The Bollen-Stine bootstrap was statistically significant (p= .002). Therefore, I concluded that the model was a poor fit for the data.

According to Kline (2016), the Mahalanobis distance (D^2) is a useful method for identifying potential multivariate outliers when the dataset lacks multivariate normality. For this reason, employing a significance value of *p*= .001, I examined the "Mahalanobis distance-squared indices" output on AMOS (Pituch & Stevens, 2016; Tabachnick & Fidell 2013). The Mahalanobis distance-squared table led me to the conclusion that the dataset contained twenty-one potential multivariate outliers. I checked the variables with a ".000" value in the p1 column of Mahalanobis d-squared table on AMOS output. I noted the case numbers which have a ".000" value in the table. Then, I computed the Mahalanobis distance value of the variables in SPSS and requested a Q-Q plots graph to detect multivariate outliers in the dataset. I found out twenty-one cases as multivariate outliers both in AMOS and SPSS outputs and I deleted them. After I removed these multivariate outliers from the dataset, the number of variables reduced to *N*=263. This number of variables was deemed adequate for CFA (Hinkin, 1995; Russell, 2016). I reanalyzed the model after removing the potentially multivariate outliers from the dataset and the kurtosis value decreased to 36.711 (c.r. = 10.538 > +1.96) which indicates mild departure from multivariate normality. According to Jackson et al. (2009), ML estimation can perform well even with mild departure from the multivariate normal distribution. According to Tabachnick and Fidell (2013), some multivariate outliers can hide behind other outliers, and that, after each removed outlier, the dataset becomes more consistent while other outliers become more extreme, so the deletion

process may continue until it is certain that no new extreme outliers exist. I continued CFA with the dataset without multivariate outlying variables.

I re-examined the model fit indices after removing the multivariate outliers from the dataset. The chi-square goodness of fit test result for the model was statistically significant; χ^2 (321) = 672.586, p<.000 so the exact-fitting model was rejected. The model fit values were as follows; GFI= .829, CFI= .872, TLI= .860 and RMSEA= .065. These values indicate that the model is still far from being acceptable model fit. At this point, I decided that some problematic items in the model should be removed in order for the model to achieve acceptable model fit indices. In order to determine which items should be removed from the model, I examined the observed variables' factor loadings on the related factor. First and foremost, *TA9*, *TA10*, *CS1*, *CS3* which had a factor loading of less than .50 with the related factor, led to a problem for convergent validity (Caskurlu, 2018; Fornell & Larcker, 1981). Items with a low factor loading do not serve to explain the factor at the desired level, and do not have sufficient relationships with other items in the factor at the same time. By excluding items with a low factor loading from the model, the construct represented by the factor is better explained, and the relationship between items in the same factor becomes stronger, thus convergent validity is supported. I reran the CFA after removing these observed variables. I determined at this point that the model fit indices values did not meet the acceptable model fit criteria. Afterwards, *TA3*, *CS6*, *CS9*, *CRA6* were removed from the model because they had a low factor loading on the related factor (< .53, fair). Even though it is not advised to remove too many observed variables during CFA, the researcher may need to remove variables with low factor loading in order for the model fit values to reach acceptable model fit. According to Comrey (1988), not all written items will be successful in the factor analysis process, and particularly items with a low factor loading will be unable to adequately account for the factor, resulting in low internal reliability. Furthermore, DeVellis (1991) proposed that, if the observed variables in the measurement tool have a strong

relationship with the related factor, the items will also have a strong relationship with one another. As a result, the researchers stated that, during the factor analysis process, some problematic items could be removed from the measurement tool. The removal of problematic items during the scale development process is referred to as "scale purification" (Wieland et al., 2017). In the deletion of the problematic variables, I found the variables that had the lowest factor loading on the related factor and removed them from the model. After removing each problematic variable, I reran the CFA again to see if the model fit indices reached the acceptable model fit. Model fit indices were checked after each removed item, and the process was repeated until all model fit indices reached acceptable model fit. After deleting the items having low factor loading, I discovered that all model fit indices had reached acceptable model fit. Following the modifications, the model's final state and model fit indices were shown below.

Figure 5

Three-Factor Final Model with 19 Items (N=263)

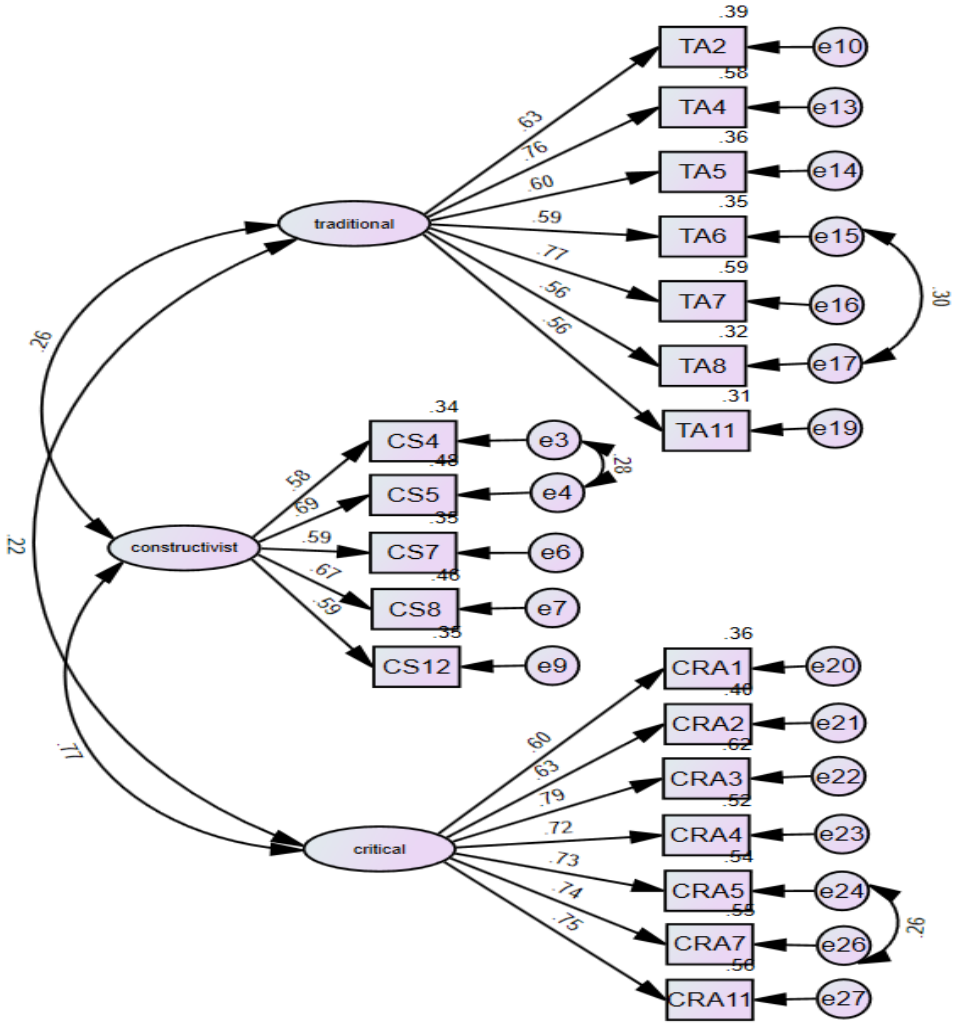


Figure 5 reveals a correlation of .26 between the traditional approach and the constructivist. The traditional approach and the critical approach have a correlation value of .22, as shown in Figure 5. The constructivist approach and the critical approach have a correlation value of .77. The factor loadings of all observed variables are above .55 (good).

Table 7

Standardized and Unstandardized Regression Weights of the Observed Variables (N=263)

Items	Factors	β_0	β_1	S.E.	C.R.	*P*
CS4	Constructivist	0.579	0.828	0.089	9.329	<0.001
CS5	Constructivist	0.69	1			

CS7	Constructivist	0.592	0.698	0.087	8.028	<0.001
CS8	Constructivist	0.675	0.908	0.102	8.907	<0.001
CS12	Constructivist	0.589	0.76	0.095	7.983	<0.001
TA2	Traditional	0.628	1			
TA4	Traditional	0.762	1.2	0.126	9.488	<0.001
TA5	Traditional	0.601	0.899	0.112	7.988	<0.001
TA6	Traditional	0.589	0.848	0.108	7.837	<0.001
TA7	Traditional	0.768	1.318	0.138	9.533	<0.001
TA8	Traditional	0.563	0.831	0.11	7.544	<0.001
TA11	Traditional	0.56	0.822	0.109	7.544	<0.001
CRA1	Critical	0.596	1			
CRA2	Critical	0.633	0.952	0.115	8.303	<0.001
CRA3	Critical	0.785	1.292	0.134	9.628	<0.001
CRA4	Critical	0.724	1.214	0.133	9.134	<0.001
CRA5	Critical	0.732	1.24	0.135	9.164	<0.001
CRA7	Critical	0.744	1.071	0.116	9.265	<0.001
CRA11	Critical	0.75	1.053	0.113	9.347	<0.001

$\beta_{0=}$ Standardized Regression Weights, $\beta_{1=}$ Unstandardized Regression Weights

Table 7 depicts the relationship between the observed variables and the factors associated with observed variables. The observed variables, according to the table, are related to a single factor with positive factor loading, and all factor loadings were found to be statistically significant. Comrey and Lee (1992) defined the factor loading as excellent if it is greater than .71, very good if it was greater than .63, good if it was greater than .55, fair if it was greater than .45, and poor if it was greater than .32. Taking into account the factor loadings of the observed variables under the constructivist approach, *CS5*= .69 (very good), *CS8*= .67 (very good) *CS12*= .59 (good), *CS7*= .59 (good), and *CS5*= .58 (good). According to factor loadings of the observed variables under the traditional approach, *TA7*= .77 (excellent), *TA4*= .76 (excellent), *TA2*= .63 (very good), *TA5*= .60 (good), *TA6*= .59 (good), *TA8*= .56 (good), and *TA11*= .56 (good). Factor loadings of observed variables under the critical approach are listed as follows; *CRA3*= .79 (excellent), *CRA11*= .75 (excellent), *CRA7*= .74 (excellent), *CRA5*= .73 (excellent), *CRA4*= .72 (very good), *CRA2*= .63 (very good), *CRA1*= .60 (good). The chi-square goodness of fit test results for the model was

statistically significant, χ^2 (146) = 260.0462, p<.000, so the exact-fitting model was rejected. The model fit indices of the final model were as follows: GFI= .904, CFI= .940, TLI= .930 and RMSEA= .055, all of which were within the acceptable model fit limits.

Table 8

AVES Items of the Three-factor Final Model

Item Code	AVES Items
	Traditional Approach
TA2	I would teach important authority values to children.
TA4	I would teach values to have children obey the rules of their society.
TA5	My role in the class would be to transmit values accepted by society.
TA6	I expect children would listen to the explanations I provide for them while learning values in class.
TA7	I would teach values to make children obey the rules determined by the authority.
TA8	I expect children would listen to my advice to display appropriate behaviors.
TA11	I would teach values that the school administration has determined at the beginning of the year.
	Constructivist Approach
CS4	My role in the class would be to guide children in constructing their own value systems.
CS5	I would utilize values to have children discover their own moral principles.
CS7	I expect children would participate actively in class activities to interpret certain values.
CS8	My goal in teaching values to children would be to help them discover their own virtues.
CS12	I would utilize values that children construct in class activities.
	Critical Approach
CRA1	My role in the class would be to raise children's awareness of social problems.
CRA2	When I read stories with certain values to children, I would guide them on discussing the importance of social equality.
CRA3	My role in the class would be to facilitate children in discussing solutions to social injustice.
CRA4	I would facilitate children's role play activities to have them discuss social justice.
CRA5	I would utilize values to have children become active agents in solving race/gender inequality.
CRA7	I would utilize values to have children seek solutions to social injustice.

CRA11	I would have children discuss values that related to social problems in society.

In conclusion, AVES created to assess primary school teachers' approaches to values education was supported by a three-factor model through CFA. Since the constructivist and critical approaches have a very high correlation, this result was not an unexpected result for the researcher. While the constructivist approach and the critical approach differ conceptually in the literature, the two approaches have some similarities. The most prominent of the similarities is that they are more contemporary approaches than the traditional approach, as both are student-centered. Some studies were conducted by combining the constructivist approach and the critical approach in the literature (Thornberg & Oguz, 2016). On the other hand, the traditional approach was significantly different from the other two approaches since it had a low correlation with the other two. As a result of experimenting with numerous models, a three-factor model consisting of 19 items emerged to assess primary school teachers' approaches to values education. According to Russell (2016), in order to define a factor in a model, at least three items must be grouped under a single factor. Seven observed variables account for the traditional approach, five for the constructivist approach, and seven for the critical approach (see Table 8). Since this model is being developed for the first time, it is open to further development through testing it in various socio-cultural contexts and with various sample groups.

Reliability

Internal consistency of AVES was performed by evaluating its Cronbach's α scores, which is frequently used in the social sciences to calculate the internal consistency of data collected from a single test administration (Cho & Kim, 2015; Green & Yang, 2009). Measurement tools used to measure the affective domain may have a lower cutoff value for reliability than those that measure the cognitive domain. This is because cognitive skills tend

to be more consistent and stable than affective characteristics. If the measurement tools measuring affective characteristics have an α greater than .70, these scales are considered reliable measurement tools (Gable & Wolf, 1993). The reliability of the dimensions in AVES and the overall scale's reliability score were displayed in Table 9.

Table 9

Reliability of AVES and Dimensions

Scale and Dimensions	Coefficient of Cronbach's Alpha (α)
Traditional Approach	.841
Constructivist Approach	.721
Critical Approach	.887

The reliability of the dimensions of AVES are relatively high as the traditional approach = .841 (good), constructivist approach = .721 (acceptable), and critical approach = .887 (good). Therefore, the AVES as a whole, as well as all of its dimensions, can be regarded as a reliable measurement tool.

Convergent and Discriminant validity

Convergent validity is about having a high and roughly the same magnitude of factor loadings between all observed variables related to a factor. If factor loadings of variables collected under a factor is higher than .50, it is an evidence for convergent validity (Fornell & Larcker, 1981). Examining the factor loadings of observed variables in the model, it can be seen that the observed variables all have a factor loading of .55 and above. Thus, all dimensions of AVES meet the convergent validity criterion. In addition to this criterion, Portraits Values Questionnaire (PVQ) developed by Schwartz (1992, 2001) was used to test the convergent and discriminant validity of AVES. Taking the conceptual definitions into consideration, the traditional approach of AVES corresponds to the conformity and traditions value type in PVQ. The constructivist approach and PVQ's self-direction value type, as well

as critical approach and PVQ's universalism value type, have conceptual similarities. Therefore, the high level of positive correlation between approaches in AVES and PVQ value types was accepted as evidence of convergent validity. Table 11 provides information about the correlation between the approaches to values education in AVES and value types in PVQ.

Discriminant validity is described as "the degree to which measures of constructs are distinct" (Deery et al., 1999, p.543). PVQ, as in convergent validity, was used to determine whether discriminant validity was obtained. Low correlations were expected between the traditional approach and self-direction/universalism value types, between the constructivist approach and conformity and tradition/universalism value types, and between the critical approach and conformity and tradition/self-direction value types in order to ensure discriminant validity. The items in the PVQ can be viewed in Table 10.

Table 10

The Items and Value Types of Portrait Values Questionnaire

	PVQ Items
	Conformity and Tradition
1	He/she believes that people should do what they're told. He/she thinks people should follow rules at all times, even when no-one is watching.
2	It is important to him/her always to behave properly. He/she wants to avoid doing anything people would say is wrong.
3	He/she believes he/she should always show respect to his parents and to older people. It is important to him/her to be obedient.
4	He/she thinks it is best to do things in traditional ways. It is important to him/her to keep up the customs he/she has learned.
	Self-direction
5	It is important to him/her to be independent. He/she likes to rely on himself/herself.
6	It is important to him/her to make his own decisions about what he/she does. He/she likes to be free to plan and to choose his/her activities for himself/herself.
7	Thinking up new ideas and being creative is important to him/her. He/she likes to do things in his/her own original way.
	Universalism
8	He/she wants everyone to be treated justly, even people he/she doesn't know. It is important to him/her to protect the weak in society.

9	He/she believes all the worlds' people should live in harmony. Promoting peace among all groups in the world is important to him/her.
10	He/she thinks it is important that every person in the world be treated equally. He/she believes everyone should have equal opportunities in life.

To test convergent and discriminant validity, I first calculated the mean scores of each dimension of the AVES and the value types of PVQ, and then used bivariate correlation analysis to compare two different surveys. Table 11 indicates whether convergent and discriminant validity is obtained by comparing approaches to values education and the PVQ's value types.

Table 11

The Correlation between AVES and PVQ

	Conformity and Tradition	Self-direction	Universalism
Traditional Approach	.492**	0.028	-0.002
Constructivist Approach	-0.027	.159**	.261**
Critical Approach	-.213**	.126*	.456**

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

When Table 11 is examined, it is observed that the convergent and discriminant validity are obtained on both the traditional approach and the critical approach. According to the table, the traditional approach and conformity and tradition value type have a correlation value of .492 (moderate). The correlation between the critical approach and the universalism value type is .456 (moderate). However, the correlation between the constructivist approach and the self-direction value type is .159 (very weak), while the correlation between the critical approach and self-direction is .261 (weak). This could be due to two reasons. The first is that the constructivist and critical approaches have theoretical similarities in the literature, and, thus, there is a very high correlation between them, as shown in the model. The second

reason may be that the self-direction value type does not accurately meet the constructivist approach at a conceptual level. The constructivist approach emphasizes individuals' understanding to construct knowledge based on their learning processes whereas self-direction emphasizes individuals' freedom to act on their own thoughts.

When Table11 is examined in terms of discriminant validity, the correlation between the traditional approach and the self-direction value type (0.028) and the correlation between the traditional approach and the universalism value type (-0.002) are quite low, indicating that these dimensions are clearly separated from one another, and discriminant validity is obtained. Because the correlations between the critical approach and conformity and tradition (-.213) and the critical approach and self-direction (.126) were quite low, it is possible to conclude that discriminant validity was obtained for the critical approach. As previously stated, the convergent and discriminant validity could not be obtained for the constructivist approach.

General Teaching Survey and AVES

Similar to AVES, I prepared a second survey to measure the teachers' approaches in general education purified in the content of values education. Therefore, I tested whether the second survey and AVES have similarities between each other or not. By examining the correlation between these two measurement tools, I was able to evaluate whether there are similarities or differences in teachers' approaches to values education and general education. The items including the approaches to general education can be viewed in Table 12.

Table 12

Survey Items of Approaches in General Teaching

	Items of General Teaching Survey
	Traditional Approach
1	My role in the class is to transfer knowledge.
2	I use visual materials in my class to make children memorize what they learn.

3	My goal in the classroom is to ensure that children follow my instructions.
4	I transmit information to children through stories.
	Constructivist Approach
5	I use visual materials in my class to guide children in interpreting what they learn.
6	After I read stories to children, I have them share their opinions with each other about the topic in the story.
7	My role in the class is to guide children in constructing their knowledge.
8	I expect children to participate actively in classroom activities to interpret what they learn.
	Critical Approach
9	After I read stories to children, I guide them on discussing what kind of social issues they can learn from the story.
10	I expect children to actively engage in classroom activities to discuss social problems.
11	I use visual materials in my class to facilitate children in discussing possible solutions to social problems.
12	My role in the class is to guide children to discuss social problems in the class.

The reliability of the second survey aiming to measure the teachers' attitudes toward general education was determined to be = .765. (acceptable). First, I calculated the mean scores of AVES's dimensions and the second survey's dimensions. Following the calculation, I compared the calculated mean scores by running a bivariate correlation analysis. The generated result can be viewed in Table 13.

Table 13

The Correlation of Dimensions of AVES and Approaches to General Teaching

	General Teaching TA	General Teaching CS	General Teaching CRA
AVES/TA	.504**	.330**	.151*
AVES/CS	0.110	.452**	.375**
AVES/CRA	0.061	.292**	.593**

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

When Table 13 is examined, it is observed that there is a .504 (moderate) correlation between the traditional approach of AVES and the traditional approach to general education,

a .452 (moderate) correlation between AVES's constructivist approach and the constructivist approach of general education and that there is a moderate correlation of .593 (moderate) between the critical approach of AVES and the critical approach of the general education approach. This situation demonstrates the parallelism that exists between teachers' approaches to values education and to general education.

Social Desirability Bias

In this study, I used the short version of the Marlowe-Crowne Social Desirability Scale introduced to the literature by Reynolds (1982) to test whether the dimensions of AVES are affected by social desirability bias. The items of the measurement tool can be seen in Table 14.

Table 14

Social Desirability Survey Items

	Social Desirability Scale (Short Version)
1	It is sometimes hard for me to go on with my work if I am not encouraged.
2	I sometimes feel resentful when I don't get my way.
3	On a few occasions, I have given up doing something because I thought too little of my ability.
4	There have been times when I felt like rebelling against people in authority even though I knew they were right.
5	No matter who I'm talking to, I'm always a good listener.
6	There have been occasions when I took advantage of someone.
7	I'm always willing to admit it when I make a mistake.
8	I sometimes try to get even, rather than forgive and forget.
9	I am always courteous, even to people who are disagreeable.
10	I have never been irked when people expressed ideas very different from my own.
11	There have been times when I was quite jealous of the good fortune of others.
12	I am sometimes irritated by people who ask favors of me.
13	I have never deliberately said something that hurt someone's feelings.

In the scoring form prepared for the questionnaire, false was coded for eight items and true for five items. In accordance with the scoring form's system, I coded false=1 and true=0 for the eight items that were false. For the other five items that were considered true, I coded false=0 and true=1. I calculated z-scores and then the mean score of the survey. By calculating z-scores and the mean scores of the AVES's dimensions, I ran a bivariate correlation analysis between the mean score of the social desirability scale and dimensions of AVES's mean scores. The generated result can be seen in Table 15.

Table 15

Social Desirability Bias and AVES

	Traditional Approach	Constructivist Approach	Critical Approach
Social Desirability Scale	0.061	0.007	-0.001

When Table 15 is examined, the correlation of the social desirability scale with the traditional approach is seen to be .061, with the constructivist approach to be .007 and with the critical approach to be -0.001. According to these results, all dimensions of AVES have a low correlation with the social desirability scale for this study. Thus, it can be stated that the results obtained are not impacted significantly by social desirability bias.

Short Scenarios

The predictive validity of AVES, which was developed to evaluate approaches of primary education teachers towards values education, was determined by considering the responses given by the participants to the short scenarios prepared by the researcher. Each of the six short scenarios prepared by the researcher, and which involve values education, consists of three options that represent the traditional, constructivist and critical approach. After completing reading the short scenarios, the participants have answered the most

suitable option for them. Accordingly, the responses given by the participants have been coded as traditional approach (1), constructivist approach (2) and critical approach (3). Multiple logistic regression analysis method has been used via SPSS to conduct predictive validity of AVES. Logistic regression analysis is a method which is preferred when the dependent variable is categorical (or nominal). While the number of dependent variables is two for binary logistic regression, the number of dependent variables is more than two for multiple logistic regression. The most important advantage of using the multiple logistic regression model is that it contains many parameters and it is easy to overcome the complexity of the outcomes (Hosmer & Lemeshow, 2000; Long & Freese, 2001).

Before starting the process of analysis, mode calculations of the responses given by the participants to the short scenarios were conducted with SPSS for each approach. The teachers were evaluated on the approach they preferred four or more times based on six short scenarios. For example, if a teacher preferred a critical approach for four of the six short scenarios, this teacher was evaluated in the critical approach category. Accordingly, all participants were categorized in the approach they preferred the most. The dependent variables were coded as traditional approach, constructivist approach and critical approach; and the education levels of the participants were coded as undergraduate (1) and graduate (2) under the title of "Level" and assigned as independent variables. The data of the participants who have marked the master's degree option have been combined with the ones who have marked doctorate degree option for the Graduate category. For the Undergraduate category, the data of the participants who have marked the bachelor's degree have been combined with the ones who have marked associate degree option. At the analysis phase, the scores obtained from the scale (AVES) were assigned as covariate variables. The mean score was calculated for each dimension of AVES. For example, the traditional approach contains seven observed variables. The means (P_ TA) of the responses (1-strongly disagree, 5-strongly agree) given

by the participants to the items in this dimension were calculated. The scores obtained from the short scenarios were identified as predicted, and, according to this, the approach which has been preferred the most by each of the participants according to the responses given to the six short scenarios has been calculated; accordingly, the participants have been put into the most suitable category. As a factor variable, teachers' graduation status (level) has been taken into consideration. Since the constructivist approach (2) is the most preferred category, it has been assigned as the reference category. The outcome obtained from the analysis is demonstrated and explained in the tables below.

Table 16

Cross Table of Independent and Dependent Variables

		Undergraduate	Graduate	Total
Predicted	Traditional	23	16	39
	Constructivist	56	56	112
	Critical	66	45	111
Total		145	117	262

According to Table 16, 112 (42.7%) of the participants have tended towards the constructivist approach depending on their answers to the short scenarios, while 111 (41.9%) of the participants have tended towards the critical approach and 39 (14.8%) towards the traditional approach. Taking the short scenarios into consideration, it is observed that the majority of the participants prefer constructivist and critical approaches, which are defined as contemporary approaches. Goodness-of-Fit values were examined to determine if the model is suitable for the data set or not. Pearson's chi-square test indicates that the model fits the data well [χ^2 (454) = 447,797, p=.573]. The fact that the test outcomes are not statistically significant demonstrates that the model is suitable for the data (Field, 2018). In addition, the Model Fitting Information table compares the full model (all the predictors included) and the null model

(intercept only model). According to the table [$\chi^2(8)=37.079$ $p<.001$] indicates that the full model is a significant improvement in fit over a null model. The likelihood ratio tests outcomes of the model show that all three categories are statistically significant ($p< .05$). Therefore, it can be said that the scale outcomes were statistically significant to determine teachers' approaches towards values education and that the parameters have a good classification in terms of decisiveness. Table 17 presents detailed information about the parameters of the model.

Table 17

Parameter Estimates of the Three-factor Model

Predicted[a]		B	s.e.	Wald	df	Sig.	Exp(B)	Exp(B)* Lower Bound	Exp(B)* Upper Bound
Traditional	Intercept	-1,717	1,632	1,106	1	,293			
	P_TA	,957	,363	6,968	1	,008	2,604	1,280	5,301
	P_CRA	,105	,333	,099	1	,753	1,111	,578	2,135
	P_CS	-1,867	,517	13,012	1	,000	,155	,056	,426
Critical	Intercept	-3,378	1,247	7,340	1	,007			
	P_TA	-,068	,241	,080	1	,778	,934	,582	1,499
	P_CRA	,620	,247	6,320	1	,012	1,860	1,146	3,016
	P_CS	-,154	,320	,233	1	,630	,857	,457	1,605

a.The reference category is: 2.00 constructivist, b. This parameter is set to zero because it is redundant.
*95% Confidence interval for odds ratio.

Table 17 presents parameter estimates (a.k.a the coefficients of the model) of the model. The constructivist is the reference group so it is estimated a model for the traditional relative to the constructivist and a model for the critical relative to the constructivist. The regression coefficients in the table show which predictors significantly discriminate between the traditional and the constructivist and between the critical and the constructivist. In the

traditional category, the traditional approach and the constructivist approach were significant predictors in the model, B=.957, s.e.=.363, Exp(B)= 2.604, p=008 and B=-1.867, s.e.=.517, Exp(B)= .155, p=.000 respectively. The odds for a participant choosing the traditional approach (relative to constructive approach) decreased by a factor of .155 per increase of one unit on the constructivist predictor. In other words, individuals became less likely to choose the traditional approach (relative to constructivist approach), the more constructivist they were. The odds ratio of .2.604 means that for every one-unit increase on the traditional approach, the odds ratio of a participant in the traditional category increased by a factor of 2.604. As for the critical category in the second set of coefficients, the critical was only a significant predictor in the model, B=.624, s.e.=.247, Exp(B)= 1.860, p=.012. The odds ratio of 1.860 means that for every one-unit increase on the critical approach, the odds ratio of a participant in the critical category increased by a factor of .1.860. Table 18 indicates the percentage of the categories in terms of observed (AVES) and predicted (short scenarios) variables.

Table 18

Classification of Multinominal Logistic Regression Analysis

Observed	Predicted			
	Traditional	Constructivist	Critical	Per cent Correct
Traditional	6	15	18	15.4%
Constructivist	3	64	45	57.1%
Critical	2	41	68	61.3%
Overall Percentage	4.2%	45.8%	50.0%	52.7%

Table 18 demonstrates which group members are best predicted by the model. When the table has been examined, it has been predicted that six of the teachers in the traditional category would be in the traditional category, 15 of them in the constructivist category and 18

in the critical category. The correct classification percentage for the Traditional category is 15.4%. It has been predicted that three of the teachers in the Constructivist category would be in the traditional category, 64 of them in the constructivist category, and 45 in the critical category. The correct classification percentage of the Constructivist category is 57.1%. The category having the highest percentage of correct classification is the critical category. It has been predicted that two of the teachers in the critical category would be in the traditional, 41 of them in constructivist and 68 in critical categories. The correct classification percentage of the Critical category is 61.3%, and the overall correct prediction of the categories is at the rate of 52.7%.

According to this table, it is observed that the constructivist category and the critical category are not completely separated from each other. The fact that the constructivist approach and the critical approach had a high correlation in the model created on AMOS, and the fact that the conceptual definitions in the literature determine mostly common points for both approaches, explain why this outcome was obtained. It has been detected that the traditional category is clearly separated from the other two categories. However, the fact that the estimation accuracy of the critical category is proportionally very low (15.4%) is thought-provoking. The reason for this outcome may be that hypothetical scenarios provide a context for the reader and require a clear response to the question provided in the scenario. Among the candidates who have responded to the items in the assessment tool (AVES), the ones who are prone to the traditional approach may have seen themselves closer to the constructivist and critical approaches, which are student-centered approaches, under the influence of the hypothetical context in the short scenarios. As another reason, since especially the number of the participants in the traditional approach category is quite low, the possibility of not having a healthy outcome can be taken into consideration. In this case, it would create healthier outcomes to test the outcomes with a larger sample group.

Chapter Five: Discussion and Conclusion

Discussion

Values can be taught to children formally or informally (Kupchenko & Parsons, 1987). However, it is necessary to integrate values education within the scope of the formal curriculum to be able to teach values in a planned and programmed manner and reduce negative behaviors (Carr, 1983; Erbaş & Başkurt, 2020).

It is necessary to identify teachers' approaches toward values education and develop appropriate teaching materials, methods, and techniques to teach values effectively and efficiently within the formal education program (Erbaş & Başkurt, 2020). Some private or governmental agencies carry out research related to character education. For example, in the United States, the Great Expectations character education program provides character education seminars for teachers and school administrators in many school districts in eleven different states. The program also designs course materials and curricula for Character Education. Their website offers a section where the program's goals and activities are shared. When classroom practices in particular are examined, the program shapes these practices within the framework of both the traditional and constructivist approaches but does not partake in the critical approach within classroom practices (Great Expectations, 2021). AVES would be a beneficial tool for this program to conduct teacher seminars more effectively and efficiently. For example, seminar attendees could be asked to fill out AVES prior to the seminar programs which would allow the training to focus on the approach or approaches teachers used least in their classroom activities. The adaptation of all three approaches in classroom activities can be encouraged. Character training carried out by adapting a single approach would undermine an effective and efficient character training process, which is why it is useful to know the approaches teachers use and to carry out training programs accordingly.

Many different theoretical classifications for values education have been identified in the literature. However, the classification of approaches to values education in literature could not surpass the conceptual definitions. It has been investigated in literature what values teachers care about in their daily and professional lives, and various measurement tools measuring the individuals' value orientation were developed (e.g., SVS and RVS). However, any measurement tool aimed at measuring teachers' approaches to values education has not been found in the literature. Therefore, this study was conducted to develop a scale to measure primary school teachers' approaches to values education.

An item pool was generated as a step of the scale developing process. The items in the item pool were prepared using the triple classification in literature (Thornberg, 2008b; Thornberg & Oğuz, 2013). The item pool of 53 items was then reduced to 36 items taking account of the feedback of experts in various fields. The remaining 36 items were analyzed for reliability and items with low-reliability scores were modified in the pilot study. Finally, the study was continued with a larger sample group (N= 619) for the measurement tool (AVES)'s validity and reliability analyses.

The triple classification model classified as the traditional, constructivist and critical approach in the literature, was utilized in the development of the scale. Although the triple theoretical model in the literature presented a certain number of factors in the classification of approaches to values education, exploratory factor analysis (EFA) was conducted initially because the model had not previously been tested. EFA emerged the relationship between the observed variables and latent variables (factor) and revealed factor loadings of the observed variables (Kahn, 2006). Nine items were excluded from the measurement tool as a result of EFA for reasons such as quite low correlation with other items, cross-loading with another item, or having a low factor loading (O'Rourke & Hatcher, 2013; Tabachnick & Fidell, 2013). The remaining 27 items out of the 36 supported the three-factor model that had been

determined theoretically. The remaining items were found to be above the factor loading threshold of .32 (Tabachnick & Fidell, 2013), associated with only one factor in the model, and had sufficient factor loading. Briefly, according to the dataset in the study, EFA supported the three-factor theoretical model. The correlation table for factors showed that the constructivist and critical approaches have a high correlation (.553), while the traditional approach has a low correlation with these two approaches. The high correlation between the constructivist approach and the critical approach is not surprised. Some researchers conducted academic studies by combining these two approaches. Although Thornberg and Oğuz (2013, 2016) divided the approaches to values education into three theoretical categories, the researchers combined the constructivist and critical approaches in one category to analyze their qualitative study's results. The constructivist and critical approaches were defined in literature as the student-centered approaches encouraging the active participation of the children in the learning process (Jones, 2009; Thornberg & Oğuz, 2013). In the constructivist approach, the student's active participation in the process is expected, while focusing on the student's construction of knowledge and development of their own value system (Williams, 1985). As for the critical approach, teachers make children aware of social issues and encourage them to actively participate in the solutions (Jones, 2009). Therefore, it can be stated that both approaches share common characteristics. While these two approaches were highly correlated with each other as a result of EFA, it was not surprising that they had a low correlation with the traditional approach, which places the teacher or instruction in the center and considers children as passive receivers of information (Brownlee et al., 2016).

The three-factor model with 27 items was supported by EFA. However, the model must be validated using the confirmatory factor analysis (CFA) by using the data obtained from a separate sample group. Therefore, CFA was conducted with the second part of the

dataset (N=284). The aim of CFA is to reveal the relationship between the observed variables and the factors in a theoretical model or the model generated by using EFA (Kahn, 2006). The three-factor model was analyzed with the AMOS 26 analysis software. The remaining 27 items after EFA were placed under the related factor. The CFA results supported the high correlation (.74) between the constructivist and critical approaches in accordance with the model developed with the EFA. At this stage, the items from these two approaches were integrated and evaluated as a single factor with the concern of these two approaches might measure the same construct. Because these two approaches are student-oriented, the approach with the combined items was named the contemporary approach (Jones, 2009). The two-factor model was tested with the CFA. However, the results of the two-factor model (χ^2 (323) = 781.689, p<.000; GFI= .799, CFI= .833, TLI= .819, RMSEA= .074) did not reveal better parameters compared to the results obtained from the three-factor model (χ^2 (321) = 679,290 p< .000; GFI= .839, CFI= .870, TLI= .858, RMSEA= .063). The explanation for this could be because, while both approaches are student-centered, they have some fundamental distinctions. The most critical point between these two approaches is that the constructivist approach weighs heavily on the development of the individual's own value system (Veugelers, 2000), whereas the critical approach focused on solutions for the social problems (Brownlee et al., 2016; Jones, 2009). Evaluating these two approaches together may result in the elimination of the critical approach's emphasis on social problems. It can be suggested that social issues are still a big issue in many modern societies today. Given that some issues (e.g., bullying, cheating, and discrimination) among students in and around the school are factors nourishing social issues (Etherington, 2013; Lickona, 1993), determining the teachers' awareness of such social problems and their teaching approaches can provide useful information in values education. For this reason, the three-factor model was retained instead of the two-factor model in the CFA. However, the fact that the constructivist and critical

approaches have a high correlation as a result of the CFA is an issue that has to be addressed. The theoretical classifications in literature must be re-evaluated, and many approaches subject to various classifications must be tested and evaluated by researchers.

Some researchers focused on two key distinctions towards values education in the literature (Carr, 1983; Goodman, 2000). The first is the traditional approach in which teachers transmit the values directly to children, and the second is the progressive approach in which children experience values through collaborative learning and social relationships (Goodman, 2000). Piaget characterized these approaches in two stages as autonomous and heteronomous (Fleming, 2006; Kohlberg, 1963). In the stage of heteronomous, rules are determined by an external authority and cannot be changed. Children are expected to abide by these rules and follow what they are told (Duska & Whelan, 1975; Fleming, 2006). With this aspect, the stage of heteronomous can be associated with the traditional approach. At the stage of autonomous, children become aware of their own autonomy and can change or generate the rules by mutual agreements (Duska & Whelan, 1975; Peters, 1960). This stage can be associated with the progressive approach. Sanger and Osguthorpe (2013) criticized that such bipolar classifications are fairly simple and narrow. Researchers argued that approaches to values education have a deeper and more complex construct so the more complex classification must be discussed. Thus, we can argue that new conceptual models to be tested in practice without eliminating the characteristics of different approaches should be investigated in the literature.

As a result of EFA, the three-factor model with 27 items was tested through CFA. However, it was found that some items had a low factor loading. Therefore, the model's parameters did not yield the acceptable model fit values. If the items have a low factor loading, these items may negatively affect the reliability of the scale (Comrey, 1988). Therefore, the items with a low factor loading were removed from the model as a result of

CFA and acceptable model fit values were obtained. At this stage, 19 items remained in the model. The reliability of the three-factor model with 19 items was found enough (α= .872). Therefore, it can be said that AVES is a valid and reliable measurement tool as a result of validity and reliability analysis. In addition, Portraits Values Questionnaire (PVQ) developed by Schwartz (1992, 2001) was used to test the convergent and discriminant validity of AVES. Since the conformity and tradition value type of PVQ has similar features to the traditional approach of AVES, the high correlation between this value type and the traditional approach has been accepted as evidence for convergent validity. As a result of the analysis, this hypothesis has been confirmed and a positive correlation has been found between these two constructs (.492). Due to the similarities in conceptual definitions between PVQ's self-direction value type and AVES' constructivist approach, and between PVQ's universalism value type and AVES' critical approach, a high positive correlation was expected as evidence for convergent validity. Although the results showed a moderately positive correlation (.456) between the universalism value type and the critical approach, the analysis revealed a low relationship (.159) between self-direction and the constructivist approach. The self-direction value type focuses on the individual's free will (Arthaud-Day et al., 2012; Schwartz et al., 2001) but the constructivist approach focuses on constructing knowledge by children (Thornberg & Oğuz, 2013; Williams, 1985). It may be a reason why a low correlation was found between the self-direction value type and the constructivist approach. Thus, it can be said that they do not represent a similar construct. Conformity and traditions value type has similarities with the traditional approach in a way that individuals embrace the values accepted by society (Arthaud-Day et al., 2012; Schwartz, 1992). Because the value type of universalism focuses on social problems (Schwartz, 1992) and the critical approach encourages the student's active involvement in solving social problems while teaching values (Brownlee et al., 2016; Jones, 2009), it can be interpreted that they measure similar

constructs. The second reason may be that the high correlation between the constructivist approach and the critical approach in the model restrained the discrimination between these approaches. The fact the constructivist approach has a low correlation (.159) with the self-direction approach while it has a relatively higher correlation (.261) with the universalism value type support this claim. Therefore, we can conclude that convergent and discriminant validity of the constructivist approach cannot be achieved. On the other hand, the fact the traditional approach has a low and negative correlation with the self-direction and universalism value types can be shown as evidence that discriminant validity is achieved for the traditional approach. Similarly, the fact the critical approach has a negative low correlation with the traditions and conformity value type can be accepted as an indicator that discriminant validity is achieved for the critical approach.

To test the predictive validity of AVES, no measurement tool was found in the literature. For this reason, the researcher prepared six short scenarios to reveal the teachers' approaches to values education. After reading the scenarios, the participants chose one of the three options representing one out of the traditional, constructivist and critical approach. The participant was assigned to the approach he/she chose the most out of the answers given to the six short scenarios. So, it is assumed that AVES must predict the participant within the same approach in which she/he was assigned based on the answers of short scenarios. The multinominal logistic regression analysis was utilized through SPSS to find out the predictive validity of AVES (Hosmer & Lemeshow, 2000; Long & Freese, 2001). The analysis revealed that the critical approach has the highest accurate prediction rate (61.3%) among all three approaches. The constructivist approach's accurate prediction rate was 57.1%, while the traditional approach has a fairly low accurate prediction rate, such as 15.4%. AVES' overall accurate prediction rate of participants' approaches according to short scenarios is 52.7%. It must be discussed the reasons why the prediction rate of the traditional approach is too low.

This result can be explained in two ways. First, short scenarios may not give accurate results because they are prepared by the researcher and their validity and reliability were not tested through external sources. The second reason may be that short scenarios require participants to reply to the short scenarios within a context. After reading short scripts, teachers might have felt themselves close to constructivist or critical approach mostly. This has led to very few people being involved in the traditional approach. Therefore, it can be thought that an accurate result has not been obtained because there was no adequate variable in the traditional approach category.

Upon examination of the literature, it is found that some qualitative studies have been carried out on the subject of teachers' approaches to values education (Erbas & Baskurt, 2020; Thornberg & Oguz, 2016). Mostly interview and observation methods were preferred in these studies. However, the generalizability of the results of such studies is a controversial topic due to some problems. First, qualitative studies are conducted with a small number of sample groups so the generalizability of the results to the population can be problematic. Second, the data collection and data analysis process may include researchers' bias (Creswell & Poth, 2017). To end these problems, it may be useful to integrate a valid and reliable scale into such studies. AVES may help the increase generalizability of the results to the population when incorporating with qualitative studies.

A scoring key was presented for the researchers who will use AVES as a data collection tool or for practitioners in education (see Appendix K). Researchers or practitioners who are going collect data by using AVES can analyze the data according to this scoring key. According to this scoring key, a person may tend weakly, moderately, or strongly towards a traditional, constructivist, or critical approach. A teacher who tends to a traditional approach in terms of values education can be defined as follows: (1) transmits the values set by an authority to children (Lickona, 1991), (2) disciplines children to behave in

accordance with social rules (Williams, 1985), (3) gives the advice to shape children's behavior, and (4) a role model that holds social values above an individual's values (Arthur, 2014). A teacher who tends to a constructivist approach in terms of values education can be defined as follows: (1) encourages children to construct their own values, (2) supports children's autonomy in the learning process (Hildebrandt & Zan, 2014), (3) creates a democratic classroom environment in which students can express themselves (DeVries et al., 2000; DeVries & Zan, l994), and (4) a collaborator who considers individuals' own values no more trivial than those of society (Veugelers, 2000). A teacher who tends to a critical approach in terms of values education can be defined as follows: (1) raises students' awareness of social problems, (2) supports student's active involvement in the process for solving social problems, and (3) does not sacrifice the values of the individual for the sake of social issues or social problems (Brownlee et al., 2016; Jones, 2009).

Finally, another issue required to be addressed is that a person should not be expected to be tended to just one approach in a pure way. Because a teacher may tend to be strongly constructivist, while he/she may tend moderately to critical approach, and weakly to the traditional approach. Therefore, it should be examined to what extent the individuals tend to those approaches.

Summary of Results and Significance

AVES was developed to measure the teachers' approaches to value education was designed as a multidimensional scale with 36 items. Some items were modified as a result of expert opinions and the pilot study, and the data collection process was initiated. EFA and CFA were performed using the data obtained from teachers teaching at various grade levels, ranging from kindergarten to fifth grade in public schools in three different states. As a result of EFA, some items that did not meet the criteria were removed, and a model with 27 items and three factors emerged. Items with low factor loading were removed from the AVES as a

result of CFA because these items were insufficient to explain the factors and would have a negative impact on validity and reliability. Therefore, a three-dimensional model comprised of 19 items has emerged. In addition, as a result of the reliability analysis (α= .872), it was discovered that AVES is a reliable measurement tool.

AVES is significant in terms of developing a model for the literature. Although various measurement tools have been developed to measure the individuals' value orientations, no example of a measurement tool developed to measure the teachers' approaches to values education has been found in the literature. It can be observed how important teachers' approaches to education are when considering the student-teacher relationship, the use of educational materials, the organization of classroom activities, and teachers' role for children, particularly in values education. Therefore, determining what kind of value orientations teachers have in their personal or professional lives does not provide an adequate information in terms of values education for the organization and implementation of educational activities in the classroom. It can be stated that there is a need in the literature to develop and disseminate measurement tools that determine teachers' approaches so as to obtain this information. Therefore, we can conclude that AVES will make a positive contribution to the literature in this regard. The appendix K contains the scoring and evaluation form for how researchers or policy makers who intend to collect data using AVES will interpret the data obtained with AVES.

Implications

Growing interest and awareness in values education has resulted in an increase in academic study on the subject. Along with many theoretical studies on values education, empirical studies can be found in the literature. It is particularly promising in terms of values education or character education that the strengthening of views that values education should be carried out within the scope of formal education programs, as well as the fact that

more empirical studies are being conducted on this subject. The aim of this study was to introduce to the literature a measurement tool that will allow the determination of teachers' approaches to values education in order to provide values education effectively and efficiently within the framework of formal education. In this regard, the study has some theoretical and practical implications.

Theoretical Implications

In the literature, we can see that many studies have been conducted with a title of values education, character education or moral education. Previously, some specific studies dealing with approaches to values education were conducted. The five-point classification introduced to the literature by Superka and Johnson (1975) was one of the first studies to classify approaches to values education. Kupchenko and Parsons (1987) added one more approach to Superka and Johnson's classification. Similarly, there are classifications in the literature that are in four (Brady, 2011), triple (Thornberg & Oğuz, 2013), or different categories. It can be thought that these classifications, which form as a result of the conceptual definitions, do not pose any problems in the theoretical framework. However, these conceptual classifications are incapable of demonstrating a practical divergence. The factor analysis results of the triple approach (traditional, constructivist, and critical approach), which served as the foundation for the development of AVES, revealed that conceptual divergences between theoretical categories and methods may not find a clear answer in practice. This result indicates that the theoretical classifications in the literature should be reassessed, as should the conceptual definitions, in order to find a practical solution.

The triple classification introduced to the literature by Thornberg and Oğuz (2013) was used as the foundation for writing the items for AVES. Although the researchers theoretically separated this classification into three, in a qualitative study they conducted, they examined the constructivist and critical approaches together (Thornberg & Oğuz, 2016).

Based on the results of this study, it is safe to say that this choice was made correctly. Because the constructivist and critical approaches have a significant correlation, a second-order factor (contemporary approach) was constructed between these two approaches. Therefore, the triple classification's theoretical foundation can be revised, and the conceptual definitions and classification can be reshaped. Many studies in the literature have concentrated on two fundamental classifications (Carr, 1983; Goodman, 2000; Kirschenbaum, 1992; Sanger & Osguthorpe, 2005). These two fundamental approaches are positioned in the center based on whether the student or the teacher/instruction will be in the center. Therefore, while discussing the approaches to values education theoretically, it can be considered that the sub-classifications may be then positioned inside these two fundamental approaches after presenting the basic characteristics of these dipolar primary approaches.

Practical Implications

When the literature is examined, some qualitative studies were conducted on approaches to value education (Erbaş & Başkurt, 2020; Thornberg & Oğuz, 2013, 2016). It was investigated in these studies which approaches teachers prefer while teaching values to children in the classroom. It was attempted to determine the teachers' methods on values education through interviews and in-class observations. However, a measurement tool was not used to collect the quantitative data in these studies. AVES aims to fill this gap in the literature, since there is no measurement tool with proven validity and reliability in the literature to determine teachers' approaches to values education. In addition to employing interview and observation methods to improve study generalizability, researchers can also use AVES to collect quantitative data. In addition, mixed method studies can be carried out on this subject by conducting qualitative and quantitative studies in tandem.

Furthermore, programs and curriculums for values education and character education are being developed in the United States and throughout the world. Second Step and Great

Expectations are examples of such programs. Within the scope of social emotional learning, the Second Step program develops educational programs and materials that include character education and several values in many states across America. Some states and school districts mandate the Second Step program within the formal education program. However, Great Expectations organizes seminars, educational activities, and educational materials on character education for teachers and some states and school districts require teachers and school administrators to attend Great Expectations training seminars. In order for such educational programs and activities to be performed effectively and efficiently, the teachers' approaches to values education can be determined and such programs can be developed. Teachers who participated in such educational activities before and after the implementation of educational programs and activities can provide data on their approaches to values education through AVES. In practical terms, these data can be used to develop educational programs and activities, as well as to contribute to the collection of data on values education for academic publications.

By using AVES, policy makers can identify teacher approaches to values education and use this data to develop seminars, educational programs/curricula, and educational materials for values education. By identifying approaches typically not used in the classroom, these training activities can ensure that teachers are encouraged to adapt multiple approaches within their classrooms thereby supporting an efficient and effective training process in values education.

Lastly, AVES can be utilized as a useful measurement tool for policy makers. In the United States, some states (for example, California and Nebraska) require character education in public schools, while others encourage it. Therefore, it can be stated that teaching values is one of the responsibilities of state education departments and school administrative districts. When these institutions want to develop value seduction policies, AVES may assist policy

makers by serving as a data collection tool to measure teachers' approaches to values education. In light of the empirical data, more efficient and beneficial results in policy steps related to the subject can be obtained.

Limitations

There are some limitations that need to be noted in this study. First, the sample group of the study consisted mostly of female teachers (91.4 %). Consequently, the study results were likely to be affected by gender bias. On the other hand, this study was restricted to PreK-5 teachers. Data for middle and high school teachers may reveal different results because PreK-5 students have remarkably different cognitive and affective capacities compared to more mature students. Teachers are, therefore, highly likely to display different attitudes and behaviors depending on the age group they teach.

One of the limitations of the study is that the vast majority (64.2%) of teachers participated in the study from a single state out of three different states. This may reveal the study's ability to reflect the characteristics of a single socio-cultural setting at a high rate, and, therefore, this will, to some extent, hinder generalization of the results. Furthermore, the fact that the majority of the teachers who participated in the study (80.8%) were Caucasian raises the question that the study's results may have resulted in racial as well as gender bias.

The third limitation is that, although the study aimed to include teachers working in three different states, the socio-cultural dynamics present in each state mean that the results are limited to the primary school teachers working in public schools included in the sample group. Given that such variables as culture, environment, and society influence individuals' value systems, different results will likely be yielded when this study is repeated in different cultures and societies.

The fourth limitation of the study is that the results obtained from this study were limited to characteristics measured by the variables included in AVES. Another limitation of

the study originates from the analysis method and the analysis software. It is debatable in the literature whether 5-point Likert type data should be considered continuous or ordinal data. Depending on how the dataset is evaluated, the nature of the analysis programs may also change. When the data are considered an ordinal variable, the R Studio is used as the analysis software. The dataset was evaluated as a continuous variable in this study, and the AMOS 26 analysis software was used for the confirmatory factor analysis. Therefore, the results are limited to the opportunities provided to the researcher by the AMOS analysis software. Different analysis programs may obtain different results.

The last limitation is that no validated and reliable scale measuring the approaches to values education has been found in the literature. It is, therefore, impossible to compare AVES with an external scale that measure teachers' approaches to values education in terms of external validity. AVES functions as a self-reported data collection tool where teachers can express their own thoughts. Testing the study data using the observation method ensures the measurement tool is more reliable and valid. However, the observation method was not included in this study due to the COVID-19 precautions taken in schools and the fact that education services could not be provided for a particular time period. It would be useful for future studies to consider this issue. For this reason, researchers can compare the data collected through AVES by observing teacher classroom activities and noting the approaches they used to teach values to children.

Recommendation for Future Studies

AVES was developed as a result of the data collected from primary school teachers across three different states. Because AVES is a scale developed for the first time in this study, it is open to testing and development with different sampling groups. Future studies can test the validity and reliability of AVES by collecting data from different states and socio-cultural environments with a larger sampling group. Therefore, it will be more efficient

and beneficial for researchers to repeat the validity and reliability analyses of AVES with different sampling groups and even different analysis programs in future studies.

Researchers may collect data by using AVES in different cultural and social contexts so that data obtained from various countries can be reported to prove the cross-cultural validity of AVES. If cross-cultural validity (Matsumoto, 2003) is proven, comparative studies can then be added to the literature to identify the approaches toward values education adopted by teachers working in different countries.

AVES is a scale developed based on the ternary classification found in the literature. Other measurement tools can subsequently be developed based on other classifications found in the literature to measure approaches to values education. By utilizing AVES, future researchers can benefit to prove the convergent and discriminant validity of their measurement tool.

AVES was developed by collecting data solely from PreK-5 teachers working in elementary schools. In the future, cross-sectional studies employing AVES can be performed with teachers working in both middle and high school to determine whether teachers of different grade levels use the same approaches to teach values education and these variables can then be considered while developing future curricula for values education.

AVES may allow us to predict how teachers utilize educational materials while teaching values, the student-teacher relationship, and teachers' preferred methods. By detailing teachers' approaches toward values education in light of different variables (e.g., gender, education level, socio-cultural structure, years of service), prospective studies can guide policy makers in their policy steps toward values education.

Conclusion

The aim of this study was to develop a valid and reliable measurement tool to measure teachers' approaches towards values education. The theoretical model consisting of

three approaches (traditional approach, constructivist approach, and critical approach) developed by Thornberg and Oğuz (2013) was tested with the exploratory factor analysis and confirmatory factor analysis. The conceptual definitions of these approaches in literature were used to generate an item pool. The 53 items in the item pool were first evaluated by experts within the scope of the content validity, clarity of expressions, face validity, and wording criteria. The items were revised in response to expert feedback, and it was decided that 36 items would be tested in the pilot study. A pilot study was conducted with a group of primary school teachers. Some items with low reliability were revised as a result of the pilot study. Then, the data collection process began with a large group and the data obtained from the large group were analyzed by following the EFA and CFA procedures. A multidimensional measurement tool was tested and a model with nineteen items emerged as a result of the analyses.

In the study, it was concluded that various conceptual classifications related to the values education in literature should be reviewed, and the models that can be tested in practice should be revealed. Furthermore, we can state that a new measurement tool has been presented to the literature that will support the qualitative studies on the approaches of values education and increase the generalizability of the qualitative study results. This measurement tool can be utilized with an aim to develop educational policies in academic studies and other fields. Thus, the necessary steps can be assisted to ensure that values education which quickly gains ground in formal education is conducted efficiently and effectively. Finally, the developed measurement tool is open to testing and development in various sample groups and socio-cultural settings. It is expected that using the results of the study to develop and test new theoretical models for future studies will contribute to the enrichment of the relevant literature.

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Appendix A

Demographic Information of the Participants

Characteristic		Pilot (*N*=52)	Large Group *(N*=619*)*
Gender			
	Male	3 (5.7%)	38 (6.1%)
	Female	47 (90.3%)	566 (91.4%)
	N/A	2 (3.8%)	15 (2.4%)
Ethnicity			
	African American	2 (3.8%)	10 (1.6%)
	Asian	3 (5.7%)	7 (1.1%)
	American Indian	8 (15.3%)	36 (5.8%)
	Caucasian	34 (65.3%)	500 (80.8%)
	Hispanic	2 (3.8%)	32 (5.2%)
	Other	3 (5.7%)	25 (4.0%)
Age			
	20-25	7 (13.4%)	50 (8.1%)
	25-30	11 (21/1%)	112 (18.1%)
	30-40	16 (30.7%)	194 (31.3%)
	40-50	7 (13.4%)	108 (17.4%)
	50 Above	9 (17.3%)	145 (23.4%)
	N/A	2 (3.8%)	10 (1.6%)
State			
	California	-	51 (8.2%)
	Oklahoma	52 (100%)	398 (64.2%)
	Nebraska	-	160 (25.8%)
	N/A	-	10 (1.6%)
Education			
	Some College	-	1 (0.1%)
	Bachelor’s Degree	30 (57.6%)	324 (52.3%)
	Master’s Degree	21 (40.3%)	276 (44.5%)
	Doctorate Degree	-	9 (1.4%)
	N/A	1 (1.9%)	9 (1.4%)

Service			
	Less than 1 year	4 (7.6%)	15 (2.4%)
	1 year	1 (1.9%)	19 (3.0%)
	2 years	4 (7.6%)	50 (8.0%)
	3-5 years	9 (17.3%)	95 (15.3%)
	5-10 years	10 (19.2%)	148 (23.9%)
	10-15 years	8 (15.3%)	99 (16.0%)
	Over 15 years	15 (28.8%)	184 (29.7%)
	N/A	1 (1.9%)	9 (1.4%)
Teaching Level			
	Pre-K	8 (15.3%)	38 (6.1%)
	Kindergarten	8 (15.3%)	54 (8.7%)
	First Grade	8 (15.3%)	73 (11.7%)
	Second Grade	7 (13.4%)	92 (14.8%)
	Third Grade	3 (5.7%)	98 (15.8%)
	Fourth Grade	7 (13.4%)	104 (16.8%)
	Fifth Grade	10 (0.1%)	141 (22.7%)
	N/A	1 (1.9%)	19 (3.0%)

Appendix B

Item Evaluation Form (for Experts)

Directions: Item Evaluation Form (IEF) was designed to understand which items seem to be appropriate for the approaches to values education scale (AVES) in terms of grammar, appropriateness for participants (early childhood teachers, from PreK to 5 grade), and content. Please review the summary of the background theory of the approaches towards values education and then rate the items, explain your choice for the items, or suggest modifications for the items.

Evaluation Criteria

Excellent (**E**) Good (**G**) Fair (**F**) Poor (**P**) Not Applicable (**N/A**)

Item No	Items	Evaluation					Reason/Suggestion for Modifications
		E	G	F	P	N/A	
A) Traditional Approach (TA)							
TA1	I explain the lessons to be learned from stories which I read in the classroom.						
TA2	I make children obey the classroom rules by explaining them.						
TA3	I teach values to children that are important to me.						
TA4	I explain why and how to follow social rules.						
TA5	I discipline children to behave appropriately in the classroom.						
TA6	I act as a role model for children.						
TA7	I teach values determined by the school administration.						

TA8	I teach values to children to serve the community.						
TA9	I contribute to the growth of children as a good citizen.						
TA10	I give advice to children to behave appropriately in the society.						
TA11	I avoid imposing my values while I am teaching in the classroom.						
TA12	I teach values accepted by the society to children to make them good citizens.						
TA13	I explain to children how to behave in the society.						
B) Constructivist Approach (CSA)							
CSA1	I guide children to create their value systems by arguing with classmates on values.						
CSA2	I help children to construct their own values.						
CSA3	I avoid encouraging children to create their own values.						
CSA4	I set classroom rules with children through a democratic approach.						
CSA5	I encourage children to participate actively in classroom activities.						
CSA6	I create an environment in which children can express themselves easily.						
CSA7	I create opportunities for children to ensure self-awareness.						
CSA8	I guide children to internalize the values they constructed.						
CSA9	I create a democratic environment in the classroom to discuss values.						
CSA10	I help children to take responsibilities of their action.						

CSA11	I let children experience their own values by managing relationships in the classroom.						
CSA12	I encourage children to experience independent judgement.						
CSA13	I create teaching activities which children can experience their own values.						
C) Critical Approach (CRA)							
CRA1	I set classroom rules by discussing them with children.						
CRA2	I do not encourage children to seek for solutions to social problems.						
CRA3	I guide children to discuss social problems.						
CRA4	I encourage children to think about social inequality.						
CRA5	I increase children's awareness of social injustice.						
CRA6	I make children take action to solve social problems.						
CRA7	I help children to evaluate values from a critical point of view.						
CRA8	I encourage children to discuss social problems.						
CRA9	I help children to be aware of social problems.						
CRA10	I encourage children to discuss race/gender inequality in the society.						
CRA11	I guide children to be aware of problems in the society.						

Q1. Do you think AVES is an appropriate tool to measure approaches to values education in early childhood education?
Q2. Any other comments or suggestions for AVES?

Appendix C

Demographic Information Form

1.What is your age?

20-25 O 25-30 O 30-40 O 40-50 O 50 above O

2.What is your gender?

Female ○ Male ○ Non-Binary/Third gender O Prefer not to say O

3. What would best describe you?

African American ○ Asian ○ American Indian○

Hispanic ○ Caucasian ○ Other O

4. What is the highest degree or level of school you have completed?

High school graduate ○ Some college ○ Associate degree ○

Bachelor's degree ○ Master's degree ○ Doctorate degree ○

5. How many years have you been teaching?

Less than 1 year O 1 year ○ 2 years ○ 3-5 years ○ 5-10 years ○

10-15 years ○ over 15 years ○

6. What grade level are you presently teaching?

Pre-k ○ Kindergarten ○ First Grade ○ Second Grade ○

Third Grade ○ Fourth Grade ○ Fifth Grade ○

7. In which State are you presently working?

California O Oklahoma O Nebraska O

8. Your e-mail:…… (Enter your email address here to be entered in a drawing for a $20 Amazon gift)

Appendix D

AVES Evaluation Form (For Pilot Study)

Directions: The questions below are about the items that you already rated. The purpose of these questions is to find out the content validity of the measurement tool and the appropriateness for the target participants (primary education teachers). Please read and answer the questions carefully.

Q1. What do you think the items in the survey aim to measure?

Q2. Were any of the directions unclear? Any suggestions?

Q3. Were any of the items unclear? Any suggestions?

Q.4 Any comments or suggestions?

Your email:

Appendix E

Modifications after the Pilot Study

Traditional Approach Modification	
Initial Item	Modified/Replaced Item
1- When I read stories with certain values to children, I would determine the lessons to be taken.	I would avoid determining the lessons to be learnt from the stories for children.
4- I would avoid transferring parents' values to children.	I would teach important authority values to children.
18- I would teach children values in order for them to serve their community.	I would teach values to make children obey the rules determined by the authority.
26- I would provide children with a list of classroom rules so they follow the rules.	I would give a list of classroom rules that I determined to children so they follow my rules.
29- I would transmit values that families consider important.	I would transmit traditional family values to children.
35- I would make ultimate decisions regarding classroom rule changes.	I would decide what classroom rules to change.

Constructivist Approach Modification	
Initial Item	Modified/Replaced Item
3- I would use text-based materials depicting certain values to have children interpret them.	I would have children role play activities to help them interpret values for themselves.
5- When I read stories with certain values to children, I would have them share their opinions with each other.	I would not allow children to share their opinions with each other after I read stories with certain values.
17- I would not encourage students to take active roles in-class activities.	In my classroom, children take active roles in class activities about values.
36- I would negotiate classroom rules with students to make a list of rules that we all follow.	a) In my classroom, children negotiate classroom rules with me.

Critical Approach Modification	
Initial Item	Modified/Replaced Item
2- My role in the class would be to guide children to discuss solutions to social inequality.	a) My role in the class would be to raise children`s awareness of social problems.
25- I would not utilize values that emerge from discussing social injustice.	a) I would not discuss values with children to solve social problems in my class.
34- I would utilize values that emerge from class discussions about social problems.	I would have children discuss values that related to social problems in society.

Appendix F

IRB Permission

Institutional Review Board for the Protection of Human Subjects

Final Report – Inactivation

Date: August 04, 2021 **IRB#:** 13171

To: Ahmet Basyigit **Inactivation Date:** 08/04/2021

Study Title: APPROACHES TO VALUES EDUCATION IN PRIMARY EDUCATION: AN INSTRUMENT VALIDATION STUDY TO MEASURE TEACHERS' APPROACHES TO VALUES EDUCATION

On behalf of the Institutional Review Board (IRB), I have reviewed the Final Report for the above-referenced research study. You have indicated that this study has been completed and should be inactivated. This letter is to confirm that the IRB has inactivated this research study as of the date indicated above.

Note that this action completely terminates all aspects and arms of this research study. Should you wish to reactivate this study, you will need to submit a new IRB application.

If you have questions about this notification or using iRIS, contact the IRB at (405) 325-8110 or irb@ou.edu.

Cordially,

Aimee Franklin, Ph.D.
Chair, Institutional Review Board

Appendix G

Approaches to Values Education Scale (AVES) Item Pool

	Items
1	I would have students do role play activities to help them internalize certain values.
2	My goal in teaching values to children would be to increase children's awareness of social problems.
3	I would transmit values that families consider important.
4	I would allow students to set the classroom rules by discussing them with each other.
5	I would teach children values in order for them to serve their community.
6	I expect children would gain awareness of certain values by taking an active role in classroom activities.
7	I would use text-based materials depicting certain values to have children interpret them.
8	When I read stories with certain values to children, I would guide them on discussing the importance of social equality.
9	I would not encourage students to take active roles in-class activities. (Negative)
10	I expect children would listen to my advice to display appropriate behaviors.
11	I expect children would think about certain values in discussing solutions to racism.
12	I would teach values to make children show respect to their elders.
13	I would have children change classroom rules after discussing them throughout the year.
14	I would utilize values that children themselves have developed based on their own socio-cultural background.
15	I would not utilize values that emerge from discussing social injustice. (Negative)
16	I would make ultimate decisions regarding classroom rule changes.
17	I would utilize values to have children discover their own moral principles.
18	My role in the class would be to guide children to negotiate values with their peers.
19	I would avoid transferring parents' values to children. (Negative)
20	I expect children would actively engage in classroom activities concerning social problems.
21	I would facilitate children's role-playing activities to have them discuss social justice.
22	I would act as a role model by demonstrating certain values in role-playing activities.
23	My role in the class would be to transmit values accepted by society.
24	I expect children would participate actively in class activities to interpret certain values.
25	I would utilize values to increase children's awareness of social issues.
26	I would change classroom rules in negotiation with children throughout the year.

27 I would provide children with a list of classroom rules so they follow the rules.

28 I would not utilize values that children construct in classroom activities. (Negative)

29 I would teach values to have children obey the rules of their society.

30 I would utilize values that emerge from in-class discussions about social problems.

31 I would teach values that the school administration has determined at the beginning of the year.

32 My goal in teaching values to children would be to help them discover their own virtues.

33 I would utilize values to have children seek solutions to social injustice.

34 I would negotiate classroom rules with students to make a list or rules that we all follow.

35 I would utilize values that children have developed by seeking solutions to social injustice.

36 My goal in teaching values to children would be to make them become good citizens.

37 I expect children would listen to my explanations after demonstrating visual materials containing values.

38 When I read stories with certain values to children, I would have them share their opinions with each other.

39 I would give advice to children through puppets so they behave appropriately in society.

40 I would use visual materials to have children share their opinions about certain values.

41 My role in the class would be to facilitate children in discussing solutions to social injustice.

42 I expect children would listen to the explanations I provide for them while learning values in class.

43 I would not teach values designated by the school administration. (Negative)

44 I would utilize values to have children develop mutual respect in their relationships.

45 My role in the class would be to guide students in constructing their own value systems.

46 I would use visual materials to have children discuss how to solve social problems considering certain values.

47 I would use visual materials to convey specific values to children.

48 My role in the class would be to guide children to discuss solutions to social inequality.

49 When I read stories with certain values to children, I would determine the lessons to be taken.

50 I would avoid utilizing values to have children seek solutions to social problems. (Negative)

51 I would utilize values to have children discover their own moral development process.

52 I would avoid asking students' opinions when designating classroom rules. (Negative)

53	I would utilize values to have children become active agents in solving race/gender inequality.

Appendix H

Online Consent to Participate in Research

Would you like to be involved in research at the University of Oklahoma?
I am Ahmet Basyigit from the Educational Psychology department and I invite you to participate in my research project in collaboration with Dr. Benjamin C. Heddy entitled Approaches to Values Education in Primary Education: An Instrument Validation Study to Measure Teachers' Approaches to Values Education. This research is being conducted at the University of Oklahoma. You were selected as a possible participant because you are working as a primary education teacher (PreK - 5th grade) in a public school.
You must be at least 18 years of age to participate in this study.
Please read this document and contact me to ask any questions that you may have BEFORE agreeing to take part in my research.
What is the purpose of this research? The purpose of this study is to collect data to investigate teachers' approaches to values/character education in primary education.
How many participants will be in this research? About 600 people will take part in this research.
What will I be asked to do? If you agree to be in this research, you will be asked to complete several surveys, read a text, and then complete several more surveys. All data is to be collected online.
How long will this take? Your participation will take approximately 15 minutes for the entire survey.
What are the risks and/or benefits if I participate? There are no risks and no benefits from being in this research.
Will I be compensated for participating? You may be reimbursed for your time and participation in this research. If you take this survey, you can be entered in a chance to win an Amazon gift card! You need to enter your email address to be entered in a drawing for a $20 Amazon gift for 40 participants. Also, $50 Amazon gift cards will be given to 5 participants.
Who will see my information? All of research records will be stored securely and only approved researchers and the OU Institutional Review Board will have access to the records. In addition, this is an academic not-for-profit research project. Data are collected via Qualtrics, an online survey system that has its own privacy and security policies for keeping your information confidential.
What will happen to my data in the future? After removing all identifiers, we might share your data with other researchers or use your data in future research without obtaining additional consent from you. Your de-identified data might later be used only for further research and scholarly publication purposes.
Do I have to participate? No. If you do not participate, you will not be penalized or lose benefits or services unrelated to the research. If you decide to participate, you don't have to answer any question and can stop participating at any time.
Who do I contact with questions, concerns or complaints? If you have questions, concerns or complaints about the research or have experienced a research-related injury, contact me at Ahmet Basyigit; phone: 405-213-5585; email: ahmtbsygt003@ou.edu.
Or
Dr. Benjamin Heddy; phone: 405-905-5613; email: heddy@ou.edu
You can also contact the University of Oklahoma – Norman Campus Institutional Review Board (OU-NC IRB) at 405-325-8110 or irb@ou.edu if you have questions about your rights as a research participant, concerns, or complaints about the research and wish to talk to someone other than the researcher(s) or if you cannot reach the researcher(s).

Please print this document for your records. By providing information to the researcher(s), I am agreeing to participate in this research.
This research has been approved by the University of Oklahoma, Norman Campus IRB.
IRB Number: 13171 Approval date: 03/17/2021

Appendix I

Approaches to Values Education Scale (AVES)

Definition: Values education refers to teaching universal values such as responsibility, respect, honesty, sharing, tolerance, empathy, etc. to children with pedagogical methods. In other words, values education involves guiding children to organize their behaviors and attitudes in a way that they can adapt to society. In values education, character development of the individual is supported, and opportunities are provided for children to practice in the classroom. Also, values education, character education, and moral education are used interchangeably.

Directions: The goal of this study is to examine the approaches of teachers while teaching values in the classroom. Please read scenario below and then read the statements afterwards. Next, mark the response that best represents the extent to which you agree with each statement. There is no correct or incorrect response to the statements. It is very important that you respond sincerely so that we may obtain reliable results for the study. Rate the following statements within the range of "1" strongly disagree, and "5" strongly agree.

Scenario: Imagine that your principal has informed you that all of the public schools in your school district have been required to teach values. The school administration wants all teachers to teach children certain values in their classes; however, teachers have not been given any information on how they are to teach values to students. You are completely free to teach the values you want. You can use whatever teaching materials and methods you would like to teach these values. In short, the values and how you will teach them in your classroom have been left entirely to your discretion.

Item Code	Items
TA1.	1- I would avoid determining the lessons to be learnt from the stories for children.
CRA1.	2- My role in the class would be to raise children's awareness of social problems.
CS1.	3- I would have children role play activities to help them interpret values for themselves.
TA2.	4- I would teach important authority values to children.
CS2.	5- I would not allow children to share their opinions with each other after I read stories with certain values.
TA3.	6- I would advise children after class activities so they behave appropriately in society.
CRA2.	7- When I read stories with certain values to children, I would guide them on discussing the importance of social equality.
CS3.	8- My role in the class would be to guide children to negotiate values with their peers.
CRA3.	9- My role in the class would be to facilitate children in discussing solutions to social injustice.

TA4. 10- I would teach values to have children obey the rules of their society.

TA5. 11- My role in the class would be to transmit values accepted by society.

CS4. 12- My role in the class would be to guide children in constructing their own value systems.

CRA4. 13- I would facilitate children's role play activities to have them discuss social justice.

CS5. 14- I would utilize values to have children discover their own moral principles.

TA6. 15- I expect children would listen to the explanations I provide for them while learning values in class.

CRA5. 16- I would utilize values to have children become active agents in solving race/gender inequality.

CS6. 17- In my classroom, children take active roles in class activities about values.

TA7. 18- I would teach values to make children obey the rules determined by the authority.

CRA6. 19- I expect children would think about certain values in discussing solutions to racism.

CRA7. 20- I would utilize values to have children seek solutions to social injustice.

TA8. 21- I expect children would listen to my advice to display appropriate behaviors.

CS7. 22- I expect children would participate actively in class activities to interpret certain values.

CRA8. 23- I expect children would actively engage in class activities concerning social problems.

CS8. 24- My goal in teaching values to children would be to help them discover their own virtues.

CRA9. 25- I would not discuss values with children to solve social problems.

TA9. 26- I would give a list of classroom rules that I determined to children so they follow the rules.

CS9. 27- I would utilize values that children themselves have developed based on their own socio-cultural background.

CRA10. 28- I would have children change classroom rules after discussing them throughout the year.

TA10. 29- I would transmit traditional family values to children.

CS10. 30- I would change classroom rules in negotiation with children throughout the year.

CS11. 31- I would allow students to set the classroom rules by discussing them with me.

CS12. 32- I would utilize values that children construct in class activities.

TA11. 33- I would teach values that the school administration has determined at the beginning of the year.

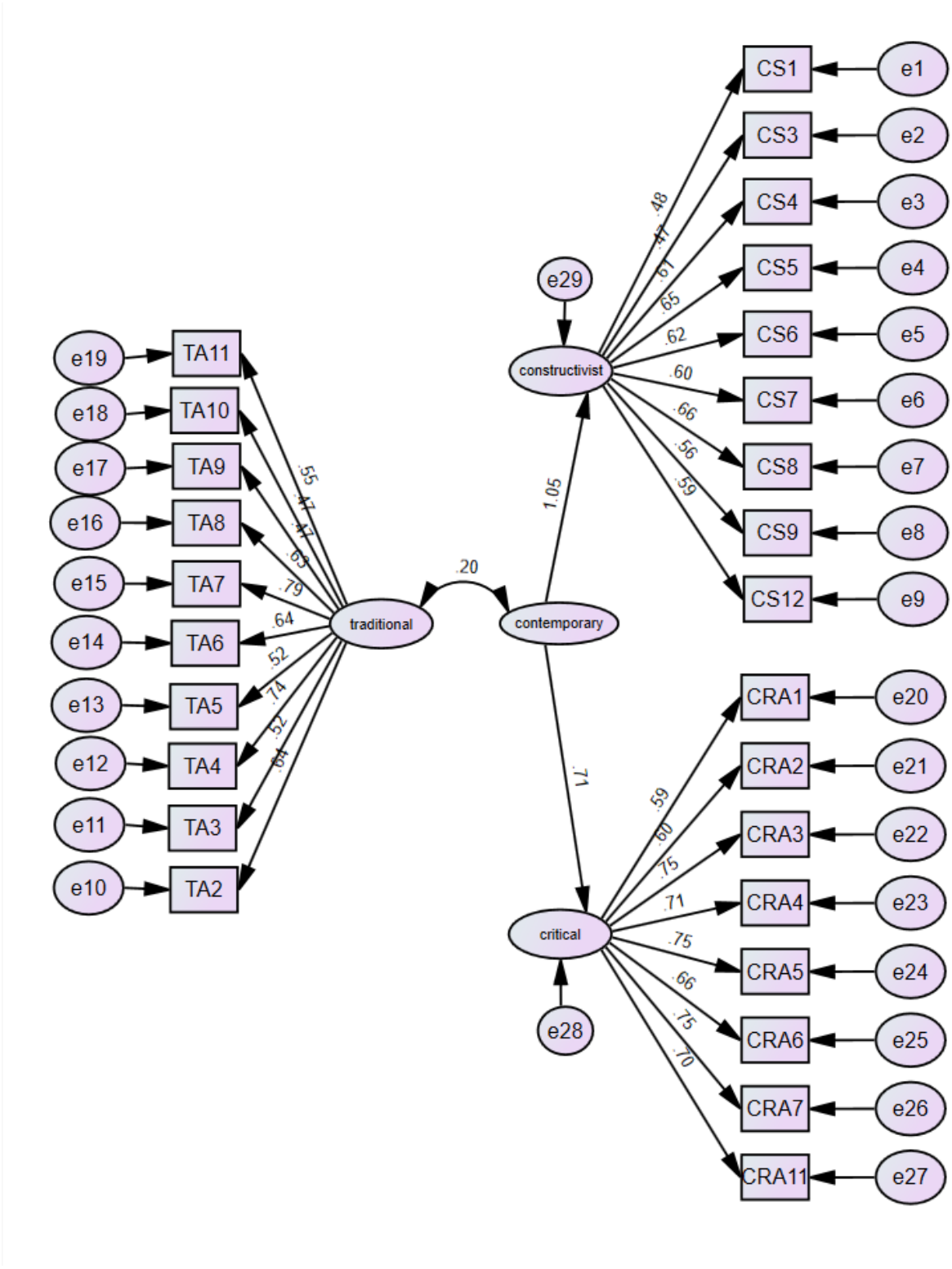
CRA12. 34- I would have children discuss values that related to social problems in society.

TA12. 35- I would decide what classroom rules to change.

CRA12. 36- In my classroom, children negotiate classroom rules to follow.

Appendix J

Approaches to Values Education Scale (AVES) Second-order Model



Appendix K

Scoring of Approaches to Values Education Scale (Aves)

Approaches to Values Education scale (AVES) consists of three dimensions and nineteen items. Seven items for the traditional approach, five items for the constructivist approach, and seven items for the critical approaches. AVES is also a 5. Likert-type scale. The evaluation formula is shown below.

Traditional Approach:

Items: 7 Rating: Strongly disagree (1)-Disagree (2)-Somewhat agree (3)-Agree (4)-Strongly agree (5) **Max**= 7*5= 35 **Min**=7*1= 7

Evaluation Criteria:

Rating	**7**	**14**	**15**	**27**	**28**	**35**
Evaluation	weak		moderate		strong	

For example: Let's say participant A got a total of 29 points from seven items of the traditional approach. Therefore, we can say that participant A is strongly inclined towards the traditional approach.

Constructivist Approach:

Items: 5 Rating: Strongly disagree (1)-Disagree (2)-Somewhat agree (3)-Agree (4)-Strongly agree (5) **Max**= 5*5= 25 **Min**=5*1= 5

Evaluation Criteria:

Rating	**5**	**10**	**11**	**19**	**20**	**25**
Evaluation	weak		moderate		strong	

For example: Let's say participant A got a total of 13 points from seven items of the constructivist approach. Therefore, we can say that participant A is moderately inclined towards the constructivist approach.

Critical Approach:

Items: 7 Rating: Strongly disagree (1)-Disagree (2)-Somewhat agree (3)-Agree (4)-Strongly agree (5) **Max**= 7*5= 35 **Min**=7*1= 7

Evaluation Criteria:

Rating	**7**	**14**	**15**	**27**	**28**	**35**
Evaluation	weak		moderate		strong	

For example: Let's say participant A got a total of 10 points from seven items of the critical approach. Therefore, we can say that participant A is weakly inclined towards the critical approach.

Appendix L

Anti-image Correlation Matrix

Traditional Approach

	TA1	TA2	TA3	TA4	TA5	TA6	TA7	TA8	TA9	TA10	TA11	TA12
TA1	.430[a]	0.003	-0.045	0.103	-0.036	-0.027	-0.073	0.036	-0.035	-0.096	0.123	0.052
TA2	0.003	.905[a]	-0.130	-0.179	0.057	-0.135	-0.181	-0.081	0.104	-0.221	0.012	-0.018
TA3	-0.045	-0.130	.926[a]	-0.128	-0.168	-0.099	0.102	-0.096	-0.095	-0.123	-0.039	0.006
TA4	0.103	-0.179	-0.128	.912[a]	-0.307	-0.029	-0.225	-0.122	-0.056	-0.025	-0.028	-0.077
TA5	-0.036	0.057	-0.168	-0.307	.905[a]	-0.007	-0.190	0.007	-0.100	0.030	-0.053	-0.069
TA6	-0.027	-0.135	-0.099	-0.029	-0.007	.888[a]	0.041	-0.381	-0.004	0.006	-0.049	-0.174
TA7	-0.073	-0.181	0.102	-0.225	-0.190	0.041	.897[a]	-0.173	-0.098	-0.118	-0.240	0.043
TA8	0.036	-0.081	-0.096	-0.122	0.007	-0.381	-0.173	.908[a]	-0.105	-0.035	-0.062	-0.081
TA9	-0.035	0.104	-0.095	-0.056	-0.100	-0.004	-0.098	-0.105	.930[a]	-0.152	-0.097	-0.142
TA10	-0.096	-0.221	-0.123	-0.025	0.030	0.006	-0.118	-0.035	-0.152	.915[a]	-0.062	0.012
TA11	0.123	0.012	-0.039	-0.028	-0.053	-0.049	-0.240	-0.062	-0.097	-0.062	.923[a]	-0.198
TA12	0.052	-0.018	0.006	-0.077	-0.069	-0.174	0.043	-0.081	-0.142	0.012	-0.198	.923[a]

Constructivist Approach

	CS1	CS2	CS3	CS4	CS5	CS6	CS7	CS8	CS9	CS10	CS11	CS12
CS1	.899[a]	0.019	-0.124	0.008	-0.148	-0.121	-0.128	-0.024	0.002	0.010	0.054	-0.049
CS2	0.019	.837[a]	-0.027	-0.037	0.017	0.100	0.018	-0.037	0.113	0.009	-0.007	0.117
CS3	-0.124	-0.027	.884[a]	0.044	-0.142	-0.001	-0.054	-0.165	-0.070	-0.026	0.049	-0.172
CS4	0.008	-0.037	0.044	.780[a]	-0.441	0.002	0.032	-0.303	-0.122	-0.004	0.029	0.003
CS5	-0.148	0.017	-0.142	-0.441	.824[a]	-0.178	0.055	-0.067	-0.118	0.072	-0.063	-0.108
CS6	-0.121	0.100	-0.001	0.002	-0.178	.836[a]	-0.315	-0.139	0.016	-0.065	0.130	-0.185
CS7	-0.128	0.018	-0.054	0.032	0.055	-0.315	.832[a]	-0.132	-0.073	0.101	-0.078	-0.143
CS8	-0.024	-0.037	-0.165	-0.303	-0.067	-0.139	-0.132	.861[a]	-0.127	-0.010	-0.066	0.071
CS9	0.002	0.113	-0.070	-0.122	-0.118	0.016	-0.073	-0.127	.895[a]	-0.185	-0.043	-0.081
CS10	0.010	0.009	-0.026	-0.004	0.072	-0.065	0.101	-0.010	-0.185	.660[a]	-0.326	-0.031
CS11	0.054	-0.007	0.049	0.029	-0.063	0.130	-0.078	-0.066	-0.043	-0.326	.676[a]	-0.327
CS12	-0.049	0.117	-0.172	0.003	-0.108	-0.185	-0.143	0.071	-0.081	-0.031	-0.327	.831[a]

Critical Approach

	CRA1	CRA2	CRA3	CRA4	CRA5	CRA6	CRA7	CRA8	CRA9	CRA10	CRA11	CRA12
CRA1	.899[a]	0.019	-0.124	0.008	-0.148	-0.121	-0.128	-0.024	0.002	0.010	0.054	-0.049
CRA2	0.019	.837[a]	-0.027	-0.037	0.017	0.100	0.018	-0.037	0.113	0.009	-0.007	0.117
CRA3	-0.124	-0.027	.884[a]	0.044	-0.142	-0.001	-0.054	-0.165	-0.070	-0.026	0.049	-0.172
CRA4	0.008	-0.037	0.044	.780[a]	-0.441	0.002	0.032	-0.303	-0.122	-0.004	0.029	0.003
CRA5	-0.148	0.017	-0.142	-0.441	.824[a]	-0.178	0.055	-0.067	-0.118	0.072	-0.063	-0.108
CRA6	-0.121	0.100	-0.001	0.002	-0.178	.836[a]	-0.315	-0.139	0.016	-0.065	0.130	-0.185
CRA7	-0.128	0.018	-0.054	0.032	0.055	-0.315	.832[a]	-0.132	-0.073	0.101	-0.078	-0.143
CRA8	-0.024	-0.037	-0.165	-0.303	-0.067	-0.139	-0.132	.861[a]	-0.127	-0.010	-0.066	0.071
CRA9	0.002	0.113	-0.070	-0.122	-0.118	0.016	-0.073	-0.127	.895[a]	-0.185	-0.043	-0.081
CRA10	0.010	0.009	-0.026	-0.004	0.072	-0.065	0.101	-0.010	-0.185	.660[a]	-0.326	-0.031
CRA11	0.054	-0.007	0.049	0.029	-0.063	0.130	-0.078	-0.066	-0.043	-0.326	.676[a]	-0.227
CRA12	-0.049	0.117	-0.172	0.003	-0.108	-0.185	-0.143	0.071	-0.081	-0.031	-0.227	.831[a]

Appendix M

Short Scenarios

Instructions: This section aims to identify your approaches to values education. Please read the following short scenarios and select one of the options that best fits your opinion.

Scenarios
1- Imagine that you want to teach responsibility to the students in your class. You have several visual materials related to "responsibility" in your class. As such, which option best represents the strategy you would use to incorporate these visual materials while teaching responsibility in your class? O I would use visual materials to explain children what responsibility means. (TA) O I would use visual materials to have children share their opinions about responsibility. (CSA) O I would use visual materials to have children discuss how to solve social problems by taking responsibility. (CRA)
2- Imagine that parents have recently begun to complain to your school's administration about the increasing number of fights between students and problems related to bullying in your school. Your principal talks to you about this issue and asks you to conduct activities related to "respect" in your class. As such, which option best represents the role you would perform on while teaching respect to your students? O My role in the class would be to show children how to respect each other. (TA) O My role in the class would be to guide children to negotiate why they should respect each other. (CSA) O My role in the class would be to encourage children to discuss being respectful to solve bullying. (CRA)
3- Imagine that your school's administration has decided to include a character education program in your school curriculum. As part of this character education program, the administration has requested you to develop a certain number of activities focusing on a specific value each month to be completed with your students. This month's value is "honesty". As such, which option best represents the role that students would perform during these activities? O I expect children would listen to my explanations about why we should be honest. (TA)

O I expect children would actively involve in classroom activities to interpret honesty. (CSA)

O I expect children would think about honesty in developing solutions to social injustice. (CRA)

4- Imagine that your school's administration has developed a character education program that will be implemented schoolwide. Your principal has asked every teacher in the school to teach certain basic values in his/her class (e.g., respect, responsibility, honesty). To do this, each teacher needs to prepare a lesson plan articulating the objectives sought in teaching these values. As such, which option best represents the objective you intend to achieve in teaching these values?

O My goal in teaching values to children would be to have children obey the rules of their society. (TA)

O My goal in teaching values to children would be to help them develop their own moral autonomy. (CSA)

O My goal in teaching values to children would be to increase children's awareness of social problems. (CRA)

5- Imagine that you have been required to post a list of classroom rules incorporating certain basic values (e.g., respect, responsibility, honesty) to help students to display appropriate behaviors in the class. The rules to be included in this list have been left to your discretion. As such, which option best represents the strategy you would use in deciding these rules?

O I would provide children with a list of classroom rules at the beginning of the school year. (TA)
O I would negotiate classroom rules with students at the beginning of the school year. (CSA)

O I would have students set the classroom rules after discussing them. (CRA)

6- Imagine that you have attended a seminar on character education emphasizing the importance of adopting certain values at a young age. You want to incorporate what you have learned during this program in your class; however, you are still undecided as to which values you will teach. As such, which option best represents your thought while deciding on which values to include in instruction?

O I would teach values that our society consider important. (TA)

O I would teach values that children themselves have constructed based on their own moral understanding. (CSA)

O I would teach values that emerge from in-class discussions about social problems. (CRA)