DEVELOPMENT OF PICTORIAL HUMOR STYLES SCALE FOR PRESCHOOL CHILDREN

A THESIS SUBMITTED TO
THE GRADUATE SCHOOL OF SOCIAL SCIENCES
OF
MIDDLE EAST TECHNICAL UNIVERSITY

BY

BETÜL YILMAZ ÇAM

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR
THE DEGREE OF DOCTOR OF PHILOSOPHY
IN
THE DEPARTMENT OF ELEMENTARY AND EARLY CHILDHOOD EDUCATION, EARLY CHILDHOOD EDUCATION

SEPTEMBER 2023

Approval of the thesis:

DEVELOPMENT OF PICTORIAL HUMOR STYLES SCALE FOR PRESCHOOL CHILDREN

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ABSTRACT

DEVELOPMENT OF PICTORIAL HUMOR STYLES SCALE FOR PRESCHOOL CHILDREN

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September 2023, 204 pages

Humor is seen as an effective tool for different aspects of people's lives. Like adults, children have the ability to understand, appreciate, and produce humor, and their humor behaviors also may have an effect on their development, learning, and well-being. On the other hand, differences in humor behaviors and preferences can also have different outcomes, both positive and negative. Considering humor's importance starting in the early years, learning about children's humor behaviors becomes a necessity. In addition, even if there are some universal explanations for humor, clarifying through culture-specific explanations may provide a better understanding of children's humor. From this point, developing a reliable and valid measurement tool creates the main purpose of this study. Thus, the aim of the study is to develop a pictorial humor styles scale for children which may enable researchers to learn about young children's humor styles by taking their own responses. To reach this aim, scale development procedures were applied in the light of the Humor Styles Model. Exploratory and confirmatory factor analyses were conducted in the scale development process. Because of children's developmental characteristics, pictures

were used as scale items. In addition to scale development, quantitative analyses were made with the help of children's demographics. To have a deeper understanding of children's humor patterns, cluster analyses were made. As a result of the data analyses, the findings are provided in accordance with the research questions, and they are discussed with the help of the related literature.

Keywords: Early childhood education, humor styles, scale development, preschool children, pictorial scale

ÖZ

OKUL ÖNCESİ DÖNEM ÇOCUKLARI İÇİN RESİMLİ MİZAH TARZLARI ÖLÇEĞİNİN GELİŞTİRİLMESİ

YILMAZ ÇAM, Betül
Doktora, Temel Eğitim, Okul Öncesi Eğitimi Bölümü
Tez Yöneticisi: Prof. Dr. Feyza TANTEKİN ERDEN

Eylül 2023, 204 sayfa

Mizah, insanların yaşamlarının farklı yönleri için etkili bir araç olarak görülmektedir. Yetişkinler gibi çocuklar da mizahı anlama, takdir etme ve üretme becerisine sahiptir ve mizah davranışları da gelişimleri, öğrenmeleri ve iyi oluşları üzerinde etkili olabilir. Öte yandan, mizah davranışları ve tercihlerindeki farklılıklar da hem olumlu hem de olumsuz farklı sonuçlar doğurabilir. Mizahın erken yaşlarda başlayan önemi göz önünde bulundurulduğunda, küçük çocuklarda mizah tercihlerini araştırmak bir gereklilik haline gelmektedir. Ayrıca mizah için bazı evrensel açıklamalar olsa da kültüre özgü açıklamalar yapmak çocukların mizahının daha iyi anlaşılmasını sağlayabilir. Bu noktadan hareketle güvenilir ve geçerli bir ölçme aracı geliştirmek çalışmanın temel amacını oluşturmaktadır. Bu nedenle çalışmanın amacı, araştırmacıların okul öncesi çocuklarının mizah tarzları hakkında kendi yanıtlarını alarak bilgi edinmelerini sağlayabilecek, çocuklar için resimli bir mizah tarzları ölçeği geliştirmektir. Bu amaca ulaşmak için Mizah Tarzları Modeli ışığında ölçek geliştirme adımları uygulanmıştır. Ölçek geliştirme sürecinde açımlayıcı ve doğrulayıcı faktör analizleri yapılmıştır. Çocukların gelişimsel özellikleri nedeniyle ölçek maddesi olarak resimler kullanılmıştır. Ölçek geliştirmenin yanı sıra çocukların

demografik özellikleri yardımıyla nicel analizler yapılmıştır. Çocukların mizah örüntülerini daha derinlemesine anlamak için kümeleme analizleri yapılmıştır. Veri analizleri sonucunda elde edilen bulgular araştırma soruları doğrultusunda sunulmuş ve ilgili literatür yardımıyla tartışılmıştır.

Anahtar Kelimeler: Erken çocukluk eğitimi, mizah stilleri, ölçek geliştirme, okul öncesi dönem çocukları, resimli ölçek

To My Family

ACKNOWLEDGMENTS

I would like to express my appreciation to all those who assisted me throughout this lengthy dissertation process. Prof. Dr. Feyza Erden provided me with invaluable guidance and support throughout my graduate studies. Her expertise, patience, and encouragement have been instrumental in shaping my research and professional growth. I am truly fortunate to have had the opportunity to work under her supervision. Her academic expertise, professionalism, and thoughtfulness make her a role model for me. It is a tremendous honor for me to become your student. I would also like to extend my heartfelt appreciation to the members of my dissertation committee, Assoc. Prof. Dr. Hasibe Özlen Demircan, Assoc. Prof. Dr. Dilek Altun, Assoc. Prof. Dr. Serap Sevimli Çelik and Assist. Prof. Dr. Çağla Öneren Şendil. Their expertise, critical insights, and constructive feedback have immensely enriched my research and contributed to the overall quality of this dissertation.

My sincere thanks go to the school principals, teachers, parents, and children who assisted me in conducting this study. Without their cooperation and willingness to share their insights and experiences, this study would not have been possible.

In addition, I would like to share my deepest gratitude with my dear friend Dr. Funda Eda Tonga Çabuk, who has been by my side with her presence, wisdom and love in the best and worst days of my life and made every moment even more meaningful. The strength we have gained from continuing our academic and private life path together is priceless.

My thesis would not have been possible without the love, encouragement, and unwavering support of my parents, Mahmut Yılmaz and Menşur Yılmaz. I am forever grateful to be your daughter. You made my accomplishments possible through your unending love. In addition, I would like to thank my father-in-law Prof. Dr. Halit Çam, who answered all my questions during my thesis studies with

his academic foresight and support, and my mother-in-law Meliha Çam, who gave me strength with her love and compassion.

I would like to thank myself for not giving up despite the difficulties I encountered in this process and for continuing on this path patiently without making excuses to achieve my goal. Each process I went through during my Ph.D. not only gave me a degree but also made me a very effective teacher in recognizing and dealing with my weaknesses.

Finally, I would like to share my thanks and gratitude with my beloved husband, Assoc. Prof. Dr. Emre Çam. As an experienced academic, I am grateful for the support he provided me in scale development, data analysis, and thesis preparation, and for his contribution to the finalization of my thesis. In addition to all these academic supports, I will remain grateful throughout my life for giving me strength, motivation, and confidence with just his presence. I am already very excited to know that every journey we will walk with you will be so joyful and wonderful.

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CHAPTER 1

INTRODUCTION

Humor is a tool that can help people better express their feelings regarding the funny and meaningless parts of their lives (Berk, 2015). Also, humor is a commendable attribute and positive way to deal with the challenges of life (Berk, 2015), for example, according to a common American saying, “laughter is the best medicine”. Importantly, this sentence can be examined from different aspects to more fully understand how humor impacts people’s lives. For example, whereas some researchers have defined humor as an ego defense (Vaillant, 2000), other studies describe it as a tool for psychological well-being (Kuiper & McHale, 2009), and as a means of dealing with depression (Frewen et al., 2008). In addition to the psychological explanations regarding the function of humor, Martin, Puhlik-Doris, Grey, Larsen and Weir (2003) state that humor can be defined as a cognitive ability, aesthetic response, and personality trait. Furthermore, Martin et al. (2003) realized there can be individual differences in humor responses and ways to use humor in people’s communication.

Even when people experience the positive effects of humor from using positive humor, there can also be humor behaviors which are harmful to one’s social bonds and/or psychological adjustment. Therefore, according to the outcomes of the Humor Styles Questionnaire (HSQ) developed by Martin et al. (2003), there are adaptive and maladaptive humor styles as well as the kinds of humor styles people use also effects the influence humor behaviors have on their lives. Importantly, explanations related to different humor behaviors are highly affected by Freud’s psychoanalytic theory (Poncy, 2017). For this reason, while using adaptive humor styles can be perceived as a defense mechanism that supports a realistic point of view with low levels of anxiety, on the other hand, maladaptive humor styles can serve people as a

form of defensive denial which causes one to ignore their needs along with suppressing their negative emotions. As a result, according to Martin et al. (2003), tendencies related to what kind of humor behaviors people display are an expression of one's subconscious.

Along with adults, children also understand, appreciate, and produce humor (Southam, 2005). However, depending on their developmental characteristics, the kind of humor children appreciate and/or the way they produce humor can differ (Lampert, 2014). For humor development, McGhee (1971) suggests four stages which are seen to be highly influenced by Piaget's cognitive development theory. Thus, McGhee explains humor development as changes in cognitive skills and states that, "humor develops as the child's playfulness extends to recently mastered ideas and images, as well as overt play with objects. In children's self-directed play, they can make meaning of such experiences and in their humor attempts, they gain pleasure in noting these cognitive incongruities" (p. 61). Additionally, playfulness is defined as a quality related to the desire to play and be full of fun (Barnett, 1990). Thus, it is possible to claim that children's playfulness levels are in effect related to their humor behaviors.

Apart from this constructivist perspective, there are several other perspectives which describe the development of humor in children. To illustrate, from a psychoanalytic perspective, Freud defines humor development in three stages that include play, jesting, and true joking (Freud, 1990). Thus, while children develop their skills in terms of humor, they can also learn to incorporate humor into their psychological well-being (Crawford & Caltabiano, 2011). On the other hand, the sociological communications perspective explains humor development in relation to social behaviors, culture, and adult-child interactions, suggesting that humor develops within social frames that are "play and serious frames" (Airenti, 2016). Therefore, communicative contexts are necessary for children to experience these frames and develop their humor skills (Airenti, 2016). For example, Bergen (2019), describes play as an important source of humor behaviors as well as argues that children's humor behaviors are observed during play, and adults' reactions toward those humor behaviors decrease/increase or shape the humor behaviors of children.

There are several areas of children's development affected by humor styles such as cognition (Rnic, Dozois, & Martin, 2016), social relations (Klein & Kuiper, 2006), psychological well-being (Kuiper & McHale, 2009), and empathy skills (Halfpenny & James, 2020). Thus, supporting children in developing a desired humor style could contribute to them in these areas of child development. Saroglou and Scariot (2002) also reveal the relationships between humor styles and personality traits. That is, agreeableness, openness, and self-esteem were found to be positively related to both self-enhancing and affiliative humor styles, whereas the aggressive humor style was observed to be negatively related to these personality traits. Also, the self-defeating humor style was found to be negatively correlated with emotional stability and self-esteem. As a result, Kuiper et al. (2004) argued that for psychological well-being, supporting adaptive humor styles in children is necessary. Importantly, the reasons why children use these specific humor styles may differ, for example, children with low self-esteem may use self-defeating humor to be part of the group, while children with developed prosocial skills may favor an affiliative humor style. Even if the aim of using humor is similar (to be part of a group), the outcomes may differ. Whereas the child using an affiliative humor style is favored within a group, the one with a self-defeating humor style may harm his/her identity, and s/he can face bullying from their peers (Klein & Kuiper, 2006).

Although children experience humor in different ways than adults, the way they engage in humorous experiences, or their humorous behaviors, can vary as they do in adults (Klein & Kuiper, 2006). Importantly, similar to adults, children's humor preferences can affect their social relations as well as the effects of humor on their psychological adjustment (Klein & Kuiper, 2006). For this reason, using adaptive or maladaptive humor behaviors yields different outcomes in children in terms of their social relations and psychology (Klein & Kuiper, 2006). For example, having self-defeating humor which involves humiliating jokes can be an indicator of inner neediness and low self-esteem. In a similar vein, using an aggressive humor style that includes making humiliating jokes about others can cause one to develop negative opinions in terms of peers as well as create boundaries among peers (Klein & Kuiper, 2006).

Not only children's development and learning but also their personalities are shaped in the early years. For example, children's behaviors, feelings, and/or reactions toward a specific situation are determined by their temperament, and to support children in shaping their actions in a desired and beneficial way, learning about their temperamental characteristics and scaffolding them accordingly should be the aim of caregivers, educators, researchers, and/or policymakers (Janson & Mathiesen, 2008). As a result, similar to temperament, humor styles are described as another personality trait for both adults and children (Martin & Ford, 2018). Humor behaviors begin to be observable from infancy, and according to Bowlby (1969), the first developmental task is ensuring a secure attachment with a caregiver. Thus, smiling and laughing, which are described as humorous reflections, are ways for infants to gain caregivers' attention and interest (Cairns, 1979; Mireault & Reddy, 2016). Thus, with the increase in experimental experiences, humor behaviors increase or decrease with regard to responses received from the environment (Nahemow et al., 2013). So, it is possible to state that children's differences in humor begin to be formed during infancy. As a result, with the contribution of environmental factors, it becomes possible to observe children's humor preferences that can affect them in the future.

Additionally, Poncy (2014) discusses the relationships between emotional self-regulation and humor styles. Emotional self-regulation can be defined as the ability to evaluate, modify, and manage emotions related to a specific behavior or situation (Thompson, 1994). Considering the importance of the early childhood period in developing healthy humor behaviors and emotional self-regulation skills, the investigation of humor styles, emotional self-regulation, and the relationships between them gains greater importance. Related literature also displays the function of humor styles in the emotional status of individuals. For instance, Ford et al. (2017) finds that people who have self-enhancing humor, which is an adaptive humor style, are more successful in dealing with stressful situations and their anxiety levels tend to decrease. Similarly, it has been found that positive humor is highly related to developing positive emotions as well as controlling negative emotions when experiencing undesired situations (Leist & Muller, 2013; Samson & Cross, 2012; Suna, 2018; Yerlikaya, 2009).

Given that the world has been changing and people struggle to find new ways to deal with stressful situations, humor and humor styles have attracted renewed attention. In other words, especially during the COVID-19 pandemic, which affected people around the world both physically and mentally, Olah and Ford (2021) state that humor styles can serve as evidence in predicting people's emotional and behavioral responses to negative situations. Moreover, they concluded that people who have adaptive humor styles experienced less stress and hopelessness throughout the COVID-19 pandemic.

There are also other demographic features which may affect humor styles such as age, gender, and socioeconomic status. As stated by McGhee (1971), humor is highly related to cognition and with the improvement of cognitive abilities, children begin to better understand, appreciate, and produce more complex humor. Thus, with maturation, children's cognitive and humor abilities improve (McGhee, 1971). As a result, to explain children's humor more fully during their early years, in the current study, the researcher included 60-72-month-old children. The second variable that required attention was related to humor styles according to gender. In the literature, there are many studies describing how males and females differ in terms of humor styles (Dyck & Holtzman, 2013; Salavera et al., 2020; Sillars et al., 2020; Tümkaya, 2011). Even if the reasoning is not clear, Martin et al. (2003), argues that using maladaptive humor styles is more beneficial for males within social contexts, thus making reference to the gender variable in terms of humor styles in early childhood. Furthermore, other possible sources related to the differences regarding humor styles can be related to the moral development levels of boys or girls (McGhee, 1974a), gender role socialization and socio-cultural influences (Kazarian & Martin, 2004), and different outcomes for boys and girls (Underwood, 2003).

To continue, another demographic variable that might be related to humor styles is described in the related literature as socioeconomic status (SES). Masui and Ura (2016) conducted a study to determine the effect of SES on humor styles and concluded that low SES is related to an aggressive humor style. The reason can be attributed to the moderator role of society's perceptions of undesired behaviors (Masui et al., 2011). Thus, in relation to this, discussing socioeconomic status

becomes a necessity for developing a deeper understanding of humor styles during the early years.

Apart from age, gender, and socioeconomic status, the current study also made a detailed investigation into other demographic variables regarding parent and sibling information. For example, Soonert (2009), suggests that parents with higher educational levels are better role models for their children. This is why parent education status helps to predict children's behaviors and family interactions (Conger et al, 2002). Thus, humor styles are the consequences of experiences gained within the family environment (Vernon et al, 2008). In this regard, details related to the family, especially those that may affect the family structure, can also affect children's humor styles.

Another influence related to the family environment can be related to siblings. Howe et al. (2022) suggest that sibling relationships play a role in children's development since children experience much of their social skills development from interactions with their siblings. In sibling relationships, children may encounter a multitude of incongruities and absurdities as part of their daily lives due to being together at home for long periods of time which can provide rich content in terms of humor (Paine et al., 2019). Even if there are both positive and negative outcomes regarding sibling humor, it was also concluded that humor contributes to the quality of relationships between siblings (Paine et al., 2020). For this reason, gathering information about the children's number of siblings' as well as the siblings' genders, may also enrich the findings of the current study by providing a broader framework to make conclusions about the children's humor styles.

The effects of culture on humor are also an important question to be discussed in humor studies. Even though humor is described as a universal concept, the way humor occurs differs with respect to several factors including culture and culture-specific characteristics (Yue et al., 2016). For example, in Western and Eastern societies, these cultural differences can be clearly recognized, that is, whereas humor is perceived in some Western countries as positive and attractive (Bressler et al., 2006), it can also be seen as an important personality trait within relationships

(Regan & Joshi, 2003). On the otherhand, humor might be seen as controversial in some countries within Eastern cultures such as China (Yue, 2011; Xu, 2011).

Since the population of the current study was preschool children in Türkiye, addressing the cultural characteristics of Türkiye was an important aspect of having a better understanding of children's humor behavior. Arslan et al. (2021) argue that Türkiye is the synthesis of Eastern and Western cultures, so can provide a unique opportunity for discovery of humor patterns that make up Turkish culture. Namely, in Turkish culture humor seems to be a product of intelligence (Sak, 2007), whereas it can be seen as inappropriate in cases that require "seriousness", and some humor styles are not welcomed in such cases as affiliative humor (Ünal, 2014). Furthermore, whereas self-defeating humor, can be seen as inappropriate in some Western cultures, it is more readily accepted in some Eastern cultures due to it contributing to modesty and/or the lifelong learning process. Additionally, there are studies regarding Eastern and Western cultures within the literature and interestingly Turkish culture displays characteristics of both cultures within the scope of humor. However, there remains a need for studies regarding humor in Turkish culture.

Investigating humor styles to develop educational practices or a better understanding of children for teaching purposes is also an important pursuit (Saroglou & Scariot, 2002). Even if different cultures react differently to humor, the role of humor in creating a positive learning environment, supporting children's development, and enhancing healthy relationships within the classroom cannot be underestimated (Chabeli, 2008; Hunsaker, 1988). Furthermore, using humor in the classroom can facilitate and develop learning (Chabeli, 2008) as well as encourage students' willingness to learn and participate in classroom learning and instruction (Kelly, 2005). Robinson (as cited in Hayden-Miles, 2002) suggests that through humor, children can recognize their weaknesses in a more tolerant and welcoming atmosphere along with not harming their self-image.

Besides all the positive aspects humor has on learning and education, the way humor is included within instruction and learning is vital. For example, humor can promote learning, critical thinking, and emotional intelligence (Goodman, 2005) but it can

also, if used in a humiliating and harmful manner, can create a negative atmosphere observed by other students as well as can damage the learning environment (Kelly, 2005). As a result, investigating humor styles becomes a necessity because as Martin (1988) asserts, humor styles can be an indicator of a personality trait related to social interaction. Moreover, different characteristics related to humor styles can cause different outcomes in education (Saroglou & Scariot, 2002). For example, differences in humor can affect students' school performance (Wanzer & Frymier, 1999) as well as students' stress levels at school, their life satisfaction, adjustment, and resilience (Cheung & Yue, 2012). Thus, regarding the importance of humor styles for increasing the efficacy of education, the investigation of children's humor styles and shaping educational settings with respect to these humor styles is of paramount importance.

According to DeVellis (2014), in all academic disciplines, researchers are required to measure aspects of their research area to better understand the specific discipline as well as observe changes related to it that may occur. For example, in social sciences, the phenomenon measured, comes from theory, and these theories help to provide meaning to the dimension they wish to measure (DeVellis, 2014). In a similar vein, Hinkin (1995) argues that to improve and test these theories, findings from standardized tests are required. Even if there are several measurement tools, the existence of different variables such as age, gender, and/or developmental characteristics creates a need for developing different measurement tools (DeVellis, 2014). As a result, the current study was aimed at both creating a measurement tool related to humor styles for younger children, different from the existing humor styles scales found for older people, and using the theory from Martin et al. (2003), to shape the scale into a reliable and valid measure. Importantly, people have attempted to measure specific phenomena since the beginning of time. With changes in the world and an increase in people's needs, there has been a renewed need for appropriate scales to measure phenomena. Therefore, scale development studies are crucial for researchers in gaining a greater understanding of people as well as effectively answering research questions.

Considering the related literature, children in early childhood, and their related humor styles, make up the focus of the current study. James and Fox (2019) argue that children also differ in their humor behaviors. Thus, along with adults, different humor styles can cause different outcomes related to humor in terms of social, emotional, and cognitive experiences. To illustrate, it was found that maladaptive humor styles are associated with difficulties within social relationships and self-esteem (Yip & Martin, 2006) as well as lead to low levels of emotional control (Martin, et al., 1993). For this reason, learning what type of humor style a young child has and how it relates to their development, learning, and well-being is extremely important. In this regard, developing suitable measures for humor styles in the early childhood period along with exploring the relationships between humor styles and children's development, learning, and well-being was the aim of the current study.

1.1. Statement of Problem

As mentioned in the studies stated previously, humor is of crucial importance in people's lives, especially children. Therefore, investigating the behaviors of people to gather fuller and more detailed information regarding their cognitive, social, and mental status can lead to a greater understanding of human beings in general as well as help in supporting their strengths and improving upon their weaknesses (Polimeni, & Reiss, 2006). When we compare children's and adults' humor behaviors, it can be recognized that there are a variety of differences. Importantly, these differences emerge due to children's developmental features (McGhee, 1983), and due to these differences, children's humor should be investigated in different ways. For example, studies investigating kindergarten children's exploration of visual humor (Loizou, 2006) and what children laugh at can be carried out by having them take photos of "funny" things around them (Loizou, 2011). Additionally, since children at an early age can have a difficult time explaining what funny is, collecting visual data has been seen as an effective way in aiding in this process. Along with learning about what is humorous to children, developing an affective scale for measuring humor in younger children is needed as well (Fox et al, 2013).

Thorson (1990) argues that to develop a healthy measure related to humor, the scale should not just include a few elements of humor, but should be designed to include multidimensional factors related to humor. In the literature, there are several humor scales with differing aims such as using humor for coping with stress (Martin, 1996) or how children react to humorous situations (Martin & Lefcourt, 1984). There are also scales developed to measure children's sense of humor (Bird, 1925; Raley, 1942) or the humor comprehension of children (Allen & Zigler, 1986). To have an understanding of children's humor styles, Fox, Dean, and Lyford (2013) developed a scale for children aged 9-14-years-old. Additionally, James and Fox (2016) developed another humor styles scale for younger children between the ages of 8-11-years-old. However, it is more difficult to learn about the humor behavior of young children who are unable to read and/or write via a scale which requires them to read and answer evaluation questions about what they find humorous. Moreover, Loizou (2006) states that visuals are the most effective way to learn about children's humor. To gain some types of information regarding children's humor, there are also several examples which incorporate the use of visuals (Chik et al., 2005; Guo et al., 2011; Pien & Rothbart, 1976; Zoroğlu, 2015). As a result, to learn about young children's humor styles, a scale that consists of visuals can provide more accurate information (Halford, 2014). This is due to visuals activating more of the senses thus it is easier for young children to understand the humor as well as decide if it is suitable to their tastes or not (Eisenberg et al., 2010).

In previous studies related to scale development for investigating young children's humor, items related to affiliative and aggressive humor were included since it is believed that it is harder for young children to evaluate themselves in terms of self-defeating and self-enhancing humor, and that these humor styles might develop and to be observed in the later years of life (Fox et al., 2013; James & Fox, 2016a). On the other hand, Dowling (2014) argues that children have the potential to use all forms of humor styles, while Führ (2001) indicates that humor is a way of coping with stress even at an early age. Therefore, in light of these ideas, James and Fox (2016) conducted interviews regarding self-focused humor styles (self-enhancing and self-defeating), and determined that some, but not all, children exhibited these styles of humor. From this point of view, it can be concluded that there remains a need for a

scale which includes all four humor styles instead of solely evaluating children in the context of affiliative or aggressive humor styles. As a result, the scale developed for the purpose of the current study has the potential to meet these needs.

1.2. Purpose of the Study

Given that humor plays a crucial role in young children's development, learning, and well-being, the discovery of young children's humor preferences as well as providing experiences which enhance their adaptive humor behaviors is extremely important. In this regard, developing a scale for children which is suitable for their developmental characteristics can provide more valid and reliable data for learning about children's humor styles. Thus, the developed scale consists of humorous pictures that reflect the four humor styles and children were to choose from pictures which created an understanding related to their humor styles. Thus, the aim of this study was to develop pictures suitable for children's developmental characteristics as well as reflected the features of the differing humor styles. Thus, by following scale development steps, the primary aim of this study was to develop a valid and reliable pictorial scale which displayed preschool children's humor styles for applying this scale to 60-72-months-old children.

Besides the purpose of scale development, the current study was also aimed at revealing the relationship between children's humor styles and a variety of demographic variables as a means of making more detailed interpretations. Thus, the aim of this study was to reveal the relationship between humor styles and the gender and age of children, which are defined in the literature as being related to humor styles. Since humor styles are influenced by environmental factors, socioeconomic level, parental age, parental education level, number of siblings, and sibling gender; these demographic variables were also included in the study. According to Martin et al. (2003), it is not possible to observe a single humor style in individuals. Thus, although some humor styles are more dominant, all humor styles are observable in individuals. Therefore, another aim of the current study was to create meaningful clusters regarding children's humor styles. As a result, thanks to the meaningful clusters created in this context, it can be possible to reveal which humor styles tend to be recognized together within children.

1.3. Research Questions

To reach these aims, the researcher followed the research questions below.

RQ1: Is “Pictorial Humor Styles Scale for Preschool Children” scale valid to measure preschool children’s humor styles?

RQ2: Is “Pictorial Humor Styles Scale for Preschool Children” scale reliable to measure preschool children’s humor styles?

RQ3: Is there a statistically significant relationship between preschool children’s demographics and humor styles?

RQ3a: Is there a statistically significant difference between preschool children’s gender and humor styles?

RQ3b: Is there a statistically significant relationship between preschool children’s age and humor styles?

RQ3c: Is there a statistically significant relationship between preschool children’s SES and humor styles?

RQ3d: Is there a statistically significant relationship between preschool children’s fathers’ age and humor styles?

RQ3e: Is there a statistically significant relationship between preschool children’s mothers’ age and humor styles?

RQ3f: Is there a statistically significant relationship between preschool children’s fathers’ education level and humor styles?

RQ3g: Is there a statistically significant relationship between preschool children’s mothers’ education level and humor styles?

RQ3h: Is there a statistically significant relationship between preschool children’s number of siblings and humor styles?

RQ3i: Is there a statistically significant relationship between preschool children’s siblings’ gender and humor styles?

RQ4: What are the preschool children's clusters regarding their predominant humor styles?

1.4. Significance of the Study

Humor is a research area that includes differing perspectives such as communication, health, sociology, psychology, advertising, and education (Alden et al., 2009; Bergen, 2015; Dines, 2009; Hoicka & Akhtar, 2011, 2012; Loizou & Kyriakou, 2016; Martin, 2007). Even if these studies determined the positive effects of humor within differing aspects, Martin et al. (2003), state that some humor behaviors can be maladaptive due to their negative outcomes. Therefore, differentiation of humor styles is necessary for learning more about individuals' social, emotional, and/or cognitive well-being. To illustrate this point, whereas Hampes (2006) discovers how shyness differs within different humor styles, Klein and Kuiper (2006) mention differences in peer relationships and bullying regarding children's humor styles. For example, leadership (Rahmani, 1994), psychological well-being (Dyck & Holtzman, 2013; Kuiper & Mchale, 2009; Martin et al., 2003), adult attachment (Besser et al., 2012), life satisfaction (Zhao et al., 2014), self-esteem (Stieger, Formann, & Burger, 2011; Vaughan et al., 2014; Yue et al., 2014; Zeigler-Hill, Besser, & Jett, 2013), loneliness (Yue et al., 2014), social anxiety and depression (Tucker et al., 2013), empathy (Hampes, 2010), and peer victimization (Fox et al., 2015) are other areas found to be related to humor styles.

Considering the studies related to humor styles, discovering individuals' humor styles to make estimations related to their personality, well-being, cognition, and social life; may contribute to the existing literature in various ways. To achieve this, it is of paramount importance to have a measurement tool which is valid and reliable to learn about humor styles more fully. Martin et al. (2003) took the first step in describing humor styles and developing the "Humor Styles Questionnaire" scale for adults. Although there is a scale for adults, Klein and Kuiper (2006), state that there remains a need to research and describe children's humor styles. For this purpose, Fox, Dean and Lyford (2013) developed a humor styles scale considering the Humor Styles Model developed by Martin et al. (2003), however, their scale was carried out with children from 9-15-years-old. As a result, this scale is not suitable for children's developmental features, thus James and Fox (2016) developed another scale for younger children between the ages of eight to 11. All three scales mentioned are

suitable for adults and children who are able to read and write, however, no attempts were made to develop a scale regarding preschool children's humor styles. Thus, the current study could become an important source in filling the gap related to developing a scale to determine and measure preschool children's humor styles.

The early years are essential in providing children with the initial experiences that will determine the person they ultimately become. Thus, to determine the most appropriate means of supporting children in terms of their development and learning as well as thoroughly describing their characteristics and interests is essential. There are a several sources available when learning about a specific child, such as genetics (Armstrong-Carter et al., 2020), culture (Harkness, 1979), parents (Hsin & Felfe, 2014), socioeconomic status (Blau, 1999), education (Blundell, Dearden, & Sianesi, 2005), teacher (Pianta, Lipscomb, & Ruzek, 2021), and other environmental determinants. As a result, by investigating these factors, children's development, learning, and/or psychological adjustment can be more fully explained.

Considering the importance of humor styles in learning about children and supporting them from various perspectives, a description of their humor styles becomes necessary. For example, Martin (2007) states, "it is assumed that people tend to engage in humor quite spontaneously and are often unaware of its social or psychological functions in each situation" (p. 211). Thus, it may be challenging for children to self-report on what they laugh at because they might not actually be aware of how they use humor. As a result, because self-reports and interviews can provide insufficient data regarding children's humor styles; a valid and reliable scale is required (Fox, Dean, & Lyford, 2013). In this way, children's behaviors can be deeply understood, and the reasons behind their behaviors displayed (Klein & Kuiper, 2006). Also, external factors that have an effect on children's humor preferences can be researched through detailed information regarding humor styles.

In the related literature, both sense of humor and humor styles scales for children at different ages can be found. For example, King and King (1973) developed the "Children's Humor Test" aimed at learning about children's choices related to hostile-aggressive and nonsensical humor. Thus, to measure children's sense of

humor, Zigler, Levine and Gould (1966), Allen and Zigler (1986), Raley (1942), Bird (1925), and Dowling and Fain (1999) developed different scales. Additionally, for humor styles, Fox, Dean and Lyford (2013) and James and Fox (2016) developed scales for school-aged children. As a result, even though there have been some attempts to describe what children laugh at and what their preferences are, the early childhood period is still not fully described. That is, both the importance of the early years and the importance of humor styles for young children as well as the way humor styles in early childhood are described has not been clearly outlined. Thus, the aim of the current study was to develop the "Pictorial Humor Styles Scale for Preschool Children".

As mentioned previously, culture is important dimension in developing a better understanding of people's humor behaviors. Therefore, to apply scales related to humor styles, some adaptation studies have been conducted. For instance, Yerlikaya (2003) adapted Martin's Humor Styles Questionnaire into Turkish to be applied to adults. Additionally, Anlı (2021) created an adaptation to be used with children between the ages of 11-14-years-old. Nevertheless, it remains necessary to measure the humor styles of children during the early childhood years (Klein & Kuiper, 2006). This is essential because humor is an important developmental aspect that begins to improve within the early years of development. To illustrate, children start to show their first humor behaviors while interacting with caregivers (Mireault et al., 2015) as well as their humor experiences increase when they begin to develop peer relationships in preschool (Bainum et al., 1984). Therefore, to provide children with appropriate humor experiences, support their adaptive humor behaviors rather than maladaptive ones, and to discover what factors are behind developing such humor styles (parenting, temperament, teaching methods, etc.); an appropriate measurement scale is needed for early childhood children. However, as young children have not yet learned how to read and/or write, it is abstract to contemplate their humor preferences. Thus, the current study utilized pictures within the scale rather than written questions. Importantly, Allen and Zigler (1986), also used visuals to determine children's sense of humor levels, and this methodology seemed more effective in learning about how children comprehend things as being "funny" or not. Also, Raley (1942) used cartoons to learn about children's humor responses. For that

reason, the current study aimed to create a measurement tool while considering the effectiveness of visuals in learning about children's humor preferences. Thus, a scale which enables researchers to better determine children's humor preferences through interviewing children, can prove to be an effective means of more fully exploring children's humor styles.

All in all, the outcomes of the current study can be a valuable source for learning about children's humor styles as well as providing the necessary experiences for supporting adaptive humor styles. Thus, it should be possible to find ways to discover reasons why maladaptive humor behaviors occur by examining relationships between related variables. Regarding this, the current study can fill the gap related to measuring the humor styles of young children and ultimately become an important source of discovering relationships between children's developmental features and their humor styles.

1.5. Definitions of the Important Terms

Humor: It is the ability to understand and produce a funny situation and to convey it to others (McGhee, 1971).

Sense of Humor: It is the ability to appreciate the funny and the frivolous side of life (Martin, 2003).

Funny: It refers to things that people find amusing, entertaining and humorous. The concept of funny can be different for everyone and depends on factors such as one's lived experiences, cultural influences and personal characteristics (McKee, 2016).

Humor Behaviors: It can be defined as the communications and actions that tend to produce humor toward the self or others (Martin, 2019).

Humor Ability: It is a person's capacity to express and perceive funny things. Humor ability refers to a person's ability to speak in a humorous way, to recognize what is funny in different situations, and to make other people laugh (McGhee, 1971).

Humor Comprehension: It is the ability to understand and appreciate humor (McGhee, 1971). It also includes children's incongruity resolution on the non-predicted finals in the situations around them (McGhee, 1971).

Humorous Situations: They are situations that cause people to laugh, chuckle or be amused. Humorous situations can be different for different people and what one person finds funny may not be funny for others (Durmuş & Tezer, 2001).

Humor Styles: It is the tendency that determines the purpose, context and method of using humor, which is shaped by one's perception of oneself and others (Martin et al., 2003).

Self-Enhancing Humor: This humor style includes one's jokes about the self but these jokes are not humiliating (Martin et al. 2003).

Affiliative Humor: People who like to have jokes about others can be categorized under this humor style. These jokes do not include sarcasm (Martin et al. 2003).

Self-Defeating Humor: One's making humiliating and harmful jokes about themselves can be evaluated with this humor style (Martin et al. 2003).

Aggressive Humor: This humor style includes making jokes that would insult other people in the social group (Martin et al. 2003).

Preschool Children: It defines the group of children at the age of between three and six, and who continue preschool education (Härkönen, 2002).

Scale Development: It is the process of developing a set of stimuli or items that will stimulate the trait of individuals to be measured and appropriate response categories to these stimuli. (DeVellis, 2014).

1.6. Summary

In this chapter, the background of the current study was provided. In addition to the background information, the problem statement, significance, and purpose of the study were also provided to present a broader view of the scope of this study. Also, definitions related to humor styles and why it is important to discover young children's humor styles were presented through the related literature. Additionally, the aim of this study, along with the research questions used in reaching this aim were shared in this chapter. Finally, the significance of the study and how the result can serve the related literature were examined in the light of previous studies related to this topic.

CHAPTER 2

LITERATURE REVIEW

In this chapter, the literature behind the current research is shared. Firstly, humor, forms of humor, humor development and theories related to humor are described. After sharing the general descriptions, more detailed information about humor styles theory, and humor styles in children is included in this chapter. In addition, detailed information on early childhood education and parents in terms of humor was provided. Finally, national and international studies related to humor styles, scales related to humor styles, their importance for early childhood education, and the importance of culture in humor are shared.

2.1. Definition of Humor

Humor is defined as one of the ways to express one's emotions and ideas (Morreall, 2008). Humor is a topic that has been discussed by theorists and philosophers from different research areas such as literature, sociology, philosophy, and psychology for a long time now. Philosophers and scientists such as Platon, Aristoteles, Descartes, Kant, Schopenhauer, Spencer, Hobbes, Bergson, Darwin, Piaget, and Freud tried to develop an understanding related to humor and provide a definition (Carrell, 2008). Therefore, humor has several definitions in the related literature. According to Simpson and Weiner (1989), humor is about perceiving things that are funny or amusing, or it is an ability to make these funny things by writing, speaking, or expressing.

Humor is also described as a universal concept that is highly related to smartness and wit (Ruch, 1998). Ziv and Gadish (1989) provide a definition from a different point of view and states that humor is a way of communicating that causes pleasure,

enjoyment, laughing, and smiling. People's humor preferences may differ and any kind of sexual, aggressive, or social humor can cause smiles and laughter (Martin & Lefcourt, 1884). However, to distinguish the humor from the basic smile, the essential point is to question if the humor provides positive energy that helps to deal with negative emotions (Mallen, 1993). Even if the definitions focus on people's laughter as a result of humor behavior, the content of humor (adaptive or maladaptive) is also effective on psychological well-being, social relations, etc. (Mallen, 1993).

Humor is defined as a crucial tool for adults to have a healthy ego structure and for children to have a healthy development. From this point, it cannot be underestimated that humor is a multidimensional concept and it is hard to make a common definition. According to Martin (2007), when we describe humor from a psychological perspective there are four different components in the humor process. These are the social context, cognitive-perceptual process, emotional response, and vocal and behavioral expression of laughter. Apart from this physiological definition, it is also possible to define humor from a social perspective. That is, humor is basically a social phenomenon, and people usually make jokes and laugh more with others than they laugh when they are alone (Martin & Kuiper, 1999; Provine & Fischer, 1989). Thus, according to Bergson (1997) humor has a function for social adaptation, and intelligence is necessary to understand and appreciate a humorous situation. However, the reaction to humor is not only a cognitive reaction, it also has some behavioral reactions such as enjoyment, laughter, or smiling (Martin, 2007).

Another concept of humor is a sense of humor. Eysenck (1972) states that it is possible to define a sense of humor from three different perspectives. First of all, it can be about the case in which other people laugh at the things that we laugh at. Secondly, it is about how others can easily and overly laugh at things, and finally, it can be defined as one's actions to make others laugh as a meaning of his/her part of the soul (Martin, 1998). There are also some additions made to Eysenck's list of definitions related to the sense of humor. These are degrees of individuals' understanding of jokes and humorous stimuli, evaluating expression styles of humor and laughter responses both qualitatively and quantitatively, their ability to generate

humorous comments and perceptions, liking different jokes, cartoons, or other humorous material, seek sources that make them laugh in an effective way, memories with related anecdotes and funny incidents, tendencies to use humor as a coping mechanism (Hehl & Ruch, 1985). When we look at the definitions made at the end of the 19th Century, sense of humor is seen as a consistent personality characteristic, and it includes some individual differences (Martin, 2007).

As stated before, humor is one of the ways to express one's emotions and ideas (Morreall, 2008). The way how people express the humor can differ. That is, there are different forms of humor that are verbal, physical and pictorial humor (Sover, 2018). In the following part, these different forms of humor will be shared.

2.1.1. Definition of Verbal Humor

Verbal humor is a type of humor made through the use of words (Sover, 2018). Verbal humor can be realized through speech, storytelling, stand-up shows, sketches, jokes and other forms of verbal communication (Norrick, 2004). Since verbal humor can be done with puns, contradictions, irony, satire and other techniques, its purpose is not limited to making people laugh. Verbal humor can also be used to make social criticism, to make people think, to raise awareness and even to give political messages. For example, satirical verbal humor can be used to criticize social problems. Although the purpose of verbal humor is usually to make audiences laugh and entertain, it can also be used for other purposes (Öztürk, 2022).

2.1.2. Definition of Physical Humor

Physical humor is a type of humor that uses body language (Sover, 2018). This type of humor is performed through gestures, facial expressions, movements and other physical actions. Physical humor is often performed through theater, circus, pantomime, puppet shows and other performing arts (Sover, 2018). This type of humor creates a laugh-out-loud effect through the use of body language rather than the use of words. Examples of physical humor include Charlie Chaplin's films, performances by comedians such as Mr. Bean, Laurel and Hardy, and others.

Physical humor can help people cope with difficulties in everyday life and make people's lives more enjoyable (Boz, 2014).

2.1.3. Definition of Pictorial Humor

Pictorial humor is a type of humor made through paintings, cartoons, comics and other visual arts (Sover, 2018). This type of humor creates a humorous effect through the use of visual elements. Examples of visual humor include cartoons, comics, internet memes, animations and others. Pictorial humor is often used to make social criticism, to give political messages, to address current events and to help people cope with challenges in their daily lives. Pictorial humor can make people's lives more enjoyable and reduce stress in people's daily lives (Ersözlü & Okyayuz, 2023).

2.2. Humor and Development

According to Martin and Ford (2018), humor development is a lifespan process, and with new cognitive, social, and emotional experiences, humor behaviors may change. Even if it is a lifetime process, in the early years it is possible to observe the first signs of humor development. That is, in infancy, babies start to smile during their first months to the caregivers' voice, and later, lights and moving objects. And, after that, infants start to distinguish the adults and give different responses to siblings or parents and laugh at them (Martin & Ford, 2018). From 10 to 20 weeks onwards, infants' laughter starts to be observed interacting with the caregiver and reacting to them with laughing as a result of the interaction. These changes in laughter behaviors can be explained by the development of cognitive schemas and mental representations (Martin & Ford, 2018). Not only cognitive improvements, but social factors are also effective on laughter. Shults (1976) suggests that humor responses occur during social interaction, and the experiences that infants have during these social interactions, contribute to and shape their humor behaviors. In addition, cognitive development is found to be one of the important developmental areas that contribute to humor in childhood (McGhee, 1971; Shultz & Horibe, 1974). In the following part, humor and its relationship with other developmental areas are presented

2.2.1. Humor and Cognitive Development

The theories related to humor comprehension are highly affected by cognitive psychology. Humor is highly related to understanding, identifying, and interpreting the events and incongruities related to that event (Martin & Ford, 2018). Therefore, the mental process of understanding a joke and reacting to it is an important area to discuss in explaining children's humor. With this consideration, Martin and Ford (2018) describe different cognitive methods in humor studies. Semantic distance is one of these methods. Semantic distance is about how people keep the meaning of a concept or knowledge in their minds (Osgood et al., 1957). According to this explanation, the concepts that are related are stored closely, and the ones that are not related are placed away in the mind. The ability to decide between similar and dissimilar concepts contributes to recognizing incongruity among the situations or concepts, which is one of the important dimensions of creating humor (Martin & Ford, 2018). In his study, Godkewitsch (1974) supported this idea by finding out participants' reflections on the word combinations that are created by distant word pairs. More specifically, participants described distant word pairs as funnier when compared with the close word pairs. In this regard, it is possible to say that the semantic distance concept can be one of the cognitive areas to explain humor in children. That is, with the increase in the development and the ability of semantic distance and the increase in the experiences in this area, children's understanding, appreciation, and production of complex humor also improve (Martin & Ford, 2018).

Semantic priming is another cognitive method that can serve humor processing. This is about the effect of one concept on the activation of a semantically related concept (Meyer et al., 1975). To give an example, people recognize "teacher" when they see "school" first. Valis et al. (2003) used this concept in schema activation in reading jokes. Thus, they revealed that during the joke, the initial schema becomes active, whereas incongruous or surprising schema is activated after the joke. This process serves as an incongruity resolution process. Based on this, it is possible to say that schema activation is required in the progress of humorous situations. For children, this process also needs improvement and experience for complex jokes. From this point, the importance of cognitive development is highlighted for humor

development in incongruity and incongruity resolution (Martin & Ford, 2018).As a result, cognitive processes such as recalling, analyzing, interpreting, understanding, and manipulating are required to understand, appreciate, and produce humor. Young children's development of cognitive abilities contributes to understanding complex jokes (Martin, 2007).

Even though children's humor is highly affected by their cognitive abilities, humor usage also contributes to their cognition. Creativity is one of the cognitive skills that is affected by humor. That is, both creativity and humor work with the same elements, such as looking from different perspectives (Besemer & Treffinger, 1981). Flexibility in thoughts that is used in humor also contributes to creativity (Belanger, Kirkpatrick & Derks, 1998). Memory is the other cognitive skill that may be influenced by humor. Because people need to remember humorous and non-humorous sentences and realize the incongruity among them, they need to have memory capacity (Martin & Ford, 2018). This process also helps the encoding and retrieval process, and memory advantage is created for humorous content (Scmidt, 2002). As a result, encouraging children to participate in humorous activities in terms of appreciating and producing humor would benefit their cognitive skills.

2.2.2. Humor and Social and Emotional Development

Apart from the cognitive aspects, humor is also affected by social functions and consequences in daily life (Martin & Ford, 2018). Lewin (1939) argued that social behaviors are highly influenced by the perception of social influences and interaction between personal characteristics. Thus, behaviors, feelings, and attitudes are shaped by the imagined and actual existence of others (Allport, 1954). Based on this explanation, it is possible to say that people are affected by others when there is no one around. Humor is one of the areas that is affected by these social forces. It has both positive and negative consequences in social settings (Martineau, 1972). For instance, because humor may decrease tension between people and help to deliver the message playfully even in negative situations, it might contribute to healthy relationships. On the other hand, humor might be used in a way that can harm others

if it includes disrespectful content for one's weaknesses (Bill & Naus, 1992). This situation can be described as a paradox for humor's explanation from a social perspective.

When people meet each other, they create their impressions with regard to some social categorical variables and personal characteristics (Kunda & Thagard, 1996). Humor is one of the personal characteristics that shape others' impressions of the self (Martin & Ford, 2018). Derks and Berkowitz (1989) found that gender, type of joke, recipients, context, and others' responses affect the perception of others in humor. Derks et al. (1998) also found that people tend to become more aggressive in their jokes when others do not laugh, whereas they become more affiliative when people laugh.

Humor also contributes to young children by facilitating their socialization processes in terms of relationship satisfaction (Ziv, 1988), group processes (Martineau, 1972), social control, status maintenance, and group identity (Martin & Ford, 2018). With the social competence that comes with humor use in social relationships, children can develop their communication skills and develop healthy relationships (Semrud-Clikeman & Glass, 2010). On the other hand, the way children use humor also changes the effects of humor in social relationships. In relation to that, Klein and Kuiper (2006) suggest that humor can be used as a tool for bullying. For example, aggressive humor among children is concluded with peer victimization and in the long term, isolation from the group (Fabrizi & Pollio, 1987). However, using the affiliative humor styles, one of the positive humor styles, result in popularity, social standing, and prosocial skills (Semrud-Clikeman & Glass, 2010).

In addition to the social influences, humor benefits children in mastering the ordeal of dealing with negative humor states and expressing their aggression by using humor as a tool (Martin & Ford, 2018). In the early years, when children encounter many emotions, it could be harder to find suitable defense mechanisms in undesired situations such as death, violence, punishment, or illness (Levine, 1977; Wolfenstein, 1954). Play and joy is defined as a behavioral parody that helps children transmit negative situations to positive ones. Therefore, for emotional development, humor

development becomes one of the important necessities (Sutton-Simith, 2008). Because humor is a tool to decrease the negative effects of undesired emotions, the effect of these emotions can be obstructed which can be observed in the social and physical development of children (Martin & Ford, 2018).

On the other hand, not every type of humor has similar outcomes in terms of children's emotional states. Thus, the type of humor that children use becomes an important question to interpret the outcomes in terms of emotions. As a result, even if it is possible to say that there is a positive correlation between humor use and developed emotional self-regulation, the type of humor that children prefer may change the situation negatively.

2.2.3. Humor and Language Development

Linguistic humor is one type of humor that includes verbal and written humor. The reason why people perceive a sentence or a text as funny is related to their language development (Martin & Ford, 2018). According to Bariaud (1988), understanding meaning is not enough, and the listener must disregard the literal interpretation of an utterance. The multiple meanings of words, metaphors, sudden changes in the context, or idioms are the sources of verbal humor. Thus, to understand and react to a verbal joke, children first have the necessary skills related to it. Children start to focus on language at the age of 10 to 11 in terms of humor (Semrud-Clikeman & Glass, 2010). Also, McGhee (1983) found that children do not start to use speech patterns while joking until three to four years of age, with the improvement of language skills. After the age of six, with more developed language skills, children start to use premade jokes. Therefore, during the following years, children start to have a classification related to the meanings of the words and create riddles. As a result, at the age of 11, these riddles become a source for children to understand that language is a system (Sutton-Smith, 1986). The improvements in language and complexity in humor are highly affected by cognitive development and the way verbal humor is used McGhee (1983). Therefore, to have a deep understanding of children’s verbal humor, following the cognitive processes of the child can be helpful.

2.2.4. Humor and Moral Development

Morality in children develops and is structured as a multifaceted and complex process, which includes the emotional, social and cognitive. It seems possible to recognize the characteristics of moral development accurately only by considering each of these different dimensions (Hökelekli, 1998). By the term moral development, child developmentalists mean children's learning and understanding of the rules necessary for them to keep up with the social world (Özeri, 2004). Moral development is closely related to personality development, social development and emotional development. For this reason, some developmental theorists have analyzed moral development within personality development or social development. In addition to these developmental areas, humor behaviors are also affected by moral development (McGhee, 1974a). That is, children who are less mature laugh more to the situations that are morally undesired. On the other hand, children with high levels of moral abilities consider the damaging outcomes (McGhee, 1974a). It is suggested that in terms of moral development, children do not have any preferences about humor in terms of the level of damage at an autonomous level. Also, children’s reactions to damaging situations in terms of being intentional or not change with increased moral understanding. Even if the relationship between moral development and humor has a complex nature, it is important to consider children’s moral development level in terms of children’s humor behaviors. In this way, it can be easier to understand why and how humor behaviors change with the development and maturation of the child.

There are many theories that explain humor (Lyttle, 2005). In the following titles, detailed information related to theories that aim to explain humor are shared.

2.3. Theories Related to Humor

When the literature is examined, it is seen that there are different classifications regarding humor and laughter theories (Şahin, 2018). Some researchers consider "laughter" in terms of human emotionality, while others state that it should not be compared with emotion. In this sense, although the act of laughing is tried to be

explained in light of different theories, it would be more accurate to classify it in terms of the approach to the question. From this point of view, it is seen that the subject of "laughter" is mostly handled from philosophical, psychological, and sociological perspectives. Names such as Plato, Aristotle, Thomas Hobbes, Immanuel Kant, Arthur Schopenhauer, Charles Baudelaire, Friedrich Nietzsche have approached the subject of "laughter" and "funny" from a philosophical and ethical perspective; names such as Sigmund Freud, Theodor Lipps, Luigi Pirandello from a psychological perspective; and names such as Homer, Martin Opitz, Henri Bergson from a sociological perspective (Şentürk, 2016).

At the point of understanding laughter, although there is no comprehensive theory that explains all situations that evoke laughter, there are three major traditional theories that are emphasized the most, seeking answers to the questions "Why do we laugh?" and "What are the reasons that make people laugh?". These are the superiority theory, also known as the moral theory or pessimistic theory; the incompatibility theory, known as the mental theory; and the relief theory, known as the discharge theory (Martin & Ford, 2018; Morreall, 1997; Smadja, 2013). Psychoanalytic Theory and Humor Development Theory are also presented in the following part.

In the current study, children's humor styles were tried to be investigated by developing a pictorial scale. Even if the Humor Styles Model describes differences in humor behaviors, still the reasons for such behaviors need explanation. Humor theories aim to describe the reasons for the laugh. Thus, they could help to develop a deeper understanding on why children laugh. For this reason, the theories related to humor will be shared in the following part.

2.3.1. The Superiority Theory

The beginning of this theory, which explains "laughter" as an expression of the individual's sense of superiority over others, dates back to Plato (Morreall, 1997). According to this theory, which was proposed by Aristotle and developed by

Hobbes, an individual who sees, hears, or reads a funny event feels superior to the hero of the event, thinking that s/he would not do the wrong that the hero of the funny event does, and laughs as a result of this situation arousing pleasure in him/her (Özünlü, 1999). According to Hobbes, laughter is considered an arrogant act due to the thought of superiority that arises from the weaknesses of others (Şahin, 2018).

The basis of the superiority theory is the pleasure of eliminating the opponent and putting someone else at a disadvantage (Eker, 2009). In the superiority theory, the individual sees himself lucky in different ways compared to others and laughs, but non-humorous laughing situations are not clarified (Usta, 2009). In some situations, it seems quite difficult to distinguish whether individuals' laughter is due to a feeling of superiority towards the person in the situation or whether it is related to the situation itself and unrelated to any particular individual.

2.3.2. The Incongruity Theory

In the dissonance theory, the cognitive or intellectual dimension of "laughter" is at the forefront rather than the emotional dimension, and the mental reaction to incompatible and unexpected situations is in question (Morreall, 1997). This theory, supported by Kant and Schopenhauer, reveals the cognitive dimension of laughter (Smadja, 2013). The most widely accepted incompatibility theory assumes that the individual encounters an unexpected incompatible situation, the incompatible situation appears logically compatible from a different perspective, and the contradiction of these two situations causes laughter (Usta, 2009).

According to this theory, which was pioneered by philosophers such as Kant and Henry Bergson, it is stated that an expectation is formed in the individual regarding funny events in terms of how the events will turn out, and when the events turn out to be the opposite of what is expected, the result in question causes individuals to laugh (Özünlü, 1999). For example, when a father who has never grown a mustache has a mustache, his wife and children react with laughter in the face of this unexpected situation (Şahin, 2018).

Pien and Rothbart (1976) argue that recognizing incongruity will lead to a desire to resolve it. Appreciation of the value of humor often involves a two-stage process: One first discovers the incongruity, that is, one's expectations are violated, and then engages in problem solving to resolve or explain the incongruity or inconsistency. McGhee (1979) states that incongruity is necessary for humor and that cognitive mastery -knowing how situations/concepts should be - is a basic prerequisite for understanding this incongruity. The views of McGhee, who examines children's humor development within the framework of cognitive theory and puts forward a humor development theory for children, are included in the dissonance theory.

The main weakness of this theory, in which laughter is characterized as a reaction to dissonance, is that it cannot explain all cases of laughter. Since there are also non-humorous laughing situations in which there is no incongruity, this theory of laughter is not accepted as a general and comprehensive theory (Morreall, 1997).

2.3.3. The Relief Theory

Although there are different interpretations of relief theories, the common point of all these interpretations is that laughter is a physiological perspective in which laughter is seen as the release of energy. While the superiority theory focuses on the emotions related to laughter and the dissonance theory focuses on the objects or thoughts that cause laughter, the relief theory seeks to answer the question of why laughter takes the physical form it does and what its biological function is, which is rarely discussed in these two theories (Morreal, 1997). According to this theory revealed by Spencer and developed by Freud, laughter is an energy discharge. The function of humor is to relieve tension and distress and to release excessive tension. The sense of relaxation that removes this tension is the main element of humor (Güler & Güler, 2010). People who get rid of unnecessary energy through laughter relax. The most important event that causes the accumulation of energy is the unprepared transfer of one's consciousness from important things to unimportant things. In this case, the nervous force suddenly deviates from its natural bed and enters a new path (Usta, 2009).

2.3.4. Psychoanalytic Theory

According to psychoanalytic theory, laughter is the release of excess energy. The energy accumulated in the nervous system, which is not needed, must somehow be discharged from the system. Laughter provides this release (Martin & Ford, 2018). The idea of releasing this excess energy belongs to the philosopher Spencer (1860). According to Freud (1990), in order for a joke or humor to occur, a person should think that he/she will encounter stressful and disturbing situations where he/she may experience negative emotions such as fear, sadness, or anger, but this expectation should come to naught. According to Freud (1928), the reason why a person enjoys jokes is the experience of momentary irregular pleasure resulting from the release of some of his primitive sexual and aggressive impulses. For this reason, the person does not feel guilty because the superego is temporarily distracted by the cognitive trick involved in the joke and does not realize that the joke contains aggressive and sexual themes (Freud, 1990).

According to Freud (1990), for a joke to be effective it must fulfill two important requirements: It must be clever and distract the superego with cognitive traps, and in addition, it must allow the expression of a sexual or aggressive impulse. Freud (1928), however, recognized that there may be jokes that do not involve aggressive and sexual impulses, although he believed that most jokes involve the release of these impulses. Less rational and more childlike ways of thinking can also make us laugh. Freud (1990) argued that humor is one of the various defense mechanisms that allow us to face difficult situations without being overwhelmed by unpleasant emotions. It is even the highest of the defense mechanisms because it enables individuals to avoid uncomfortable emotions without breaking away from reality.

2.3.5. Paul E. McGhee's Theory of Humor Development

Mental abilities develop throughout childhood and these abilities are reflected in the humor that children enjoy and produce (McGhee, 2002). McGhee presented his theory of humor development based on mental abilities as four stages in 1979. The characteristics of these stages are closely related to Piaget's stages of cognitive

development. In 2002, McGhee revised the stages he developed in 1979 and examined them in more detail (Hoffman, 2008). The age limits of the humor development stage here are set according to general principles. Some children may enter this stage earlier than others, although the age ranges indicated are the starting limits. Most children continue to show the characteristics of the previous stage long after the first examples of the new humor form have been seen. The specified age limits represent the period when that humor form reaches its highest level (McGhee, 2002).

2.3.5.1. Laughter without Humor (First 6 Months)

According to McGhee (2002), at this stage, infants laugh without any humor. A familiar situation or any situation that is not frightening can trigger laughter. For example, at this stage, situations such as children being bounced on their parents' knees, being quickly lowered again, or being tickled can cause laughter. McGhee observed that when his son was 4 months old, he laughed when he repeated "boop, boop, boop" in a high-pitched voice and ran his fingers from his belly to his neck.

2.3.5.2. Incongruous Actions towards Objects (18-20 Months Old)

McGhee (2002) states that the earliest form of humor is the reaction to humor rather than the production of humor by infants. Babies' parents are the most important people in their lives. Since parents are always around their children, their faces and behaviors are the most well-known parts of their new world. Parents are also emotionally important for babies and meet their basic needs. It is not surprising, therefore, that babies' first humor responses emerge from their experiences with their parents. A 6-7 month-old baby may laugh at an unfamiliar behavior of his/her parents.

2.3.5.3. Incongruous Labelling of Objects and Events (20-24 Months Old)

McGhee (2002) states that at the beginning of the second year, children begin to exhibit new and exciting behaviors; pretend behaviors. First, children use objects as

if they were other objects. Not all pretend behaviors at this age or at other ages are humorous, but the capacity to pretend is the earliest form of humor created by children. After the first year of life, children can be observed putting a bowl, diaper, or washcloth on their own head or on their parents' heads as a hat, using any long thin object as a toothbrush, holding a shoe or a spoon to their ear and saying "Hello Dad". McGhee observed that his 20-month-old son put his pants on his head like a hat and when he went to his son, his son laughed and when he wanted to take the pants off his head, his son said "Repeat, repeat" with a big smile on his face. At the age of 24 months old, as a classic example of stage 2 humor, she observed that her son took his shoes, put them on his hand, and said, "I put my shoes on." McGhee stated that her son did not laugh when he said this but had a mischievous smile on his face that reflected his pride in what he had done.

McGhee (2002) states that there are three important points at this stage. First, this is the first type of humor initiated by the child. Second, the same behavior can also be funny when it is done by a parent or an acquaintance. The last is that the maladaptive behavior can be experienced either as funny or as an interesting idea to explore. What is important is the frame of the child's mind at the moment when the maladaptive behavior occurs. Children actively explore the world, mentally and physically. This curiosity and exploration can take place in a real way or in the form of play. However, inconsistent behavior towards objects is only humorous if it occurs in a playful situation.

Play is most likely to take place in familiar environments and with familiar objects. When a new object is encountered, playing with it to discover its properties is more prominent. Once the properties of the object are well learned, play-making emerges. Humor is only one form of play-making. A child can have a lot of fun with an object without using it inconsistently. However, once an object has become very familiar to children, they enjoy using it in unusual and inappropriate ways (McGhee, 2002).

2.3.5.4. Conceptual Incongruity (2-5 years)

McGhee (2002) has addressed this phase by dividing it into different categories one of them is "*Playing with the Sounds (Not the Meanings) of Words".* According to

McGhee (2002), several new forms of humor emerge by the end of the third year. Giving false names to objects continues after the age of 2 years old. However, around the age of 3 years old (around 2.5 years for some children) a new way of playing with words emerges. Children become attuned to the sounds of words and begin to play with the sounds of words themselves. This usually takes the form of repeating familiar words over and over again in similar ways. McGhee stated that when her son was in the second half of his third year, he enjoyed saying nonsense words and they played a game of saying nonsense words for months. At this point, although they understood the meaning of familiar words, children's thinking is influenced by the perceived properties of objects, namely, their appearance, sound, and texture. Therefore, playing with the sounds of words is an appropriate source of humor for children at this age (McGhee, 2002).

The second phase is named as *"Combination of Meaningless and Real Words".* McGhee (2002) states that in addition to playing with the sounds of words, most three-year-olds also begin to substitute real words for nonsense combinations that are known to be incorrect. At this age, children enjoy putting words together in absurd ways, even if they know they are wrong.

The third category is "*Distorting the Properties of Objects, People, or Animals*". Until the age of three, children not only know that everything has a name, but also understand that these names reflect classifications and categories formed in line with certain common characteristics, and this is considered by Jean Piaget as the beginning of conceptual thinking. With the development of conceptual thinking, children's humor development also progresses (McGhee, 2002).

At this age, children structure the knowledge they acquire through experience into conceptual categories, they begin to understand that a word does not belong to a single object, but to a category of objects with distinctive features that distinguish them from other objects (e.g. a four-legged, moo-whistling, grass-eating "cow" is neither human nor canary-like).

Another phase is named "*Naming for the Opposite Sex"***.** In the preschool period, when the concept of gender is acquired, it is quite entertaining for children to

misidentify the gender of other children or to call them by a special name of the opposite sex. Two-year-olds may address their mother as "father" and their father as "mother"; three-year-olds may address each other with names of the opposite sex during play. Although the use of this type of humor is very common with some children, these gender reversals are considered to be a reflection of the pleasure derived from misnaming objects (McGhee, 2002).

2.3.5.5. Pre-Riddles Phase (Transition Period) (5 Years / 6 - 7 Years)

At this stage, children who observe older children around them asking riddles and giving random answers to these riddles followed by laughter imitate them and are interested in verbal humor. Five- to six-year-old children give meaningless and funny and outlandish answers to riddles, but children at this age do not understand riddles based on double meanings, even though these riddles are thought to be understood by children as an observer. When children are asked to choose which answer is funny by asking riddles with playful and real answers, it is seen that they only make guesses without any real comprehension.

2.3.5.6. Humor in Multiple Meanings

By the age of seven, children discover that words have different meanings and that they can use them to play pranks. At this age, children begin to understand the riddles they are asked the previous year, and they enjoy riddles very much. This lasts for up to three years and naturally disappears when a new form of humor is discovered. Children, who have increasing knowledge about social norms, language rules, and characteristics of the physical world, gain competence in understanding humorous situations and producing humor with the development of their cognitive thinking mechanisms. Cognitive gains help the child to understand the incongruities underlying humor in humorous situations on different levels.

Around the age of seven, in what Piaget calls the "concrete operations period", a number of mental abilities emerge. One of these is the ability to understand the punch line in word games based on the different meanings of words. The main

reason why children enjoy riddles during this period is the mental satisfaction of establishing a meaningful relationship between two situations that initially seem unrelated (McGhee, 2002).

In addition to all these theories, there is another theory that tries to provide a detailed explanation and classification of people's humor behaviors. Even if humor is seen as a positive behavior with positive outcomes, there are also some humorous situations that can cause harm for individuals and to others around them (Martin, 2007). Therefore, Martin and his colleagues provide a description of these adaptive and maladaptive humor behaviors.

2.4. Humor Styles Model

Humor is a tool that helps people to reflect not only enjoyment, happiness, intimacy, or sharing, but also on aggression, dominance, or pleasure (Westwood & Rhodes, 2007). Therefore, it is important to consider humor that can both benefit or harm individuals in personal or social terms. The theories that try to develop an accurate definition of humor explain it under two titles, namely, adaptive and maladaptive humor (Martin et al, 2003). Humor is not a one-dimensional and valid personality trait that can be explained in the same way in all situations. On the other hand, it needs to be considered a multidimensional personality trait (Martin et al, 2003). With a scale that is developed to measure people's humor styles named "Humor Styles Questionnaire" (Martin et al., 2003), the general humor behaviors are categorized under four different humor styles (two adaptive and two maladaptive humor styles). According to the "Humor Styles Model ", humor may protect the self from negative emotions thanks to its function as a defense mechanism. Also, humor's interpersonal functions help people to develop healthy relationships with others and strengthen social bonds (Martin et al., 2003).

With a positive form of humor, people can deal with undesired emotions, develop a positive point of view toward negative situations, reduce conflict, improve secure attachment with others, have better social attractiveness, and develop a positive atmosphere, identity, and norms in groups (Martineau, 1972). In addition to these

social benefits, positive humor is also associated with positive characteristics such as being tolerant, connecting, and welcoming to self and others. On the other hand, the negative form of humor is highly associated with personality traits such as being hostile, detrimental, and harming oneself and others. Thus, this kind of humorous behavior results in negative social relations and less acceptance in the group. The table below provides a general look at the humor styles model (Martin et al., 2003).

Table 1 *Martin et al.'s (2003) Humor Styles Model*

	Directed at Self (Intrapsychic)	Directed at Others (Interpersonal)
Beneficial (Positive)	Self-Enhancing	Affiliative
Detrimental (Negative)	Self-Defeating	Aggressive

According to this table, there are four different humor styles that help to describe people's humor behaviors. These categories were made under the titles beneficial-detrimental" and "adaptive-maladaptive". Whereas Affiliative Humor and Self-Enhancing Humor are associated with positive outcomes for the self and social relations, Aggressive Humor and Self-Defeating Humor are determined as the humor characteristics that harm well-being and relationships with others.

2.4.1. Self-Enhancing Humor

This humor style is highly related to the consideration of others' needs. People require this humor style when they need to cope with negative emotions, deal with stress, or change their point of view while experiencing an undesired situation. This is a kind of humor that is perceived by the individual and not shared with others. Thus, having a humorous perception of experiences can lead to developing humor behaviors with this humor style. People with this humor style prefer to see the absurdities and hassles of life and interpret the difficulties they experience from a humorous point of view (Kuiper, Martin, & Olinger, 1993). This point of view is similar to Freud's explanation of humor as a defense mechanism, so it is highly related to using humor as a coping mechanism (Kuiper, Martin & Olinger, 1993). That is, self-enhancing humor provides a healthy way for people to overcome stressful situations without losing their realistic point of view. It is also possible to

say that this humor style is similar to humor definitions in the literature that view humor as a tool to regulate emotions (Lefcourt & Martin, 1986). Self-enhancing humor styles help people feel mastery against adversity or threats and contribute to their sense of control (Obrdlik, 1942). As a result, this humor style is negatively correlated with negative emotions and anxiety whereas it is positively correlated with openness to experience, self-esteem, and psychological well-being (Martin et al., 2003). As a result, the self-enhancing humor style is defined with its personal functions rather than a social perspective, and its main emphasis is to control emotions via cognitive strategies.

2.4.2. Affiliative Humor

Another adaptive humor style is named affiliative humor. This humor style is associated with positive emotions, self-esteem, relationship satisfaction, extraversion, cheerfulness, and intimacy (Lefcourt, 2001). People with this humor style prefer to make others laugh and decrease their negative emotions. According to Martin et al. (2003, p.53), it is "an essentially non-hostile, tolerant use of humor that is affirming of self and others and presumably enhances interpersonal cohesiveness and attraction". Therefore, the aim of people who use this style of humor is to develop a positive atmosphere, and they are popular in their social group. They prefer to use humor to solve conflict in the group and they try to decrease tension among people who are in conflict (Martin et al., 2003). They are seen as respectful people and they are aware of others' boundaries. The humor is for strengthening social bonds and honoring the people who are involved in this humor (Kazarian ve Martin, 2004).

2.4.3. Self-Defeating Humor

In addition to the adaptive humor styles that have positive outcomes in terms of personality and social relations, there are also maladaptive humor styles that result in negative consequences. The first of them is self-defeating humor; this maladaptive style of humor is directed at the self. The aim underlying the use of this humor style is to be accepted by the group and develop close relations with others (Hampes, 2006). They have concerns about being scorned by others. Like the affiliative humor

style, people try to make others have fun, but in this humor style, they use jokes that disparage themselves. They believe that they can have the approval of others when they make others laugh at what they themselves laugh at (Martin et al., 2003). These people use humor to solve problems in a constructive way and hide the actual reason behind the negative situation and emotion. This humor style serves to suppress and deny negative emotions (Kubie, 1971). On the other hand, using this humor style can also be seen as a way to have the confidence to show one's weaknesses to create a congeniality in the group, especially if s/he is a leader in the group (Romero & Cruthirds, 2006). However, in the long run, this kind of approach can harm the psychological well-being of the person. As a result, whereas this humor style is positively correlated with anxiety, depression, neuroticism, and negative emotions, it is negatively correlated with psychological well-being, self-esteem, relationship satisfaction, and healthy ego structure (Martin et al., 2003).

2.4.4. Aggressive Humor

The second maladaptive humor style is named aggressive humor. In this humor style, people prefer to humiliate, ridicule, or use sarcasm while producing humor (Zillman, 1983). People use humor as a tool for victimizing (Zillman, 1983) or manipulating others (Janes & Olsen, 2000). They do not respect others and do not consider the result of their actions, so they are not interested in the harm they cause other people (Martin et al., 2003). They believe that by humiliating others they can have power over them and feel better at the expense of other people. Even if this humor style is defined with its negative consequences, Romero and Cruthirds (2006) distinguish between different levels associated with this style of humor. What they call "mild aggressive humor" can have positive effects. When people need to deliver a warning, humor can help to give this message in a more positive way (Martineau, 1972). People can also express their discomfort and disagreement without increasing tension (Kahn, 1989). Thus, the level of humor is important for having positive outcomes of aggressive humor. If aggressive humor is at a mild level, it can give group members the freedom to express their discomfort without being aggressive towards other group members and strengthen social bonds. On the other hand, a more aggressive

level of humor among individuals in a social group can harm these relationships and increase tension among people (Martin et al., 2003).

As a result, Martin and his colleagues (2003) provide a framework to develop a better understanding related to the differences between people's humor behaviors in terms of being positive/negative and personal/social. Considering the outcomes of each humor style, learning the possible reasons behind the development of a specific humor style, and investigating ways to find what kind of factors may have an effect on displaying such behaviors related to a specific humor style gains in importance (Martin et al., 2003). According to the related literature, one of the outcomes of humor styles may be related to emotional self-regulation (Leist & Müller, 2013; Poncy, 2017). From this point, providing the theoretical background of emotional self-regulation also gains in importance.

2.4.5. Humor Styles Model and Young Children

As discussed before, humor development occurs in accordance with different developmental areas, and humor development affects other developmental areas. Even if children show humor behaviors at some level, a sense of humor does not develop at the same level among all children (Martin & Ford, 2018). The reason why children show humor at different levels is one of the research areas. That is, how genetics, environmental factors of personality traits may affect the existence of humor, and other possible individual reasons gain importance.

According to Martin and Ford (2018), the measurement scales related to personality traits are for adults, and they cannot be applied to other populations, such as children, because the items are not meaningful in the child context. For measuring humor styles, The Humor Styles Questionnaire developed by Martin et al. (2003) was not suitable for younger children, and there are different attempts to develop a humor styles scale for young children, such as Erickson and Feldstein (2007), Fox, Dean, and Lyford (2013) and Fox, Hunter, and Jones (2016). Fox, Hunter, and Jones (2016) also made different categorizations for common patterns related to humor styles which are interpersonal humorists, self-defeaters, humor endorsers, and adaptive

humorists. They also found a correlation between depression, lower self-esteem, and loneliness with maladaptive humor styles. Therefore, even if the way it is measured should be changed, the psychological outcomes of the humor styles are similar to adults. Therefore, valid and reliable scales that are prepared with the consideration of participants' developmental characteristics for all different populations are required. Even though there are scales for adults, children at the age of 11-16 and 8-11, early childhood years require a scale to learn about children's differences in terms of humor.

About the possible reasons for the individual, Nias, and Wilson (1977) conducted research with twins, and they realized that the differences are observed in genetic bases. Thus, environmental factors such as family structure could explain the differences in humor behaviors. Wilson, Rust, and Kasriel (1977), as well as Cherkas et al. (2000) also supported these findings.

In addition to environmental factors, differences in humor behaviors in children can be related to personality. For example, Ruch and Köhler (1998) argue that temperament is one of the indicators of humor behaviors. And, because temperament starts to be observed in infancy, the first signs of humorous features or preferences can be observed in the early years (Buss & Plomin, 1984). Therefore, to develop a deeper understanding, understanding children's humor styles by starting early is required.

2.5. Humor and Early Childhood Education

Including humor in education in accordance with the level of the child from an early age is a positive contribution to the subconscious in terms of the child's use of it in the future when appropriate conditions occur (Işık & Kolçak, 1953). The ability to look at things from a new and different point of view, which is one of the indispensable elements of humor, accelerates creativity, and in this sense, word games, jokes and other types of humor should be included as part of education from the early stages (Ramachandran & Blakesle, 2014). If the aim is to educate the individual rather than transferring knowledge, humor should be used in education

and teachers should be made aware of this point (Usta, 2009). In this sense, teachers who are aware of the curious, playful and creative characteristics of children will take an important step for both themselves and the child by using humor as a teaching technique and adapting humor to education (Morreall, 1997). The aim of humor education is not to make children laugh; humor should be considered as a tool here. In order to raise intelligent individuals with well-developed humor skills who will evaluate even the negative events they encounter in line with the conditions of this great comedy called life, a suitable environment should be provided to children with various planned activities (jokes, cartoons, imitations, etc.) appropriate to the level of the child (Işık & Kolçak, 1953). The conscious use of humor as an educational tool in the classroom will increase its impact and benefit. Humor will be a lifesaving tool in motivating children, attracting their attention, increasing their participation, preventing them from dealing with unwanted situations outside the classroom, and facilitating classroom management by minimizing unwanted behaviors in the classroom (Şahin, 2018).

Humor should take its place in creating an enjoyable educational home and the adults of tomorrow should be raised as children who, despite the harsh conditions, meet sad events with joy and goodness (Işık & Kolçak, 1953). Including humor in education is very useful for raising healthy and happy individuals, designing learning environments and learning processes in a way that children will enjoy and making learning more permanent by providing classroom environments where positive emotions are dominant (Şahin, 2018). The use of humor in education, which is an important teaching and training technique, ensures tolerance and cheerfulness (Güler & Güler, 2010). Children produce humor in a simpler style than adults, but when evaluated according to their age, this child-produced humor is very valuable. For this reason, teachers should adopt the idea of humor education and create a classroom atmosphere that will reveal this feature of children (Işık & Kolçak, 1953). According to Yurt and Keleş (2019), preschool teachers should manage the educational process with effective practices by using the elements that determine the quality of preschool education such as curriculum and educational environment at the highest level. Teachers who know the value of humor in early learning environments should

provide a learning environment for little humorists where humor is developed through fun activities (Burt & Sugawara, 1988).

In order for the preschool teacher to be efficient and the education program to be implemented effectively, the materials should be sufficient and the educational environment should include what children need to learn (Özdemir et al., 2007). Bergen (1992) stated that in order to support humor development, teachers should carefully select materials that will allow children to reveal their humor traits and give time and opportunity to use these materials.

Unnecessary and unconscious use of humor that is not suitable for the purpose, which can make children unhappy and have destructive effects on them, reduces the effectiveness of humor in educational terms (Şahin, 2018). For this reason, while including humor in early childhood, the content of humor should be one of the considerations. Thus, using developmentally appropriate humor that would not harm children's psychological well-being can be an effective way to increase the quality of early childhood education practices.

2.6. Humor and Parents

Parents are the first individuals who create a social environment for children. That is, children start to experience social abilities with their parents. Humor is one of the social abilities that children can experience with their parents (Maccoby, 1992). Since the first years of life, babies are sensitive to the effects of parents in terms of humor (Mireault et al., 2014). Parents' humorous skills and attitudes can affect children's sense of humor. A positive, reassuring, and supportive attitude of parents can improve children's sense of humor (McGhee, 2011).

Humor can be supportive of the child-parent relationship in several aspects (Lovorn, 2008). For example, if the parent uses humor while trying to make the child to do something, including humor in the communication can create a positive environment (Lovorn, 2008). This situation can contribute to two outcomes. One of them is using humor in communication can contribute children’s humor. Secondly, humor can

contribute to developing more secure and warm relationships (Lovorn, 2008). In addition, parental humor can have positive effects on children's cognitive and social-emotional development.

Oliva Delgado et al. (2007) suggest that internal and external adjustment could be supported with parental humor which can be seen as one of the parenting styles. Psychopathological intensity can be also prevented with the use of parental humor in parent-child relations (San Martín et al., 2016). Finally, León-del-Barco et al. (2022) found out the positive effects of parental humor on children's social and emotional problems.

As a result, it is possible to conclude that parents and parental styles can have significant effects on children. Because parental humor can be evaluated as a parental style, using parental humor could be beneficial for not only children's humor development but also other important areas such as child-parent relationships (Lovorn, 2008), internal and external adjustment (Oliva Delgado et al., 2007), and children's social and emotional problems (León-del-Barco et al., 2022), etc.

2.7. Humor and Culture

Culture is another vital point to discuss while trying to understand humor. Even though humor is a phenomenon that is observed in all people, and is universal, the way humor occurs differs with respect to several factors including culture, and it has culture-specific characteristics (Yue, Jiang, Lu & Hiranandani, 2016). These cultural differences can be clearly seen between Western and Eastern societies. In other words, whereas Western people perceive humor as positive and attractive (Bressler et al., 2006), or they see humor as an important personality trait for relationships (Regan & Joshi, 2003), humor is a controversial disposition for Eastern people (Yue, 2011; Xu, 2011). That is, in Western culture, humor is a natural feature that is required for social relations (Grant, 1970), a defense mechanism (Freud, 1928), health (McDougall, 1922), or creativity (Richards, 1990). However in Eastern cultures, humor is something that may be done in certain situations about certain topics by certain people (Yue, 2011). Even physical laughter has some limits and

people need to laugh gently in these cultures (Lin, 1934). Therefore, the cultural biases related to humor affect the way humor is performed and reacted to (Xu, 2011). Not only the perception of humor but the humor styles are also affected by cultures. As stated above, Martin (2007) describes four different humor styles. For example, according to Chen and Martin (2005), Americans' perception of self-engaging humor is positive while in Eastern cultures, it is the opposite. Having different orientations with regard to being collectivistic and individualistic, the reactions to the humor of self (self-enhancing), and to the humor of others (affiliative) differ. For example, aggressive humor is found highly related to independence and assertiveness (Kazarian & Martin, 2006). In this regard, it is possible to say that Westerners tolerate humor more compared to Eastern people (Chen & Martin, 2007; Davis, 2011; Yue, 2011).

The effect of cultural differences on humor affects how humor is included in education. For example, even if humor can be an effective tool for coping with stress among students, Chen and Martin (2005, 2007) found that Chinese students are less likely to use humor when compared to their Canadian peers. When investigating the humor styles of students from different cultures, Saroglou and Scariot (2002) found that different humor styles are acceptable among students in different cultures such as Belgium, Lebanon, Canada, and China. Schermer et al. (2019) aimed to discover the similarities and differences in humor styles in a global sense and they included 28 countries with 21 languages. The results showed that the affiliative humor style was the highest for all countries. Furthermore, the self-enhancing humor style was high in some countries such as Hungary, South Africa, Serbia, and Indonesia whereas this humor style is the lowest in Japan. That international-based study also became a source for the culture-specific difference in humor styles. As a result, a deeper understanding of culture-specific humor is required to find the most suitable ways to support individuals' humor behaviors and explore what they would need in terms of their humor behaviors. From this point, developing a measure that can serve the aim of understanding children's humor in our culture becomes a necessity.

Because the study is conducted in Turkey, the cultural characteristics of Turkey gain importance to have a better understanding of children's humor behaviors. Arslan et

al. (2021) argue that Turkey is the synthesis of Eastern and Western cultures, so it is a unique endeavor to discover the humor patterns in Turkish culture. Namely, humor and rationality are used together, and problem-solving is the main theme in funny narratives such as Nasrettin Hodja stories (Sak, 2007). Many issues of criticism of societies are brought to the agenda through the texts constructed around Nasrettin Hodja stories (Bayraktar, 2010). Critical thinking, which has been the basis of science for nearly eight hundred years, is symbolized by Nasreddin Hodja's identity as a sage of wisdom (Özdemir, 2010). Nasreddin Hodja has been educating new sages in the school of wisdom for centuries. Humor and critical thinking help to solve the problems of life and to reveal more secrets. Nasreddin Hodja, while educating his readers on the path of wisdom, begins by teaching them to read life backwards and to ask questions. Creating original questions and answers is the basis of critical thinking (Özdemir, 2010). Thanks to the relationship between problem-solving and humor, cognitive abilities have become a necessity in appreciating or producing humor in Turkish culture. In their study, Arslan et al. (2021) mainly aimed to discover the relationship between intelligence and humor ability in Turkish culture and conclude that cognitive abilities, particularly verbal analogical reasoning, and verbal reasoning, combined with crystallized knowledge are the indicators for humor ability in Turkish children. Therefore, humor is expected to be an art of mind in Turkish culture, so it is highly associated with cognitive abilities (Boysan 2005; Sak 2007).

In addition to becoming the product of intelligence, the use of humor in society may have different functions in Turkish culture. That is, Eğilmezler Boylan (2015) describes the social role of humor in Turkish culture and argues that humor is used for defense mechanisms opposition, rebellion, freedom of expression, hope, therapy, survival, communication and community formation, and self-reflection; these functions can be explained by the universal social theories such as incongruity, superiority, and relief theories. On the other hand, when we look at the proverbs of the Turkish culture in general, we see that in a significant number of proverbs, the verb laugh is used in a way that means to despise, to ridicule (Ersöz, 2017). One of the first proverbs that comes to mind in this context is the proverb "Don't laugh at your neighbor, it would come to you" and "He who laughs too much cries too

much.” which are a common proverb in all Turkish dialects (Ersöz, 2017). Thus, it is possible to conclude that humor is Turkish culture can be evaluated as a product of intelligence and a source for despising. These two opposite ways of using humor can be a reflection of the complex structure of the Turkish humor.

Culture might be one of the dimensions to affect not only the sense of humor but also humor styles. To illustrate, Tümkaya (2011) found out that the self-defeating humor style is the most common humor style in Turkish males, and they use this humor style to be a part of the group. In Turkish culture, this kind of behavior can be accepted as a positive and constructive mechanism. For that reason, this might be seen as a source of why Turkish males prefer this humor style. From this point, the cultural influences that direct one to prefer a specific humor style can be understood. Hofstede (2001) also emphasizes that Turkish employees have collectivist tendencies rather than individualistic ones. In collectivism, individuals tend to approach social groups with respect, and hierarchical levels are important in communication. In relation to that, humor might be seen as inappropriate in cases that require “seriousness”, and some of the humor styles cannot be welcomed in such cases as affiliative humor (Ünal, 2014). Similarly, whereas the self-defeating humor style can be seen as inappropriate in Western cultures, it is accepted because it may contribute to a modesty or lifelong learning process in Eastern cultures such as Turkey.

As a result, when the literature describes the humor characteristics observed in Western and Eastern cultures, the need for a deeper understanding of Turkish culture is required because of its mixed structure. For instance, even if humor is seen as a product of cognition in Western cultures, the effects of collectivism are also observed in Turkish humor patterns similar to Eastern cultures.

2.8. National Studies

When the related national literature on humor in early childhood was investigated, the first attempts were observed in 1997 by Akün. In this section, these studies will be presented. For example, Akün (1997) conducted a study in order to understand children’s self-reported ideas on what they laugh about and what makes them angry

when others make jokes. Open-ended questions were prepared and applied to children in fourth and fifth grade. The results revealed that Nasrettin Hadja, funny Black Sea stories, animal behaviors, impossible behaviors, and verbal jokes are funny for them. Also, even if most of them get angry at mischievous and scary jokes, some of them find these jokes funny. In the study, gender was one of the variables. Thus, whereas female children preferred verbal jokes, male children laughed at behavioral jokes. The researcher also concludes that integrating funny stories also contributes to children's learning in the classroom. Savaş (2009) also supports these findings and argues that humorous materials such as cartoons in the classroom facilitate children’s learning and success.

Like Akün (1997), Kızıltan (2006) also investigated gender variables in children’s understanding of humor elements in the text. Six Nasrettin Hodja stories and 41 questions were applied to 120 first-grade children, and the researcher found no difference in their reading and listening abilities in terms of gender. However, the researcher also reported that the children did not fully understand the humorous elements in the stories. Meral’s (2013) study can explain the reason behind these findings. That is why children can have a hard time understanding verbal humor in this age period. Thus, these studies can support each other.

Zoroğlu (2015) conducted another study on the effect of humor in education and developed and used cartoons in the study to teach science. In the application process, in order to determine the student-student and the student-teacher interaction, children's interest and reaction to concept cartoons were noted, observations were made, notes were taken, and video recordings were taken. It was concluded that the teachers found science and nature activities important. The concept cartoons may cause positive attitudes towards science activities in children, and could increase active participation, based on the participation of shy children during the application of concept cartoons supported by stories.

In their study, Koç Akran and Kocaman (2018) investigated the effect of the cartoon-based learning-teaching model on the speaking and listening skills of preschool children. Semi-structured interview forms and observation forms were used as data

collection tools in the study using a dominant-less dominant mixed method design. As a result of the research, it was concluded that activities suitable for the cartoon-based learning-teaching model are beneficial for children to listen to their friends and ask questions about various subjects.

In addition to Koç et al's (2018) study on including humor in the classroom. Gültekin (2022) developed an educational program based on humor. Gültekin (2022) focused on children's humor and resilience skills with the "Preschool Humor Oriented Education Program". Mixed methods were used in the study. Thus, in addition to the quasi-experimental application, qualitative data were obtained through interviews and observation before and after the application. The children were applied to the program developed by the researchers, and the data was collected through surveys. The results revealed that the "Preschool Humor-Oriented Education Program" was effective in supporting children's humor and resilience skills.

Gültekin and Ulutaş (2021) aimed to take the teacher's view on humor. As a result of the content analysis conducted in the study, in which the data were collected by using the "Teacher Opinions Determination Form on Humor in Preschool Education", five main themes emerged as the necessity of humor, humor characteristics, classroom activities, the adequacy of the outcome-indicators, and the difficulties experienced in preparing the activity. The results of the research showed that teachers found humor necessary in education; children who use humor elements have different humor styles besides some personal characteristics; that they include humor in all activities, both in the natural process and in a planned way; revealed that acquisitions and indicators can be developed and that they need resources/materials, knowledge, and experience in event planning.

Another study that focuses on Nasrettin Hodja stories conducted by Meral (2023). Meral (2023) also suggests a way to include humor in preschool classrooms. In the study, Meral (2023) interviewed 48-73 months old preschool children about Nasreddin Hodja jokes and revealed that children realize the basic inconsistency in these jokes, but they were not able to understand the joke and laugh at them. However, Meral (2023) suggests that Nasrettin Hodja has a great importance for

Turkish culture and his jokes make people think on a specific issue while entertaining them. Thus, the study offers to include more Nasrettin Hodja jokes in preschool classrooms in order to increase children's knowledge on specific issues such as values included in jokes. Moreover, the study argued that these jokes can enhance children's humor development while increasing their knowledge.

In addition to using humor in education settings, some of the studies in national literature focused on humor development. Koçer et al.'s (2012) study can serve as one of the examples of national studies on humor development. In the study, the researchers investigate six-year-old children's humorous reactions in accordance with McGhee's humor stages. Descriptive analysis and semi-structured observation forms were used, and ten children were included in the study, and their parents observed children's humor, appreciation, and production. As a result, it was found that children were in the "conceptual inconsistency" stage, which is the 4th stage of humor development described by McGhee.

Similarly to Koçer (2012), Koçer, Eskidemir, and Özbek (2012) examined the humor development of preschool and primary school children according to Paul E. McGhee's humor development theory. In the research conducted in the case study design, one of the qualitative research designs, 101 children from the age group of 2-13 constitute the sample of the research. As a data collection tool, a 5:01-long video and semi-structured observation form were used, the scenario of which includes humor elements representing the stages in McGhee's theory of humor development. It was seen that children showed the most laughing reaction in the examples containing visual and movement, and the least laughing reaction in the examples containing verbal humor. In addition, it was noted that children laughed and produced humor in scenes other than the scenes where they were expected to laugh. As a result of the research, it has been revealed that the humor development characteristics of children living in Turkey and the characteristics of McGhee's humor development theory are parallel.

Similar to these studies, Koçak (2023) also tried to investigate the humor produced by 4-6-year-old children indoors and outdoors. She used McGhee's and Martin's

theories to explain children's behaviors and included eight children to the study. They collected the data by using observation checklist to analyses the videotapes of the children's play. The findings of the study according to Paul E McGhee's theory of humor development showed that while higher humor production was observed in the second and third stages outdoors, higher humor production was observed indoors in the fourth stage compared to outdoors. In addition, the highest humor production was in the second stage, followed by the fourth stage and the lowest humor production was in the third stage. According to Martin et al.'s theory of humor styles, children used more positive and negative humor styles outdoors than indoors.

Ak Seven (2012) tried to explain children's humor with the theory of mind. This study was carried out with a total of 90 children aged three, four, and five. As a data collection tool, the Appearance Test was developed by the researcher. The reality, unexpected place, unexpected content tasks, and Turkish Expressive Receptive Language Test was used. The Humor Sense Test was conducted on preschool children in order to evaluate their sense of humor and their level of finding jokes funny. It consists of 24 cartoons, containing physical and intentional jokes. As a result of the research, no significant relationship was found between the development of the theory of mind and physical and intentional jokes and the total humor scores in each age group.

Like Gültekin and Ulutaş (2021), in Yılmaz and Tantekin Erden's (2022) study, the researchers tried to examine humor from early childhood children and teachers. Semi-structured questions were prepared for both 60-72-month-old children and their teachers. Children were also asked to make a funny drawing and tell why their drawing is funny. It was observed that incongruity was the main component of all children. Teachers were also interviewed about their views on humor, humor in the classroom, and children's humor. The findings revealed that teachers have a lack of awareness of the importance of humor in the classroom and children's humor development. They described children with no humor development who are not socially humorous, and they argued that naughty children are humorous whereas well-behaved children had no humor development.

To have a deeper understanding of children's humor, Hantal (2016) adapted the "Multidimensional Sense of Humor Scale for School-Aged Children" which was improved by Dowling and Pain (1999). 210 children between the age of six to twelve were included in the study. With the help of this scale, children's sense of humor can be investigated and the factors that affect their sense of humor can be examined.

In addition to the studies regarding humor in early childhood, humor styles are another research area in national literature. When the related literature was examined, it was seen that there are limited studies on humor styles and young children. The studies are mostly about how adults' humor styles are effective on children. For example, Akaydın (2015) focused on how mothers' humor styles affect children's emotional intelligence. The sample of the study consisted of 206 children aged six years old along with their mothers. The results revealed that when the relationship between children's emotional intelligence levels and their mothers' humor styles were examined, it was found that there was a negative and significant relationship between the faces part of the children's emotional intelligence dimensions and the mothers' self-defeating humor style.

Türkoğlu and Güdücü Tüfekçi (2021) tried to discover the child nurses' liking for children and their humor styles and to examine the relationship between them. The study was carried out with 114 nurses working in pediatric clinics. The results displayed that the adaptive/positive humor styles of the nurses were above average, and the maladaptive/negative humor styles were below average. Also, it was determined that nurses only had a positive correlation between self-enhancing humor and liking children.

The studies on humor styles and early childhood reveal that there is a need of increasing the attempts to understand humor styles in early childhood in Turkey. In this way, it would be possible to make more comprehensive explanations in this area.

2.9. International Studies

When humor studies in early childhood were investigated, it is possible to comment that the research attempts were started earlier compared to the national studies. Considering the importance of humor in development and learning, children's sense of humor is tried to be understood by researchers. The earliest studies on children's humor were conducted in the 1930s. First of all, the studies in the literature shows that humor development was tried to be investgated. In Jones' (1926) study, she observed 16-16 months old children and she found that children's response to humorous situations is playfully dressing, tickling, gentle bathing, and teasing with other children. On the other hand, she also observed that even if in some cases these behaviors result in laughter, in others, children react by crying. For example, Justin (1932) tried to describe children's responses to laughter-provoking stimuli and worked with 96 children. Thus, he found that, in infancy, laughing is the outcome of physical relaxation, whereas, over time, laughter becomes a result of mental growth. Even if humor behaviors increase with time, with the effect of environmental influences. In addition to the differences in humor behaviors by age, gender is another factor in children's humor behaviors.

In addition to the earliest studies, the most systematic research started to be conducted in the 1970s-80s. To illustrate, Groch (1974) conducted a study with 30 children at the age of three and five years old. In the study, the researcher tried to examine children's sense of humor by observing their spontaneous play activities. As a result, it was found that children differ in humor behaviors in terms of gender. For example, female children showed reactive humor behaviors, whereas male children preferred aggressive humor.

Pien and Rothbart (1976) also aimed to understand children's humor and provided cartoons to 40 children between the age of four and five. There were two versions of the cartoons. One of them included incompatibility, and another version included solved incompatibility. The results of the study showed that children were capable of appreciating both versions. From this result, it can be concluded that humor starts to develop in the early years.

Similarly, Sinnott and Ross (1976) investigated the role of incompatibility and aggression in children's humor. Two hundred thirty children who are at the ages of three to eight were included in the story and provided different stories that included neutrality, incompatibility, and aggression. The results displayed that children prefer stories with incompatibility and aggression rather than neutral ones. With regard to this finding, aggression may be included in children's humor.

McGhee (1974) provided a developmental explanation for humor development in his study. In the study, riddles were used, and 160 children in the first, second, fourth, and sixth grades participated. Children evaluated 16 riddles in terms of how funny they were. As a result, it was found that with growing age, children's responses differed. Thus, age was found to be one of the determinant factors in humor appreciation. It was also observed that even if children cannot produce verbal humor, they still have the ability to recognize it. Finally, McGhee concluded that the concrete operational stage is critical for distinguishing between humorous and non-humorous contexts.

Pien and Rothbart (1976) examined the effect of resolution of incongruity on children's appreciation of humor using two different procedures. In the study, which was conducted to determine whether children can appreciate the value of resolved incongruity in humor in cartoons, a total of 40 children aged four and five were shown both the original version of the same cartoon with incongruity and resolution and the version with only incongruity with resolution removed and asked to choose which one was funnier. The findings of the study supported the hypothesis that young children were able to resolve incongruity and appreciate the value of both incongruent and resolvable aspects of cartoons.

To describe children's sense of humor, an attempt to develop a scale was made by Dowling and Fain (1999). One hundred sixteen school-aged children were included in the study. The researchers modified the "Multidimensional Sense of Humor Scale" for children. Thus, the scale was reliable and valid for measuring children's sense of humor. The researchers also share the multidimensional structure of humor, and the scale consists of different parts, which are the use of humor as a coping mechanism,

humor creation, the appreciation of humor, and the attitudes toward humor and humorous persons. Therefore, it is possible to say that to understand humor in a detailed way, different perspectives of humor are required to be examined.

Varga (2000) tried integrating verbal humor for four- and five-year-old children. Thus, children were observed during playtime, art activities, and mealtime, and their communication, jests, mimics, and voice tone were investigated. The study showed that children differ in appreciating and producing verbal humor. It is also found that they have the ability to participate in conceptual language play. Similarly to Varga (2000), Angeleri and Airenti (2014) focused on verbal humor in children, and they investigated three and six years old children's understanding of jokes and irony. In the study, children were provided stories with puppets, and their reactions were recorded. The result of the study revealed that the ability to understand irony starts to develop in the early years, and it is highly related to language and cognitive improvements.

When the more current studies on humor and children were investigated, Loizou (2005) also conducted studies on understanding children's humor. In the study, she observed children's appreciation and production of humor. Six children, 15-22 months old, were observed, and it was found that the source of children's humor is incongruity. Children use humor to take caregivers' attention and to strengthen their relationship with them.

Like the previous study, Chik, Leung, and Molloy (2005) tried to examine children's appreciation and production of the study. They included 53 children aged nine to fifteen and showed some cartoons to describe the level of humor. According to the results, incompatibility-included visuals were funnier for the children. In order to observe the effect of culture, Chik, Molloy, and Leung (2005) conducted the same methods in different cultures, and they concluded that incompatibility is a universal issue in humor. In addition to the studies regarding humor production, Hoicka and Aktar (2012) tried to find out two- and five-year-old children's humor production. In the study, the researchers observed children's play and interviewed parents. According to the observations and interviews, they found that children start to

produce humor at the age of two. After the age of three, children start to produce humorous actions and use objects in their humor. Also, they use mislabeling objects as a way of humor production. They do not only produce humor but also expect reactions from others in relation to their humor.

In the following year, Loizou (2006) worked with 80 early childhood children and investigated children's pictorial humor. Children were provided visuals to examine and say if they thought they were funny or not. The data were analyzed with the help of McGhee's humor development theory and Brown's visual humor categories. Finally, she found that children are capable of recognizing small and big incongruities in the visuals. Also, they found that there are no gender differences in findings. Also, she concluded that using visuals is the perfect way to search for children's humor, understanding, and explanations.

One of the most current studies on children's humor was made by Hoicka et al. (2022). She and her colleagues worked on 1 to 47 months infants' humor development by taking parents' reports. They developed a measure named Early Humor Survey with 20 items and collected the data from different countries such as Australia, Canada, the United Kingdom, and the United States. As a result, whereas they emphasized the importance of age in humor development, they could not detect a difference regarding demographics such as parents' education or country. The researchers also shared that EHS can be helpful to understand how humor emerges and affects one's life by considering the contribution of humor in life.

In addition to the humor development, some other studies investgated how humor is related to the other developmental areas. For example, McGhee focused on moral development and its relationship with children's humor appreciation. With regard to Piaget's explanation of moral development, McGhee found that children at the heteronomous stage find dangerous/damaging stories funnier when compared to less dangerous ones. On the other hand, when autonomous children were observed, it was seen that they found damaging stories funnier if there occurred unintentional damages. That is, these children found accidentally damaging jokes funnier compared to intentional ones. With the help of these results, it could be concluded

that with the maturation of moral development, the unacceptability of an outcome determines the level of humorous reactions in children.

Allen and Zigler (1986) also emphasized the importance of cognitive development in humor. That is, they used non-verbal humor tests that included cartoons. Children were asked if the cartoons were funny and to describe the logical and illogical endings. As a result, the cognitive skills created the difference in humor responses to the test.

Similarly, the studies in that period mainly aimed to discover what children laugh at (Shultz & Horibe, 1974; Klein, 1985), the relationship between cognitive development and humor (McGhee, 1971; Shultz, 1972), the effect of gender on the difference on humor behaviors (McGhee, 1979), and how other individual factors affect children's humor (Brodzinsky & Rightmyer, 1980; Carson et al., 1986).

The participants of the study conducted by Sletta and Sobstad (1993), which aimed to reveal the relationship between children's humor and their behavioral characteristics, peer acceptance, and self-perception, were 218 children attending kindergarten, 4th grade, and 8th grade. While the preschool children (4-7 years old) were interviewed one by one by the researchers, the children attending the 4th and 8th grades completed the measurement tools themselves. The teachers of the participants filled out a scale that determined the behavioral characteristics of the children and consisted of 5 categories: humorous, shy, aggressive, destructive, and positive social behaviors. According to the findings of the study, there was no significant correlation between preschool children's humor as perceived by their teachers and themselves and their acceptance or rejection by their peers. Preschool children's humor as assessed by teachers was found to have a positive relationship with positive social behaviors and a negative relationship with shyness. For 8th graders, social acceptance was found to be related to self-perceived humor. For 4th graders, self-perceived humor was found to be related to social acceptance by peers.

Hobday, Kusch, and Mcvittie (2002) conducted a study in which they emphasized why it is important to support children's humor. Therefore, they observed two

children that are described humorously by others. The results of the observations showed that children use these humorous behaviors while experiencing stress. They also concluded that when there is someone humorous in the classroom, other children also feel free to laugh. Thus, humorous children can benefit not only themselves but also their peers.

On the effect of cognition on humor, Degabriele and Walsh (2010) included seven to eleven years old children who have mild and moderate mental disabilities. Children were asked to view videos and evaluate them in terms of being funny. As a result of the study, it was found that children prefer physical and visual humor rather than verbal humor.

Salmela et al. (2010) focused on humor's function in dealing with their fears. They included 82 children who were aged four to six years old. The hospitalized children and children from preschool were integrated into the study. Children were interviewed via semi-structured questions. The findings of the study showed that humor is one of the defense mechanisms against their fears.

Humor and its relationships with social development is another research area in humor research. Addyman et al. (2018) investigated the social perspective of humor. They conducted a study in which they examined 31-49 months old children's reactions to funny videos when they are alone and with friends. As a result, they found that children laugh more when they are alone when compared to the case in which they are with others. Therefore, it can be said that being with others can be effective in children's humor reactions. Like Addyman et al. (2018), Purser et al. (2020) highlighted the importance of humor appreciation and production in social relationships. Four- and eleven-years old children were included in the study, and the importance of language development is emphasized for humor appreciation, production, and social relationships.

The relationship between creativity and humor was highlighted in Loizou and Loizou's (2019) study. They conducted a case study with three- and four-year-old children and 27 children. Children were applied to creativity-based activities and

observed the effect of these activities on children's verbal and visual humor production. As a result, it was found that the program contributed to their humor production.

Yunus and Dalli (2019) conducted another study to reveal the importance of humor for children's social competence and peer interactions. In the case study conducted in three different daycare centers, the researchers aimed to resolve the problem related to young children's social competence and they observed that children who use humor in the classroom contribute to togetherness in addition to the feelings of joy and amusement.

Paine et al (2021a) also focused on socialization, and how it is affected by humor. That is, in their study, Paine and her colleagues focused on humor production and its relation to social understanding and the quality of relationships in early childhood. As a result, it was found that children's understanding of the mind plays an important role in their humor production. Having siblings with positive rapport is another indicator. It might be concluded that humor production contributes to warm and positive bonds.

In the study that was conducted in Danish early childhood education and care, Koch (2023) revealed that fun and humor is the key pedagogical tool for children's happiness and well-being. As a result of the observations and interviews, the researcher has found that humor contributes to the feeling of freedom in communication, increases courage, informality, and improvisation, etc. It was also concluded that in Danish preschools, humor is distinguished as big and small humor. Whereas big humor is to create a positive classroom environment, small humor is for children's well-being.

Guo et al. (2011) provided a different perspective on humor behaviors in children, and they discussed the cultural effect of humor. They included 55 Chinese and 50 Greek children and evaluated them in terms of recognizing and reacting to humor. Children were provided humorous tasks, and their views were taken. Visuals were displayed to children, and their reactions were recorded. Also, they are asked if the

visuals were funny. The findings revealed that humor appreciation is highly related to cognitive development, and cultural differences are effective in differences in children's humor.

Rönkkö and Aerila (2018) tried to explain humor in the educational context. They included humor in their art-based education and evaluated children's learning outcomes. 17 early childhood children were asked to design a toy that has a humorous story. During five days, children make conservations related to humor and create toys in groups. In these products, children include incongruity and surprise, and they create characters with funny and nice natures. Thanks to the study, children realized the importance of making others laugh. They also realized that female children are more product-oriented compared to male children. As a result, including humor in education and asking children to produce humor in a different way, it was realized that humor could be used in different areas.

In addition to the sense of humor, children's humor preferences and humor styles are the other research areas related to trying to understand children's humor styles. The researchers about humor not only reveal the positive effects of humor in both adults and children but also highlighted the need for investigating humor styles in children. Klein and Kuiper (2006) suggested that humor styles can explain children's peer relationships and bullying among children at the age of six to eleven. As a result, they stated that affiliative humor styles in children can enhance peer acceptance due to this humor styles' adaptive, pleasant, and enjoyable nature. On the other hand, self-enhancing humor is associated with psychological well-being. And, because self-enhancing humor may increase self-esteem, they may be affected by indirect bullying less. They also described maladaptive humor styles and stated that the aggressive humor style is associated with direct and indirect bullying whereas the self-defeating humor style is related to peer victimization.

Fox, Hunter, and Jones (2015) contributed to Klein and Kuiper (2006)'s study and focused on peer victimization in their study and included 1234 children between the ages of 11-13. The researchers took children's self-reports and peer victimization. The result revealed that while peer victimization was associated with self-defeating

humor positively, the affiliative humor style was found negatively related to peer victimization. These researchers conducted another study in the following year and examined longitudinal associations between psychological adjustment and humor styles. Thus, the results display that the self-defeating humor style was associated with depression, loneliness, and a decrease in self-esteem whereas the affiliative humor style was found related to an increase in self-esteem (Fox, Hunter & Jones, 2016).

Sinnot and Ross (1976)'s study can be shown as the first example on humor styles in children. They, hypothesized that aggression and maladaptive states are variables that will positively affect the judgment of humorous events in early childhood. In the study, 230 boys and girls aged 3-8 years each made six paired comparison judgments about which of two short events was funnier. The events were produced by the researcher who played one or two hand puppets with or without accompanying dialog. Across all ages, children significantly preferred aggressive and maladaptive situations to neutral events. According to the findings of the study, two main conclusions were reached: Although neglected in the developmental theory of humor, aggression is an influential early factor in children's humor, and the clear results from preschoolers support the usefulness of the cognitive option over observational measures such as smiling/laughing.

In addition to Sinnot and Ross (1976)'s study, Fox et al. (2013) made initial attempts to develop an understanding of children's humor styles. They included 1187 children aged nine to fifteen, and they tried to adapt Martin et al.'s (2003) Humor Styles Questionnaire to children. Thus, they developed a valid and reliable scale for children at the age of 11, and they believe that with the help of this scale, children's psychological adjustment can be understood in a more detailed and meaningful way. Similar attempts were made by James and Fox (2016) for younger children. Therefore, in their study, the humor styles scale was adapted to eight to eleven years old children. To have a deeper understanding of humor styles in children, James and Fox (2016) took children's ideas on their humor styles via paired interviews that included 12 questions. Even if the related literature suggested that self-defeating and self-enhancing humor styles develop in older ages, this study revealed that these

humor styles were apparent in some children. In addition to their study in 2016, James and Fox (2021) included 357 children in their new study and provided them with stories that have characters with different humor styles. After the stories, children's perceptions were taken with questionnaires. When the findings were examined, it was seen that maladaptive humor styles were viewed negatively when compared to adaptive humor styles. In the second part of the study, children’s idea to include humor in the classroom or playground was asked, and similar results were found on their perception of humor styles.

Hunter et al. (2016) focused on the effect of humor style similarities on friendships. 87 best friends were included in the study. Children were applied to HSQ and they were asked who their best friend is. As a result, the affiliative humor style was associated with their best friend. On the other hand, aggressive humor does not have such an effect on friends. Thus, they highlighted the importance of affiliative humor style in stable friendships.

Halfpenny and James (2020) argued that even if there are studies that try to describe humor styles, there are limited studies on the role of humor styles in children. Therefore, 214 children at the age of nine to eleven were included in the study. As a result, a positive correlation was found between the self-enhancing humor style and empathy and sympathy, and affiliative humor styles are positively correlated with cognitive empathy while it is negatively correlated with aggressive humor.

With the consideration of these studies, it could be concluded that there is more studies in international studies compared to national studies. Still, it is also clear that not all areas in humor and humor styles are discovered in both national and international studies.

2.10. Summary

The literature review part provided a theoretical background and related studies that might contribute to the aim of the study. Because the aim of the study is to improve a scale for preschool children’s humor styles, first of all, the definition of humor was

presented in the chapter. In addition, in order to develop a better understanding of how humor is associated with different developmental areas, background information is provided. There are several theories that provide explanations for humor from different aspects. For a detailed understanding of humor, the theories on humor were also provided including theories about humor development in children. The Humor Styles Model developed by Martin et al (2003) shaped the context of the scale in the current study. Thus, the literature section provided a theoretical explanation for humor styles in order to provide a clearer understanding of scale items and the results of the study.

Finally, the previous studies shaped the framework of the current study. The methods and findings of the previous studies guide the current study's aim and methods by showing what has been done and what should be done. As a result, the previous studies on humor and humor styles conducted with children were presented from both national and international literature.

CHAPTER 3

METHODOLOGY

The aim of the current study is to develop a pictorial scale for preschool children's humor styles. In addition to this aim, the study also aims to reveal the possible relationships between children's humor styles and demographic variables. Also, creating meaningful clusters regarding children's predominant humor styles is the third aim of the study. In this chapter, information related to the research design, participants, data collection procedures and instruments, data analysis, and ethics is provided.

3.1. Research Design

The main aim of the study is to improve an instrument related to early childhood children's humor styles and check this scale in terms of validity and reliability. To reach this aim, the researcher followed four steps, namely, item development, pilot testing, field testing, and validation (DeWellis, 2014). Also, in this process, a descriptive survey model aims to describe participants' ideas, attitudes, skills, or interests by noting their views (Büyüköztürk et al, 2008). That is, these studies consist of many elements to exhibit the existing situation, a collection of books, or a group of people to form a general judgment about the universe (Karasar, 2016). In the current study, the researchers aim to discover early childhood children's humor styles, and to reach this aim, primarily the pictorial humor styles scale was developed. In addition to the scale development part, the correlational methods and ward methods were used to develop a better understanding of the participants in terms of humor styles. The correlational method is a research model that aims to determine the presence and/or degree of co-variance between two or more variables (Fraenkel et al., 2012). In addition, Ward's method is the only method among the

agglomerative clustering methods that enable the formation of clusters by minimizing the intragroup dispersion in each binary fusion based on the classical sum of squares criterion (Murtagh & Legendre, 2014). By using these methods in describing the data, a more detailed framework was created in terms of humor styles.

3.2. Participants and the Setting of the Study

In this part, detailed information about the participants and the setting of the study is provided.

3.2.1. Participants of the Study

In accordance with the aim of the study, 60-72 months old children who are continuing early childhood education in Turkey formed the population. Because the data of the main study was collected in Ankara, the accessible population of the study is the 60-72 months old children who are participating in early childhood education in Ankara. On the other hand, the pilot study was held in Tokat. Tokat is the city where the researcher lives and works, so it is more accessible for the researcher to reach schools and children in this city. For this reason, Tokat was preferred for the pilot study. Thus, 60-72 months old children who participated in early childhood education in Tokat were included in the pilot study. For both the pilot and main study, consent forms were sent to all parents in the city center, and the study was conducted with the ones who gave the necessary permission for the study. Therefore, because the researcher included participants who were available for the study, convenience sampling means to include participants who are accessible and proximately suitable for the researcher (Creswell, 2007).

Even the scales that are planned to be applied include visuals and do not require reading and writing, and rather than including all children (between the ages of 3 to 5 years old) in preschools, only 60-72-month-old children were included in the study. That is why, 60-72 months old children are assumed to have more developed language and cognitive skills, and they can feel more comfortable expressing themselves and thinking about their humor preferences. The number of participants was determined according to the literature. Cattel (1978) states that the ratio should

be 3:1 or 6:1 in deciding sample size whereas Kline (2016) suggests that the ratio must be 10:1. Thus, these references are considered in deciding the sample size. In the current study, 150 children were included in the pilot study. Tabachnick and Fidell, (2001) argue that 150 participants are enough to have high factor loadings for EFA. Moreover, for the main study and to conduct DFA, 345 children were included in the study. In the related literature, it was displayed that the sample size should be larger than 100 (Anderson & Gerbing, 1984), at least 100-200 people (Boomsma, 1985), between 200-400 (Jackson, 2001), and for continuous variables that are not normally distributed, the sample size should be larger than 250 (Yu & Muthén, 2002). Comrey and Lee (1992) state that a sample size of 300 is "good", a sample size of 500 is "very good" and a sample size of 1000 is "excellent". In light of these studies, it is possible to conclude that the sample size of the main study is enough to have meaningful results.

3.2.1.1. Demographics of the Participants

The current study included early childhood children who are participating in early childhood education in public preschools in Tokat and Ankara. In the scope of the study, the researcher aimed to reach children from Tokat for pilot study and different districts of Ankara for the main study. Thus, 150 children in the city center of Tokat were included for the pilot study. Also, 345 children that attended the public preschools from five different districts of Ankara participated in the study, and the demographics related to the children are presented in Table 2 and 3.

Table 2 *Demographics of the Pilot Study Participants*

Age			
	Min	Max	Mean
Month	60,00	72,00	65,43
Gender			
	f	*%*	
Girl	70	46,7	
Boy	80	53,3	
SES			
	f	*%*	
High	37	24,8	
Middle	61	40,6	
Low	52	34,6	
Total	150	100,0	

46,7% of the children were girls whereas 53,3% of them are boys. Also, the mean age is 65,43 months old. Finally, 24,8 of them are from high SES, 40,6% of the pilot study participants are from medium SES, whereas participants from low SES are 34,6% of the total.

Table 3 *Demographics of the Main Study Participants*

Age			
	Min	Max	Mean
Month	60,00	72,00	67,07
Gender			
	f	*%*	
Girl	161	47,2	
Boy	180	52,8	
Total	341	100,0	

After excluding the outliers in the data set, 341 children were included in the main study. 161 of these children were girls and 180 of them were boys. Children were aged between 60 to 72 months old, and the mean of their age was 67,07.

In addition to children, demographics of the family structure were also gathered from the participants as can be seen in Table 4.

Table 4 *Demographics of Parents*

		Mother		*Father*	
		f	*%*	*f*	*%*
Education	Graduate	7	2,1	20	5,9
	Undergraduate	131	38,4	136	39,9
	Associate Degree	33	9,7	37	10,9
	Highschool	122	35,8	107	31,4
	Primary & Secondary School	48	14,1	41	12,0
	Total	341	100,0	341	100,0
		f	*%*	*f*	*%*
Occupation	Working	135	39,6	335	98,2
	Not Working	206	60,4	6	1,8
	Total	341	100,0	341	100,0

As a result of this data, it was found that the mean mothers' age is 35,31 and the minimum age is 22 whereas the maximum value for age is 50. In addition, 38,4% of mothers have undergraduate degrees whereas 35,8 of mothers graduated from high school. The rest of the mothers graduated from primary school or secondary school,

associate degree, and graduate school, and their percentages are 14,1%, 9,7%, and 2,1%, respectively.

Also, whereas 39,6% of mothers are working, 60,4% of the mothers are not working. In addition to the mothers, the data related to the fathers reveals that the mean father's age is 38,70. Also, the minimum value is 25, and the maximum value is 65 for the fathers' age. 39,9% of fathers have undergraduate degrees whereas 31,4 of fathers graduated from high school.

The rest of the fathers graduated from primary school or secondary school, associate degree, and graduate school, and their percentages are, 12%, 10,9%, and 5,9%, respectively. Finally, it was revealed that 98,2% of the fathers are working whereas 1,8% of them are not working.

Finally, the number and gender of the siblings were explored in the scope of the study as provided in Table 5.

Table 5 *Demographics of Siblings*

Siblings		*f*	%
Number	,00	44	12,9
	1,00	160	46,9
	2,00	110	32,3
	3,00	21	6,2
	4,00	6	1,8
		f	%
Gender	no siblings	44	12,9
	girl	104	30,5
	boy	145	42,5
	both girl & boy	48	14,1
	Total	341	100,0

In this context, it was found that 46,9% of children have one sibling, and 32,3% of them have two siblings. In addition, 12,9% of the children have no other siblings. There are also children who have three (6,2%), and four (1,8%). When the gender of the sibling is revealed, children who have sisters consist of 30,5% of the sample. Moreover, 42,5% of participants have brothers and 14,1% of them have both sisters and brothers. Finally, when the income level of the participants is examined, it was

found that 33,7% of the participants are from low SES whereas 40,5 % of them are medium and 25,8 % of them are high SES as presented in Table 6.

Table 6 *Frequencies on SES*

		f	%
SES	High	88	25,8
	Middle	138	40,5
	Low	115	33,7
	Total	341	100,0

Because the pilot and the main study were held in different cities, it is important to describe the characteristics of these cities to increase the level of validation items regarding having different cities. By describing socioeconomic statuses, it would be possible to describe the socio-economic status of the participants. Socioeconomic level refers to the economic and social status of a person or a community. Socioeconomic status depends on many factors and is a measurable concept. The socio-economic level depends on a person's income, education, occupation, living standards, social status, and other factors (Karayiğit, 2017). Thus, in the current study, the socioeconomic levels were decided by considering the income level of the family, the education level, and occupation.

3.2.1.2. Demographics of Tokat

Because the pilot study was conducted in Tokat, it is important to learn about the characteristics of Tokat and learn if they match with Ankara where the main study was conducted. According to the data of the Turkish Statistical Institute (2022), the total population of Tokat is 602,567, while the population of the center of Tokat is 153,840. However, the Tokat province is a province that emigrates due to its unemployment problem. The main livelihood of the city is agriculture and animal husbandry, so it is seen that the industrial sector in the city is still developing. However, the city has rich tourist attractions due to its historical and cultural texture. In addition, the city shows diversity and richness in terms of its political, ethnic, and sectarian characteristics. 18% of the population is from high SES whereas 52% of the population is in middle SES. Finally, 30% of the population is in low SES (TUİK, 2022). From this data, it is possible to say that most of the population in Tokat is in

middle SES. When the educational status was investigated, it was found that 73% of the population graduated from primary, elementary, or high schools whereas 12% of them graduated from undergraduate and graduate levels (TUİK, 2022). There is Tokat Gaziosmanpaşa University, which has an average of 35,000 students, and the social texture of the university has a diverse structure in terms of culture.

According to the strategic plan shared by Tokat Provincial Directorate of National Education in 2019, the number of both private and public schools was 202, and 9.506 children were attending early childhood education in the city center. Also, whereas the enrollment rate was 92,17% in Turkey, 92,28% of the children in Tokat enrolled in early childhood education for five years (Ministry of National Education, 2022). According to the Economic Outlook Report prepared by Tokat Chamber of Commerce and Industry (2019), and its 2018 address-based population registration system data, the population of Tokat province is 612,646. Also, according to the data announced by TUIK in 2017, the labor force participation rate in Tokat is 49.9% (Turkey average 58%). The employment rate is 46.7%. (TR means 51.5%). The unemployment rate is 6.6%. (TR avg. 9%). According to the Population and Housing Survey, 49.1% of the population is employed in the agricultural sector, 34.6% in the services sector, and 16.3% in the industrial sector.

3.2.1.3. Demographics of Ankara

Ankara is the capital of Turkey and the current population of Ankara was reported as over 5.4 million in 2022. When the socio-economic status of the city is examined, it is seen that 33% of the population is from high SES whereas 49% of them is from middle SES, and 18% of the population is low SES. It is possible to say that most of the population is in middle SES (TUİK, 2022). This situation is the same with Tokat where the pilot study was conducted. Also, 66% of the population graduated from primary, elementary, or high school whereas 24% of them graduated from undergraduate and graduate programs (TUİK, 2022). The number of children attending ECE is 112. 202 in 2022, and the enrollment rate is 72,99% for five years with regard to the current data (Ministry of National Education, 2022). With the help

of the demographic information of the data collection places for the pilot study, the regions were chosen to be able to find the representative sample of the main study.

That is, Tokat is a small city compared to Ankara, and this situation can create some differences in culture, living styles, or environmental factors. On the other hand, with the consideration of the demographics of these cities, it can be seen that these two cities show similar characteristics in terms of SES, education levels of individuals, and enrollment rates in early childhood education. Therefore, it could be assumed that Tokat could provide representative data for the data collected in Ankara.

3.3. Setting of the Study

After the item preparation, expert opinion, and pilot study, the data was collected during the 2022-2023 spring semester. The researcher applied the scales in children's classrooms in order to decrease their anxiety levels. If there are children whose parents did not give their permission, the study was conducted in another playroom children are also familiar with. The data was collected during one-to-one interviews. Before the data collection process, the researcher visited the classrooms, met the children, and applied play activities to develop a secure relationship in order to make them more comfortable during this one-to-one scale application process.

3.4. Data Collection Process

Before starting the data collection, the humor styles scale was developed and after the pilot study, the final version of the instrument was shaped. When the instrumentation process is done, the second phase of the permissions was started. First of all, the researcher took the necessary permissions from related institutions. To begin with, the researcher applied to the Ethics Committee of the University (Appendix E). After taking the necessary permission, the Ministry of National Education was applied to in order to be able to collect data from early childhood education institutions (Appendix F). With the necessary permissions taken, the researcher applied to the school administrators and teachers to be able to collect data from their schools. Also, a consent form was sent to the parents to get permission to collect data from their children (Appendix A).

Finally, children were asked if they want to participate in the study, and with the ones who wanted to participate, a data collection process was started. Because the children do not know the researcher, they could feel uncomfortable in this process. To obstruct this situation, the researcher visited the classroom before the data collection and made some play activities with the children (Appendix G). In this way, children were able to develop relationships with the researcher, and they were more willing to participate in the study. As a result, in the data collection process, the researcher applied the humor styles scale during one-to-one interviews as seen in Figure 1. During the process, the researcher took notes not to miss any points related to children's answers and record them.

Figure 1 *One-to-one interviews*

3.4.1. Scale Development Phase

The aim of the study is to develop a measurement tool named "*Pictorial Humor Styles Scale for Preschool Children*" related to children's humor styles in a valid and reliable way. It is a scale where children choose one of the emojis under the pictures and get a point from 0-3. This scale was prepared with a "Likert" type scale. Likert-type scales give participants the option to select at what level the item reflects their ideas (Tavşancıl, 2010). To reach this aim, scale development steps described by DeWellis (2014) were followed as presented in Figure 2 below.

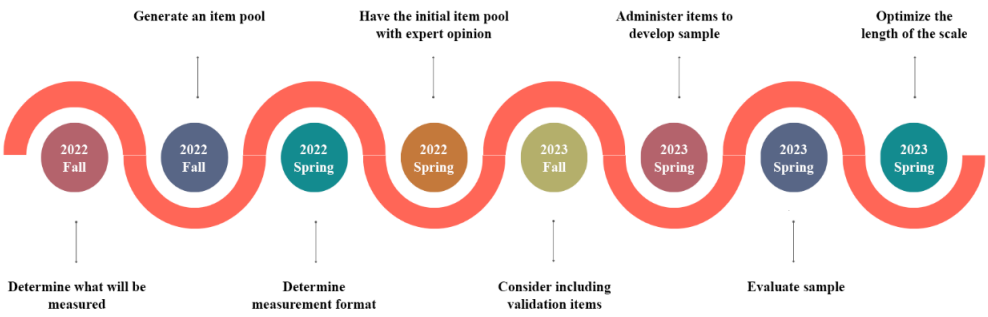

Figure 2 *Scale development steps described by DeWellis (2014)*

By following these steps, a scale that consists of pictures was developed. This is because pictures can provide concrete understanding to young children, and they can make the most appropriate selection by looking at these pictures. Detailed information related to this scale development process was shared through the following titles

3.4.1.1. Determining What Would be Measured

In order to describe humor behaviors, the humor style model was developed by Martin and his colleagues (2003). This model aims to bring a classification and meaning to the differences in humor behaviors and humor preferences. According to this model, all people have these four different humor styles (self-enhancing, affiliative, self-defeating, and aggressive), but one of them is dominant for each person (Martin et al., 2003). Thus, to determine which style is dominant, Martin and his colleagues developed a questionnaire for adults.

In this questionnaire, there are different questions to learn about people's humor preferences related to each humor style. Therefore, the ones that get the highest score determine which humor style is dominant in that person. In light of this idea, the questions were prepared for each humor style that is suitable for children's level. As a result, their humor preferences were tried to be understood through these items.

3.4.1.1.1. Teachers' Views on What Children Laugh At

In the current study, Humor Styles Model shaped the general framework for the scale items. In addition to the Humor Styles Model, early childhood teachers' views on

what children laugh at in the classroom were taken in creating the scale items. An open-ended question form was prepared as an online form and sent to the teachers. In preparing the questions, the related literature was used and expert opinion from two experts; one is a professor, other isa Ph.D. Candidates in early childhood education was taken. According to their feedback, the questions were updated, and a question about what teachers do to make children laugh was added. After this process, two ECE teachers were questioned and the researcher investigated if the questions served the research aim. As a result, the question form was prepared. In the form, the question was about what children laughed at when they were alone, when they were with their friends, and when they were with their teachers. Also, there were questions about what they laughed at during activity time and while they were reading or watching something. Finally, teachers were also asked what they do to make children laugh. 15 teachers aged between 23-42 completed the form. The teachers worked with three, 60 to 72 months old children, and in their classroom, there were eight to 26 children. The teachers were graduated from undergraduate Early Childhood Education programs from different public universities in Turkey. The answers of the teachers have both similar and dissimilar points. Table 7 displays the answers of the teachers.

Table 7 *Teachers' answers on what children laugh at*

Categories	Codes
Affiliative Humor	Funny stories, word Funny memories Funny visuals, situations, and objects Imitations Funny voices, drawings
Aggressive Humor	Funny moments and memories of each other Strange situations of characters (falling, sleeping) Mistakes in words Small accidents in plays Exaggerated reactions
Self-enhancing Humor	Just talking as usual Imitations Unexpected outcomes in plays Mistakes in words
Self-defeating Humor	Funny behaviors and animal imitation in plays Awkwardness Using exaggerated gestures and facial expressions Funny voices

Considering these answers, the content of the pictures was decided. For example, the characters that tell funny memories to peers, and have exaggerated reactions or imitations were included in the drawings of the items. For instance, when teachers asked about what children laugh at when they are alone, T2 stated that “When funny memories come to mind”, and T11 shared similar views to the question of what children laugh at when they are with friends. S/he said that “When they tell each other about their situations at home.” These sentences can be shown as evidence that funny memories are a source of humor for children when they are both alone and with friends. This situation is the same for exaggerated reactions. That is, when teachers were asked what children laugh at when they are in contact with them, T1 said that “Jokes we overreact”. T2 also stated that “I change my tone of voice. They have a lot of fun doing puppet shows. I show my emotions exaggeratedly, they are very happy when I am surprised” when she asked what she does to make children laugh. Imitation was another source of humor for children with peers, teachers, and during activities. For example, for the question about what children laugh at when they are with peers, T6 said that “They laugh a lot when they imitate each other.” Similarly, T12 stated that “They have a lot of fun and laugh when I imitate them” when she asked what makes children laugh while communicating with them. Finally, for the question about what children laugh at while reading or watching something, T6 said that “My tone of voice can make them laugh during storytime. They find it amusing when I try to imitate the voices of the characters.” As a result, these examples can show that children’s source of humor is similar in different conditions. During the item development process, these themes were considered in shaping the content of the pictures.

3.4.1.2. Generating an item pool

In preparing the item pool, pictures were used. These pictures were edited using “Adobe Illustrator” and “After Affect” programs by the graphic designer with the assistance of the researcher. Therefore, the pictures that are suitable for children’s understanding and that would take their attention were prepared. Before creating the pictures, the statements related to the pictures were determined and experts' opinions

were taken (Appendix B). After that, the statements were transferred to pictures by using “Adobe Illustrator” and “After Affect” programs (Appendix C). After the visuals are created, the views of the children were taken, and they were asked what they see in the visual. Thus, according to their answer, it was ensured that children understand the situation as they were intended to be a representation of.

3.4.1.3. Determining measurement format

Because the children do not know how to write and read, the scale items consist of pictures that are easy to understand and suitable for children’s developmental characteristics. The questions are made of pictures, and children are expected to make a choice from 3-point Likert choices. To provide a clear understanding, children were provided three emojis which included one that was not smiling, one that smiled a little, and one that laughed. In this way, the researchers aimed to decrease the confusion that the numbers (1, 2, 3) can create related to how funny it was for children. The choices are provided in Figure 3.

Figure 3 *3-point likert choices*

3.4.1.3.1. The Selection of Picture Format

As stated before, the scale consists of pictures to learn children’s humor preferences. Therefore, the choices related to the way of drawing and coloring are crucial to create pictures that took children’s attention and be clear enough for children to understand the main idea in the pictures. As Gregory (2010) argued, the picture format is helpful to understand the main idea of the content of the picture. To decide on the final pictures format, the researcher created different forms of pictures in

terms of pictures and interviewed 15, 60-72 months old children. The children were shown three versions: the first version was not colored, in the second version only the characters were colored, and in the third version both the characters and the background were colored. At first, the researcher met with the children and said that "Yesterday, I was drawing but I could not find my colored pencils. Thus, I made some drawings in black. After that, I found my other pencils and I colored my drawings. However, I was confused when deciding which one is the best. So, you want to help me to choose?" After this introduction part, the same pictures with different versions were displayed and the question, "What do you see in the picture?" was asked. The pictures are presented below.

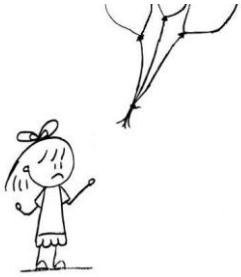

Figure 4 *Uncolored*

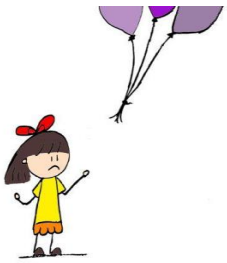

Figure 5 *Only colored characters*

Figure 6 *Both characters and backgrounds are colored*

Thus, children's answers related to each picture were taken, and it was realized that while children shared fewer details in uncolored pictures, they mentioned more details in the colored versions of the picture. For example, Child 4's ideas were "There is a girl" for the uncolored pictures whereas s/he stated, "The girl is sad because she lost her balloons" when s/he was provided the second picture. Also, Child 10's sentences were similar, and for the first picture, s/he said that "The girl is raising her hands in the air". On the other hand, for the second one, s/he shared that "The girl has a red hairpin, and she is sad. She blew her balloon". Even if there are differences in explanations in the first and the second pictures, all the children said that the second and third pictures are the same but the third one is more colorful.

When the related literature is investigated, Lopatovska (2016) also shares supportive findings. That is, she also argued that young children like to talk about colors in pictures and for the development of picture literacy, colors and shapes are important. Thus, the emphasis on the importance of colors can be shown as a source for the differences in children's answers between uncolorful and colorful pictures in the current study. As a result, the items were prepared regarding the scale (Appendix C).

3.4.1.4. The Initial Item Pool in Accordance with Expert Opinion

Before creating the pictures of the scales, statements that may describe the pictures related to humor styles were created. These statements were created with the help of Martin's Humor Styles Model and Humor Styles Questionnaire (Appendix B). After taking expert opinions for these statements, the pictures were created, and again expert opinions from three researchers from early childhood education and one researcher from psychology were taken related to the format and convenience of the pictures for the children. In the first version, hand-drawing visuals were prepared. After taking expert opinions, the format of the visuals was changed with the help of a graphical designer to have more realistic and clear visuals for children to understand as provided below in Figure 7. Moreover, in order to provide more meaningful connections, just four characters were used in all visuals. In this way, children did not get confused with the differences in character in different visuals, and just had to

focus on the context of the visual. For the final version of the visuals, the opinions of teachers, parents, and children with different features (gender, SES, etc) were taken.

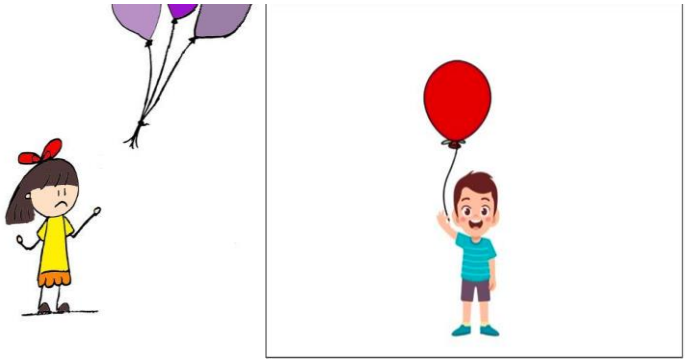

Figure 7 *Old and New Versions of Drawings*

3.4.1.5. Consider including validation items

After creating the initial item pool, the researcher tried to detect the items that the participants may not have the motivation to answer. For example, participants can feel hesitant to answer such items with a concern related to social acceptance and this situation can be described as social desirability (DeWelli, 2014). To deal with this threat, the researcher changed the types of questions. That is, in the first form of the application, the researcher asked the children "If it was you, would you have behaved the same?". After asking this question, children changed their answers even if they laughed at the visual when they first saw it.

The reason for their behavior can be due to social desirability. Therefore, in the main application, the researcher just asked if the visual is funny, and at the end of the application, additional questions were asked. In this way, children felt free to express their views on the children in the drawings. Even if the children's not answering motivation is not about the items as DeWelli (2014) stated, the researcher changes the way of application that may affect children's answering motivation.

3.4.1.6. Administer items to develop sample

After deciding the final item pool, the scale should be applied to the smaller sample to evaluate the process (DeWelli, 2014) for this reason pilot study was conducted in the scope of the study.

Pilot Study

The data regarding the pilot study is conducted in Tokat. First of all, the scale was applied to six children (3 girls, 3 boys) to be sure that children can follow the story. Also, both hard copy and digital forms of the scale were applied to the other six children (3 girls, 3 boys) to decide which way is more practical for application. Finally, with the consideration of the duration and attractiveness of the scale, the digital application was more useful for both children and the researcher. That is when the researcher applied the scale from the paper, it took approximately 10-15 minutes, and it was harder for children to keep their attention on the scale. Thus, in the last items of the scale, children were getting bored as a result of the observations. On the other hand, when the tablet was used in the process, it took about 7-10 minutes and because the process ends in less time and the children can see clearly the visuals with the "zoom-in/zoom-out" feature, it was easier to keep their attention on the scale and they were able to listen and focus on all items in the scale (Figure 8).

Figure 8 *Scale application with Tablet*

After choosing the way to apply the scale and being sure that children understand the scale and the story provided in the scale, more children were included in a pilot study to test the items and apply exploratory analysis.

3.4.1.7. Evaluate items

According to DeWelli (2014), item evaluation is at the heart of the scale development process to evaluate the performance of the scale. To evaluate items of the current study, the scale was applied to 150 children between the ages of 60-72 months old living in Tokat. The children from low-medium and high SES were included to have a more presentative pilot study sample for the main study sample. Total item correlations, item variances, and item means are important to consider in evaluating the items (DeWelli, 2014). Thus, the results are provided in the findings section.

3.4.1.8. Optimize the Length of the Scale

In the primary form of the scale, there were 20 items for the pilot study. The results of the exploratory factor analysis showed that all of the items are suitable to be included in the main form of the scale. Table 8 shows the rotated component matrix of the items.

Table 8 *The Rotated Component Matrix*

	Component			
	1	2	3	4
Affiliative1				,732
Affiliative2				,631
Affiliative3				,554
Affiliative4				,611
Affiliative5				,715
Aggressive1	,799			
Aggressive2	,743			
Aggressive3	,681			
Aggressive4	,793			
Aggressive5	,787			
Selfenhancing1		,615		
Selfenhancing2		,636		
Selfenhancing3		,758		
Selfenhancing4		,727		
Selfenhancing5		,521		
Selfdefeating1			,608	
Selfdefeating2			,705	
Selfdefeating3			,740	
Selfdefeating4			,759	
Selfdefeating5			,787	

Demographic Information Form

This form was developed in order to learn more about participants' demographic information. Thus, with the help of this form, the researcher can learn about children's gender, date of birth, school name, mother's education level, father's education level, mother's age, father's age, mother's occupation, father's occupation, number of siblings, and the gender of their siblings (Appendix D).

3.5. Data Analysis of the Study

Both descriptive and inferential analysis methods were used during data analysis. The SPSS 22.00 and IMB AMOS programs were used to analyze the data. Exploratory factor analysis was made with the data from the pilot study on SPSS 22.00. Exploratory factor analysis aims to define and summarize items by bringing together the interrelated variables and putting the variables under common factors (Watkins, 2018). Also, confirmatory factor analysis was conducted on the IMB AMOS program. Confirmatory factor analysis is an advanced technique used to verify the construct validity by testing the construct, and it explains the latent processes among the variables and the theoretical knowledge about these processes (Harrington, 2009). The results of these analyses shaped the final version of the scale.

In addition to the scale development part, frequencies and descriptions were used to provide a summary of the data. Because the data were not normally distributed, non-parametric tests were used to reveal if there is a relationship between humor styles and the demographics of the children. In order to reveal the relationships between humor styles and demographic variables, correlational analysis was used. In the correlational survey model, the association between two or more variables determines the presence or degree of change (Fraenkel et al., 2012). Also, in order to create meaningful explanations on groups regarding their demographics and humor styles, cluster analyses were used in the scope of the study. The main purpose of cluster analyses (Çokluk et al., 2010), which is a collection of methods that classify data according to their similarities in terms of their characteristics, is to determine

whether there are different groups within a data set. In this respect, the similarities (proximity) between the units or variables forming the cluster and the differences (distance) with other clusters are taken as the basis. In this context, the clusters formed from the data set are expected to show homogeneity within themselves and maximum heterogeneity among themselves (Çokluk et al., 2010).

Among the hierarchical clustering methods, Ward's method is generally accepted as the best method (Ferreira and Hitchcock, 2009). Among the agglomerative clustering methods, Ward's method is the only method that provides the formation of clusters by minimizing the in-group distribution in each binary fusion based on the classical sum of squares criterion (Murtagh and Legendre, 2014). Therefore, Ward's method has a more complex structure than other hierarchical methods. The aim of this method is to place objects in the cluster in such a way that the variance between objects is minimized. Thus, this method can help to understand humor patterns among participants by creating groups.

As a result of data analysis, the data is reported and provided in the “Findings” section.

3.5.1. Analysis of Validity Treats

Internal and external validity threats are discussed in this part.

3.5.1.1. Internal Validity

In correlation studies, subject characteristics, location, and data collector characteristics are internal validity threats (Fraenkel, et al., 2012). Firstly, the founded relationship may be affected by the subject characteristics. Therefore, it is important to describe subject characteristics and hold some of the characteristics constant (Fraenkel, et al., 2012). For the current study, the age variable was held constant, and the data were collected at the center of Tokat and Ankara. Thus, the researcher assume that all of the children come from a similar background and family structure. Secondly, where the data is collected is important. To obstruct the changes

related to where the data was collected, the researcher tried to standardize the conditions, and data were collected in a similar time period of the day and similar environment for all participants (Fraenkel, et al., 2012). In studies, if there are more than two data collectors, the differences in these data collectors can affect the data (Fraenkel, et al., 2012). To obstruct this, the researcher was the only data collector.

3.5.1.2. External Validity

According to Fraenkel, Wallen, and Hyun (2012, p.103) "the extent to which the results of a study can be generalized" is the definition of external validity. The largest population of the study aim is all 48-60 months old children in Turkey. However, because it is not possible to reach all children in Turkey, the researcher collected data from the participants that are quite accessible. Thus, the accessible population is four and five years of children in the city center of Tokat. As a result, the ones who provide the necessary permissions were included in the study. By collecting data from as many samples as possible, external validity was sought to be ensured.

3.5.1.3. Analysis of Validity Evidence

Validity is one of the most crucial dimensions that a scale must have. It questions if the scale measures the thing that is aimed to be measured. There are three pieces of evidence related to validity and these are content-related, construct-related, and criterion-related validity (Fraenkel, et al., 2012). In the scope of the current study, content and construct-related validity were examined. Content-related validity is about meaningfulness, appropriateness, adequateness, and comprehensiveness of the format and content of the study (Fraenkel, et al., 2012). In the current study, the researcher aims to develop a tool to learn about children's humor preferences. Thus, to be sure that the items serve this aim, the researcher consulted the expert opinions of different experts on early childhood education and psychology.

Secondly, it is important to determine the extent of evidence supporting the interpretation of what a measurement reflects (Fraenkel, et al., 2012). Therefore, to

determine the construct-related validity of the scale, EFA and CFA were conducted. To analyze the result of the pilot study, EFA was applied. If the results are satisfying, the main study was conducted, and CFA was applied to ensure construct validity.

3.5.1.4. Analysis of Reliability

Reliability is about the consistency of the results that is has taken from an instrument (Fraenkel, et al., 2012). Even if there are several measures of reliability, in the current study, Cronbach's Alpha coefficient was used. According to Fraenkel, Wallen, and Hyun (2012), the coefficient value should be more than 0.7, and the researcher tried to reach this value to ensure reliability.

3.5.1.5. Test of Normality

According to Table 9, it is seen that the Kolmogorov-Smirnov value is under ,05 (Sig.= ,025). Since the data do not have a normal distribution, they do not meet the assumptions of the parametric test. For this reason, Spearman's rho test, Chi-Square test and Mann-Whitney U test analysis of variance, which are nonparametric tests, were used to analyze the data (Pallant, 2020). The significance value was accepted as p<,05 (Pallant, 2020).

Table 9 *Tests of Normality*

	Kolmogorov-Smirnov			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
allscale	,052	341	,025	,990	341	,018

Also, the outlier values were determined and they were excluded from the data set in order to have more valid results.

3.6. Ethical Considerations of the Study

According to Bogdan and Biklen (1998), there are two crucial considerations to ensure ethics in studies with human subjects. The first step is to make necessary

explanations to participants related to the study and be sure that they are willing to participate, and the second step is about evaluating the possible risk that the participants can face. In the current study, the researcher applied the scales during one-to-one interviews with children. Thus, after taking the necessary permission from the Ethics Committee of the University, the Ministry of National Education, school administrators, and parents, getting permission from children and explaining what is done in this data collection process is essential. Thus, the children who are willing to participate in the study can be included. Children should be also informed about what will be done before starting the process. It was also mentioned that they are free to quit participating if they do not feel comfortable during the process. In addition, to be able to control the risks that children may experience, expert opinions were taken, and the setting was arranged in a way that could make them feel comfortable and happy. Another ethical consideration in social sciences is confidentiality, and this is about not sharing participants' actual names while reporting the data (Fraenkel, et al., 2012). Therefore, the researcher used pseudonyms rather than actual names (C1, C2…).

Before starting the data collection process, necessary permissions were taken. That is, firstly the researcher applied to the ethical committee of the university, and the Ministry of National Education. Because children are participants, getting permission from the parents is also important (Fraenkel, et al., 2012). Thus, a consent form that informs the parents about the study and requests permission from the parents was sent to the parents before the study. The children were included in the study if the necessary permission is taken from the parents.

3.7. Assumptions of Study

The assumptions of the study can be listed as follows:

1. The definitions and dimensions of humor styles selected for this study indicate the universe of all possible aspects of Humor Styles.
2. Participants will provide accurate and reliable answers.
3. Other extraneous variables will not affect the results of the study.

3.8. Limitations of the Study

Even though the study was conducted in the light of the related literature, expert opinions, and a pilot study, there are still some parts that would require to be developed. First of all, the population of the study is 60-72-month-old children living in Turkey. However, because the accessible population is 60-72 months old children in Ankara, this situation may have a negative effect on the generalizability of the study. In addition, the scale was developed by considering the Humor Styles Model. Even if this model is seen as universal, there can be other humor behaviors that cannot be explained by this model. Regarding the scale development process, another limitation was about using only pictures. Humor has a multidimensional structure that also includes verbal items. However, because the scale includes only pictures, the verbal part related to humor preferences might be missed. Finally, because this is a quantitative descriptive study, it was weak in explaining the reasons behind the existing situation. Also, because the study does not include the qualitative part, it was impossible to make inferences that would provide a deeper understanding of the data that were obtained from participants.

3.9. The Role of the Researcher in the Study

The role of the researcher in quantitative studies is not defined theoretically (Simon, 2011). The researcher let the participants be independent and tried to obtain the data in the same way in terms of conditions, materials, or attitudes. Even if it is a quantitative study, the researcher applied the scales during one-to-one interviews. Thus, it is important to apply the instrument in the same way for each participant and record the data as the participants provided by not missing any point. Also, because the children are the participants, it is important for the researcher to set a secure attachment with them and remove the factors that children cannot feel comfortable with. These considerations are important to get actual answers from the children.

3.10. Summary

In this chapter, the researcher tried to explain how the research was conducted in terms of design, participants, settings, instrumentation, procedures, analysis, and

ethics. By following the steps provided in the method chapter, the researcher aims to collect data that can serve the purpose of the study and answer the research questions. Therefore, the initial aim of the study is to develop a scale that can give information about children's humor scale. To reach this aim, children who are living and participating in early childhood education in the city center of Ankara were included in the study. As a result, after the scale development process and a pilot study ended, the data collection process was started, and after the data analysis, the findings are provided in the following part.

CHAPTER 4

FINDINGS

In the findings part, the data related to both the scale development part and describing the humor styles of children in relation to study variables are provided in light of the research questions. In addition, findings related to cluster analyses regarding humor styles were provided in this section.

4.1. Findings Related to the Exploratory Factor Analysis

The study's main aim is to develop a scale related to young children's humor styles. To reach this aim, the research question, "Is this scale valid to measure preschool children's humor styles?" was tried to be answered. Thus, an initial scale form was created and applied to 150 children to test if the items are working as it is expected.

As Büyüköztürk (2014) stated, factor analysis was performed to examine construct validity. Construct validity is the degree to which the scale accurately measures an abstract concept in the context of the behavior to be measured (Büyüköztürk, 2014). The aim of factor analysis is to develop a measurement tool that can measure the most features with the least number of items (Can, 2016). In this direction, factor analyses were performed for Pictorial Humor Styles Scale for Preschool Children. Since it was aimed to minimize the excessive amount of data with the minimum loss of content for both forms (Can, 2016), exploratory factor analysis (EFA) was applied to determine the factor loads of the items including the affiliative, aggressive, self-enhancing and self-defeating humor styles factors in the SPSS environment and to examine construct validity.

Before applying factor analysis, the suitability of the data sets for factor analysis is examined. For this, firstly, the correlation matrix that gives the relationships between

the variables is analyzed. The correlation matrix is the table showing the coefficients of the variables that are analyzed. It shows the correlation between variables. The correlation coefficient takes a value between -1.00 and +1.00. Variable coefficients are expected to be above 0.30. For between 100 and 200 observations, the Pearson correlation value is expected to be at least 0.51 (Yaşlıoğlu, 2017). Because the sample size for EFA is 150, it is expected to have a Pearson correlation of at least 0.51.

If the necessary conditions for the relationships of the variables are met, factor analysis is applied in the SPSS program. If the accuracy of the factors formed after EFA is to be determined, the Maximum likelihood (ML) method is selected from the factor analysis methods. If rotation between variables is deemed appropriate, the direct oblimin method is selected. The direct oblimin method is an applicable method if there is a connection between the variables.

The next test for suitability for factor analysis is Bartlett's test. Bartlett's test examines the previous correlation matrix in general and looks at the statistical significance of this correlation matrix. That is, after analyzing the correlation matrix, it is necessary to determine whether the high correlations between the variables are significant or not. For this purpose, KMO-Bartlett Test (Kaiser-Meyer-Olkin) (Test of Sphericity) is used. As seen in Table 10, the KMO ratio should be above (0.5). The higher the ratio, the better the data set is for factor analysis. Generally accepted KMO values and their interpretations are given in the table (Karagöz & Köstereliogğlu, 2008).

The last step of the factor analysis is to look at the construct validity from the total variance explained table. Eigen values greater than 1 are taken into consideration when deciding the number of factors in the table. The ratio of total variance explained gives the construct validity of the scale. The explained variance table is also an important table regardless of the factor analysis method. The fact that the explained variance exceeds 50% of the total variance is an important criterion of factor analysis. The construct validity of the study is accepted if it exceeds the lower limit of 0.50. When determining the factor loadings, the largest value in absolute

value is assigned to the factor in which the factor is located in the column. If the difference between the factor loadings of the statements loaded on more than one factor is greater than 0,10, the item with the largest factor loading value is loaded. Factor loadings greater than 0.30 are expected and analyses are performed according to this criterion (Yaşlıoğlu, 2017).

The assumptions required for the application of EFA were applied. The correlations of the items with each other were analyzed. The items were factor analyzed according to their correlation levels. When the correlation results (Appendix H) for the first dominant field items are analyzed, there are positive relationships between the theoretically related factors. That is, there are positive relationships between the items of affiliative and self-enhancing whereas positive relationships were found for items of aggressive and self-defeating humor styles (Martin et al., 2003). Due to the significant relationships, the data set is suitable for factor analysis.

The KMO and Barlett's Test were applied to test the suitability of the data set (Worthington & Whittaker, 2006), and according to Table 10, the data set was suitable with the KMO value of ,815 and Bartlett Sphericity test (χ^2=1062,300, p<.001).

Table 10 *KMO and Bartlett's Test*

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		,815
Bartlett's Test of Sphericity	Approx. Chi-Square	1062,300
	df	190
	Sig.	,000

To reach the relevant factor structure, first of all, it was observed that the factors are explained by 56,922% of the total variance. The total variances of the four factors are 25,817%, 13,618%, 10,962%, and 6,525% respectively. According to Table 10, since the P-value of the hypothesis is 0.000 < 0.05, the hypothesis is rejected. In other words, it is concluded that the relationship between the variables is significant. Since the KMO value is also quite high and perfect, EFA can be performed.

Secondly, the scree plot was examined. As Figure 9 examined, it is seen that the factors after the point where it starts to flatten (after the first four points) do not make

a significant contribution to the explained variance (Gürbüz & Şahin, 2016). Therefore, it can be said that the scale would be more suitable for a four-factor analysis.

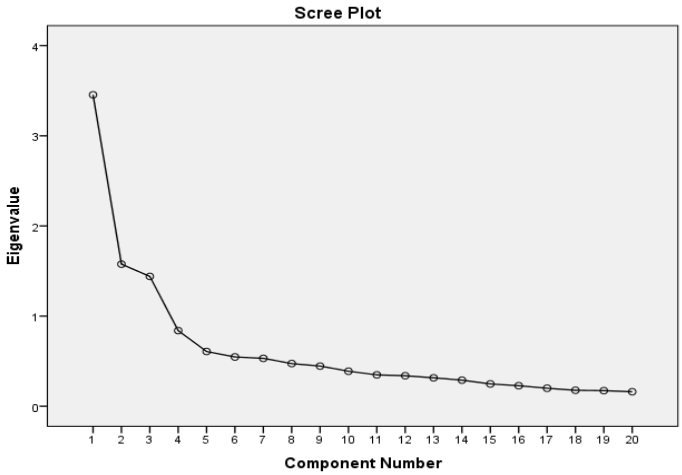

Figure 9 *Scree Plot*

When Table 11 was analyzed, it was found that for all items loaded on the expected factors, there was no cross-loading problem between the items and the factor loadings were above .6.

Table 11 *Rotated Component Matrix*

	Component			
	1	2	3	4
Affiliative1				,732
Affiliative2				,631
Affiliative3				,654
Affiliative4				,611
Affiliative5				,715
Aggressive1	,799			
Aggressive2	,743			
Aggressive3	,681			
Aggressive4	,793			
Aggressive5	,787			
Selfenhancing1		,615		
Selfenhancing2		,636		
Selfenhancing3		,758		
Selfenhancing4		,727		
Selfenhancing5		,621		
Selfdefeating1			,608	
Selfdefeating2			,705	
Selfdefeating3			,740	
Selfdefeating4			,759	
Selfdefeating5			,787	

As a result, the results of EFA show that the scale is suitable to apply, and in light of this data, the main study was embarked upon. In the following part, the results of CFA are shared.

4.2. Findings Related to the Confirmatory Factor Analysis

Then, again in accordance with the research question "Is this scale valid to measure preschool children's humor styles?", confirmatory factor analysis was carried out, which aims both to verify the previously determined structure and to understand whether the variable groups emerging from the exploratory factor analysis are adequately represented by the factors (Aytaç & Öngen, 2012; Özdamar, 2013).

CFA is one of structural equation modeling, and it discovers the relationships among items, latent variables, and factors (Brown, 2006). After EFA, no items were excluded from the scale, and 341 children between the ages of 60 and 72 months old were included. With the data collected from 345 children (4 of them were excluded after the outlier analysis), CFA was applied, and the analyses were made by using the IMB AMOS program. The analyses of model fit indices are CMIN/DF, Goodness-of-Fit Index (GFI), Normed Fit Index (NFI), Comparative Fit Index (CFI), and Root Mean Square Error O Approximation (RMSEA), were provided in Table 12.

Table 12 *Model Fit Indices*

Indices	CMIN/DF	GFA	NFI	CFI	RMSEA
Value	1,481	,938	,883	,962	,038

According to Kline (2005), a CMIN/DF value that is under 3 shows the perfect fit. From this point, it is possible to conclude that the CMIN/DF value of the current study shows a perfect fit. The cut of values for GFI and CFI are expected as .9 (Kelloway, 1998), and for PMSEA, the cut of value is 0,6 (Hu & Bentler, 1999). As seen in Figure 10, factor loadings vary between .54 and .84 for Humor Styles. According to Harrington (2009), factor loadings should not be below 0.30. 0.71, and above is excellent, 0.63 is very good, 0.55 is good, 0.45 is good/acceptable, and 0.32 is poor. In light of these values from the literature, it is possible to conclude that the current study meets the requirements of the model fit indices. The factor loadings of the model are shown in Figure 10.

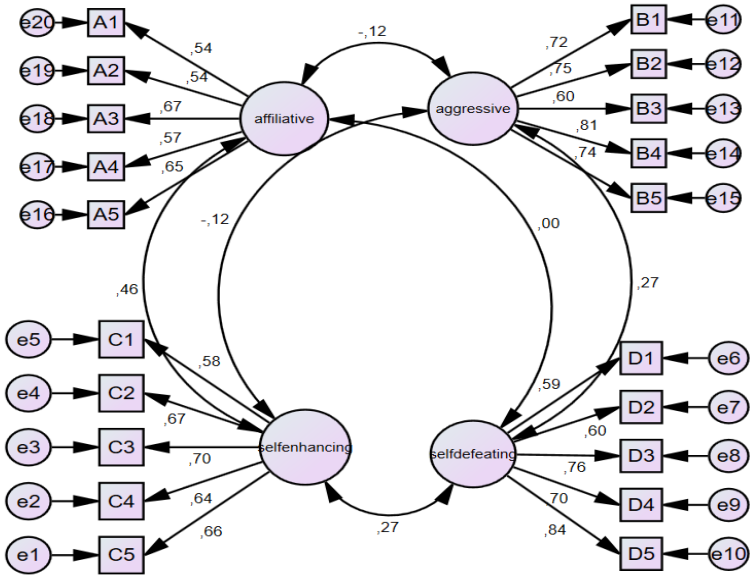

Figure 10 *Factor Loadings for Pictorial Humor Styles Scale for Preschool Children*

Factor loadings are given on the arrows going to the items belonging to each factor. The model fit indices were found to be at an acceptable fit level.

4.3. Reliability of the Scale

The second research question was "Is this scale reliable to measure preschool children's humor styles?". To answer these questions analyses were made to test the reliability of the scale. In the current study, different samples were included for the EFA and CFA. The total internal consistency coefficient of the 20-item Humor Styles scale was found to be .85 Cronbach α in the pilot study. When the reliability value for the sub-factors was examined, the values were 744, ,828, ,773, ,803 for the affiliative, aggressive, self-enhancing, and self-defeating humor styles respectively. The Cronbach α value in the main study was found as .79. Also, the reliability values for sub-factors in the main study are ,731 and ,845 for the affiliative and aggressive humor styles whereas it was ,783 and ,824 for the self-enhancing and self-defeating humor styles respectively. According to Nunnally and Bernstein (1994), the reliability score should be greater than,7. Thus, the value of the current study is considered an acceptable value for the reliability level of Pictorial Humor Styles Scale for Preschool Children.

4.4. Findings Related to Humor Styles and Demographics

In the scope of the study, the quantitative analyses were to find out the relationships between the humor styles and demographics and the research question, “Is there a statistically significant relationship between preschool children’s demographics and humor styles?”, was tried to be answered.

First of all, in accordance to the research question that is “Is there a statistically significant difference between preschool children’s gender and humor styles?” the Mann-Whitney U Test analyses were made on gender and humor styles. The relationship between humor styles and gender is provided in Table 13.

Table 13 *Mann-Whitney U Test Results on Gender and Humor Styles*

	Affiliative	Aggressive	Self-enhancing	Self-defeating
Mann-Whitney U	12018,000	12436,500	13718,500	13138,000
Wilcoxon W	28308,000	25477,500	26759,500	26179,000
Z	-2,761	-2,292	-,856	-1,498
Asymp. Sig. (2-tailed)	,006	,022	,392	,134

According to Table 13, it can be seen that girls had significantly higher on affiliative humor than boys (U=12018,00; p=,006). Also, boys had significantly higher on aggressive humor than girls (U=28308,00; p=,022). Thus, girls are more affiliative than boys, and boys are more aggressive than girls in temrs of their humor styles. There is no statistically significant difference between self-enhanging humor of girls and boys (U=13718,50; p=,392). Finally, no statistically significant difference between self-defeating humor of boys and girls was found (U=13138,00; p=,134).

Table 14 *Humor Styles for Gender*

	Gender	N	Mean	SD
Affiliative	Girl	161	12,19	2,43
	Boy	180	11,69	2,34
Aggressive	Girl	161	7,51	2,79
	Boy	180	8,01	2,89
Self-enhancing	Girl	161	11,16	2,61
	Boy	180	11,32	2,76
Self-defeating	Girl	161	8,82	2,76
	Boy	180	9,30	2,94

With regard to the statistically significant relationship between gender and affiliative and aggressive humor, Table 14 provides the means. It was observed that the mean of affiliative humor style for girls is 12,19 whereas this value is 11,69 among boys. Thus, it is possible to conclude that girls prefer affiliative humor compared to the boys. On the other hand, the mean value is 7,51 for girls and 8,01 for boys for the aggressive humor style. These means show that aggressive humor is more common among boys compared to the girls. For the self-enhancing humor style, the mean for girls is 11,16 and for boys, the mean is 11,32. Finally, the mean value for self-defeating humor style is 8,82 for girls and 9,30 for boys.

In addition, correlational analyses were made by Spearman's rho on the month variable with regard to “RQ3b” as seen in Table 15.

Table 15 *Spearman's rho Test Results on Month and Humor Styles*

		Affiliative	Aggressive	Self-enhancing	Self-defeating
Month	Correlation Coefficient	,001	-,060	,012	,063
	Sig. (2-tailed)	,983	,271	,829	,244
	N	341	341	341	341

As the table above displays, there no statistically significant relationship was found between month and affiliative humor ($r_{(341)}$=,001, p=,983). Similarly, no relationship was found between aggressive humor and month ($r_{(341)}$=-,060, p=,271). Month variable also not found related with self-enhanging humor style ($r_{(341)}$= ,012, p=,829). Finally, self-defeating humor was not found related to month ($r_{(341)}$= ,063, p=,244). Another research question was “Is there a statistically significant relationship between preschool children’s SES and humor styles?” However, SES was investigated in terms of humor styles and no relationships was found at, 05 alpha level.

Table 16 *Chi-Square Test Results on SES and Humor Styles*

	Affiliative	Aggressive	Self-enhancing	Self-defeating
Chi-Square	,096	1,914	1,802	2,016
df	2	2	2	2
Asymp. Sig.	,953	,384	,406	,365

As seen in the Table 16, the relation between affiliative humor and SES was not significiant, X^2 (2, N = 341) = ,096, p = ,953. Also, no statistically significiant relationship was found between aggressive humor and SES, X^2 (2, N = 341) = 1,914, p = ,384. Table 16 also describes that SES was not found related to self-enhanging humor style, X^2 (2, N = 341) = 1,802, p = ,406. Finally, the relation between self-defeating humor and SES was not significiant, X^2 (2, N = 341) = 2,016, p = ,365.

Other demographic variables were mother's and father's age, and in this part "RQ3d" and "RQ3e" was tried to be answered. Therefore, the correlations between humor styles and parents' age were also investigated and displayed in Table 17.

Table 17 *Spearman's rho Test Results on Parents' Age and Humor Style*

Spearman's rho		Affiliative	Aggressive	Self-enhancing	Self-defeating
Father's age	Correlation Coefficient	-,103	,007	,022	-,135*
	Sig. (2-tailed)	,057	,896	,682	,013
Mother's age	Correlation Coefficient	-,034	-,058	,071	-,176**
	Sig. (2-tailed)	,534	,284	,190	,001

As Table 17 shows, the only correlation between self-defeating humor that was detected was related to parents' age. That is, there is a statistically significant negative correlation between self-defeating humor and the father's age ($r_{(341)}$= -,135, p=,013). Similarly, the mother's age is negatively correlated to self-defeating humor ($r_{(341)}$= -,176, p=,001). Thus, the higher the age of parents, the less self-defeating humor is demonstrated by the children. Unlike self-defeating humor, there no statistically significant correlation was found between fathers' age and affiliative humor ($r_{(341)}$= -,103, p=,057), aggressive humor ($r_{(341)}$= ,007, p=,896), and self-enhancing humor style ($r_{(341)}$= ,022, p=,682). Similarly, mothers' age was not correlated with affiliative humor ($r_{(341)}$= -,034, p=534), aggressive humor ($r_{(341)}$= -,058, p=,284), and self-enhanging humor ($r_{(341)}$= ,071, p=,190).

"Is there a statistically significant relationship between preschool children's mothers' education level and humor styles?" and "Is there a statistically significant relationship between preschool children's fathers' education level and humor

styles?" were the other research questions. And, parents' education level was also investigated in terms of children's humor styles and provided in Table 18.

Table 18 *Chi-Square Test Results on Parents' Education and Humor Style*

		Affiliative	Aggressive	Self-enhancing	Self-defeating
Mothers' Education	Chi-Square	3,772	2,488	1,147	2,590
	df	4	4	4	4
	Asymp. Sig.	,438	,647	,887	,629
Fathers' education	Chi-Square	4,636	3,126	1,456	7,119
	df	4	4	4	4
	Asymp. Sig.	,327	,537	,834	,130

As table 18 displays, no statistically significant relationship was found between parent's education level and children's humor styles. That is, the relation between affiliative humor and mothers' education was not significiant, X^2 (4, N = 341) = 3,772, p =, 438. Also, there is no correlation between aggressive humor and mothers' education, X^2 (4, N = 341) = 2,488, p =,647. Self-enganging humor also found not related with mothers' education, X^2 (4, N = 341) = 1,147, p =,887. Finally, the relation between self-defeating humor and mothers' education was not significiant, X^2 (4, N = 341) = 2,590, p =,629.

In addition to the mothers' education, fathers' education was also investgated in terms of children's humor styles. Thus, the relation between affiliative humor and fathers' education was not significiant, X^2 (4, N = 341) = 4,636, p =,327. Also, there is no correlation between aggressive humor and fathers' education, X^2 (4, N = 341) = 3,126, p =,537. Self-enganging humor also found not related with fathers' education, X^2 (4, N = 341) = 1,456, p =,834. Finally, the relation between self-defeating humor and fathers' education was not significiant, X^2 (4, N = 341) = 7,119, p =,130.

About siblings, two research questions were included to the study. Thus, with regard to the questions, "Is there a statistically significant relationship between preschool children's siblings' number and humor styles?" and "Is there a statistically significant relationship between preschool children's siblings' gender and humor styles?" the following table is presented.

Table 19 *Chi-Square Test Results on Siblings' and Humor Style*

		Affiliative	Aggressive	Self-enhancing	Self-defeating
Sibling Number	Chi-Square	1,824	3,955	2,277	6,157
	df	4	4	4	4
	Asymp. Sig.	,768	,412	,685	,188
Sibling gender	Chi-Square	,069	3,456	1,183	1,798
	df	3	3	3	3
	Asymp. Sig.	,995	,327	,757	,615

Similar to the parents' education, no statistically significant relationship was found between children's humor style and their sibling's gender or the number of siblings they have. That is, the relation between affiliative humor and sibling number was not significiant, X^2 (4, N = 341) = 1,824, p =,768. Also, there is no correlation between aggressive humor and sibling number, X^2 (4, N = 341) = 3,955, p =,412. Self-enganging humor also found not related with sibling number, X^2 (4, N = 341) = 2,277, p =,685. Finally, the relation between self-defeating humor and sibling number was not significiant, X^2 (4, N = 341) = 6,157, p =,188. Table 19 also displays the correlations between sibling gender and humor styles. Therefore, there is no correlation between affiliative humor and sibling gender, X^2 (4, N = 341) = ,069, p =,995. Also, the relation between aggressive humor and sibling gender was not significiant, X^2 (4, N = 341) = 3,456, p =,327. Self-enganging humor also found not related with sibling gender, X^2 (4, N = 341) = 1,183, p =,757. Finally, the relation between self-defeating humor and sibling gender was not significiant, X^2 (4, N = 341) = 1,798, p =,615.

As a result, even if there is no relationship found in all humor styles regarding all demographics, few correlations were found and these relationships are discussed in the following parts.

4.5. Findings Related to Cluster Analyses on Humor Styles

The fourth research question was "What are the preschool children's clusters regarding their predominant humor styles?". In order to display a collection of methods that classify data according to their similarities in terms of their characteristics, and to determine whether there are different groups within a data set,

a cluster analysis was also included in the current study. Therefore, to learn more about how persistent humor styles are in children and to understand the patterns of humor behaviors among children, some clusters were tried to be created by cluster analyses. Among the hierarchical clustering methods, Ward's method was used. As a result of the Ward method, it was found that all humor styles have a statistically significant relationship (with p=,000 at a,05 alpha level) with each other, and this means that meaningful clusters might be created by using these humor styles as seen in Table 20.

Table 20 *Test of Homogeneity of Variances*

	Levene Statistic	df1	df2	Sig.
Affiliative	13,145	2	338	,000
Aggressive	48,639	2	338	,000
Self-enhancing	37,575	2	338	,000
Self-defeating	33,249	2	338	,000

With these statistically significant related variables, three clusters were created that have different characteristics in terms of humor styles as seen in Table 21.

Table 21 *Results of Cluster Analyses*

	(1) adaptive but confused	(2) only adaptive	(3) balanced
Affiliative	2,58	2,33	2,29
Aggressive	1,30	1,26	2,22
Self-enhancing	2,67	2,11	2,08
Self-defeating	2,28	1,33	2,14

The table above provides the mean values of the humor styles. As seen in the table, there are three clusters that were created, and all of these clusters have different humor patterns. That is, cluster one is named “adaptive but confused”, and it is clear that children in the first cluster show self-enhancing (μ =2,67) humor behaviors, and the affiliative humor style (μ =2,58) is the second humor style that is observed in those children. Even if having these adaptive humor styles persistently is also supported by the related literature (Martin et al., 2004), self-defeating humor (μ =2,28) is the third persistent humor style in the children in the first cluster. Secondly, in the cluster that might be described as “only adaptive”, it is clear that affiliative (μ =2,33) is persistent and it is followed by a self-enhancing humor style as the

literature suggests. In addition, the children in the third cluster display a similar mean value for all humor styles. Because all humor styles can be observed in individuals at the same time, the third group can be shown as an example of this theoretical explanation.

In addition to the clusters, it is also essential to learn about the correlation between the clusters to make more detailed explanations. Table 22 provides the correlations between the clusters.

Table 22 *Correlations between the Clusters*

Tukey HSD	(I) Ward Method	(J) Ward Method	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Affiliative	1	2	,251*	,062	,000	,104	,398
		3	,296*	,068	,000	,136	,457
	2	1	-,251*	,062	,000	-,398	-,104
		3	,045	,060	,732	-,096	,186
Aggressive	1	2	,036	,050	,752	-,082	,155
		3	-,923*	,055	,000	-1,052	-,793
	2	1	-,036	,050	,752	-,155	,082
		3	-,959*	,048	,000	-1,072	-,846
Self-enhancing	1	2	,554*	,064	,000	,403	,705
		3	,592*	,070	,000	,426	,757
	2	1	-,554*	,064	,000	-,705	-,403
		3	,037	,061	,815	-,107	,182
Self-defeating	1	2	,940*	,050	,000	,822	1,058
		3	,138*	,055	,032	,009	,268
	2	1	-,940*	,050	,000	-1,058	-,822
		3	-,802*	,048	,000	-,915	-,689

*. The mean difference is significant at the 0.05 level.

As table 22 displays, in terms of affiliative humor styles, there is a statistically significant relationship between clusters 1 and 3 (p=,000 at ,05 alpha level). Similarly, a significant relationship was found between clusters 1 and 2 (p=,000 at ,05 alpha level). On the other hand, there is no statistically significant relationship between clusters 2 and 3 (p=,732 at ,05 alpha level).

When these analyses were examined in terms of the aggressive humor style, there is no statistically significant relationship between clusters 1 and 2 (p=,752 at ,05 alpha level) whereas there is a relationship between clusters 1 and 3, and also a relationship

between 2 and 3 (p=,000 at ,05 alpha level). In terms of self-enhancing humor, there is a statistically significant relationship between clusters 1 and 2, and 1 and 3 (p=,000 at ,05 alpha level). On the other hand, no statistically significant relationship was found between clusters 2 and 3 (p=,815 at ,05 alpha level). Finally, the clusters were examined in terms of self-defeating humor style, and it was found that cluster 2 is correlated with both clusters 1 and 3 (p=,000 at ,05 alpha level). Finally, cluster 1 is also statistically significantly related to cluster 3 (p=,032 at ,05 alpha level).

As a result, the cluster can help to describe the children in terms of their humor patterns by not just a single humor style, but by providing a meaningful combination of other humor styles. A detailed examination of these clusters is made in the discussion part.

4.6. Summary of the Findings

The main purpose of the study was to develop a pictorial humor styles scale for preschool children. In addition to this purpose, with the help of demographic information obtained from the children throughout the study, it is aimed to reveal the relationship with demographic variables that may be related to children's humor styles. Another aim of the study is to create meaningful groups within the scope of children's humor styles with the help of cluster analysis. The data collected for these purposes were analyzed using various analysis methods and the findings of the study were formed.

This section presents the findings that stand out as a result of the analysis. First, exploratory and confirmatory exploratory factor analyses were conducted for the purpose of scale development. Within the scope of exploratory factor analyses, the data collected from 150 children living in Tokat showed that the scale items were appropriate for the data set (the KMO value of ,815 and Bartlett Sphericity test $\chi 2$=1062,300, p<.001, and the factors are explained by 56,922% of the total variance). In addition, the scree plot that appeared as a result of the analyses revealed that the scale should be evaluated in 4 sub-dimensions. Since the study aimed to

learn four humor styles, the collection of items under four factors showed that the scale created showed compatible results within the scope of humor styles models.

In order to validate the results of the exploratory factor analysis, confirmatory factor analysis was conducted with data collected from 345 children attending preschool education in Ankara. According to the analyses of model fit indices, it was found that the scale showed a perfect fit for learning humor styles (CMIN/DF: 1,481, CFA: ,938, NFI: ,883, CFI: ,962, RMSEA: ,038). Finally, factor loadings between .54 and .84 indicated the appropriateness of the scale items.

The internal consistency coefficient values obtained in the reliability analysis of the scale showed that the scale was reliable in detecting the humor styles of preschool children (.85 Cronbach α in the pilot study and .79 Cronbach α in the main study).

In addition to the scale development process, correlation analyses were applied within the scope of the study and the relationship between children's humor styles and various demographic variables (age, gender, socioeconomic status, parents' age, parents' education level, number and gender of siblings) was tried to be revealed. As a result of the analyses, a significant relationship was found between children's gender and their affiliative and aggressive humor styles. In other words, it was found that boys preferred more aggressive humor, while participatory humor style was found to be a humor style preferred more by girls. In addition, children's self-defeating humor style was found to be negatively associated with the age of the mother and father. There was no correlation was found for other demographic variables and humor styles.

As a result of the analyses conducted to create meaningful groups within the scope of the humor styles of children, three different groups emerged. The first of these groups is "only adaptive" (higher means for affiliative and self-enhancing humor). The second group was defined as "balanced". It can be predicted that children in this group show all four humor styles in a balanced manner. Finally, although the children grouped as "adaptive but confused" had adaptive humor styles, it was

observed that they also showed characteristics of self-defeating humor style, which is one of the maladaptive humor styles.

4.7. Summary

The main aim of the study is to develop a valid and reliable scale related to early childhood children's humor styles. To reach this aim, exploratory and confirmatory factor analyses were conducted on the data that were collected by 60-72 months old children who were participating in early childhood education in public schools and living in Tokat and Ankara. In addition to the scale development part, the data was used to make detailed explanations about the humor styles of children in terms of their demographics and their views shared during the scale application. As a result of the findings part, it is possible to conclude that the developed scale shows suitable results for the validity and reliability criteria in the literature. In addition, even though not all demographics were found to be statistically significantly related to humor styles, it might provide a different perspective in terms of children's humor styles. Not only by means of correlational analyses, with the help of cluster analyses, but it might also be possible to develop an understanding of the groups' humor patterns that were created with the help of humor styles and the values of individuals. As a result, in the following part, the findings are discussed with respect to the related literature.

CHAPTER 5

DISCUSSION

Presented in the previous chapter were the outcomes of the data collection process according to the research questions prepared within the scope of this study. The primary aim of the current study was to develop an appropriate scale for investigating preschool children's humor styles. In the following section, the result findings from the scale development process are discussed. Furthermore, additional data to understand children's humor styles more fully, were collected within the scope of the study. In other words, descriptive, correlational, and cluster analyses regarding children's humor styles and demographics are discussed in regard to the related literature.

As previously stated, the primary study aim was to develop an instrument for investigating preschool children's humor styles. Importantly, scales related to humor styles for differing age groups are provided in the literature, yet a scale of this type for preschool children was not identified. For this reason, the current study can fill a gap related to determining humor styles in preschool children. The first attempt regarding the humor styles scale is attributed to Martin et al. (2003), who developed the "Humor Styles Questionnaire" for adults. Even though a scale had been developed for adults, there remained a need for developing a scale for younger individuals (children between ages nine to 15). To accomplish this, Fox, Dean and Lyford (2013) developed a humor styles scale similar to the aforementioned Humor Styles Questionnaire by Martin et al. (2003). Additionally, James and Fox (2016) made another attempt at developing a scale for younger children between 8-11-years-old. Finally, Yerlikaya (2003) adapted Martin's Humor Styles Questionnaire to Turkish, and Anlı (2021) created a further adaptation for children aged 11-14-years-old.

Although the previously cited scales have met a need for investigating humor styles among adults and older children, a gap remained in finding a valid and reliable scale for early childhood. Importantly, due to the current study participants being preschool aged children and lacking the ability to read and/or write, visuals were used as scale items. Additionally, in the scale development literature regarding the early childhood period, similar examples which used visuals were identified. For example, earlier attempts can be observed in the Harter and Pike (1984) pictorial scale of perceived competence and social competence for preschoolers as well as Barnett et al. (2016) developed a pictorial scale for preschool children's perceptions regarding movement skill competence. Finally, in Acar and Arslan (2022), they developed a scale regarding children's emotional self-regulation and in doing so utilized visuals as scale items. Thus, these examples can be pointed to as a source of the effectiveness of using pictorial scales with preschool children.

In the current study, the "Pictorial Humor Styles Scale for Preschool Children" was developed according to the eight steps described by DeVellis (2014). Importantly, these steps were followed due to them having statistical outcomes necessary to ensure scale validity and reliability. Thus, as a result of statistical analyses, the prepared scale was found to be valid and reliable as well as being suitable for performing analyses within the scope of this research.

First of all, in accordance with the research questions, correlational analyses was carried out. Gender was an important factor and constituted the second area of investigation in gaining a greater understanding of preschool children's humor styles. For example, Bergen (2020) states that even at older ages it is possible to see gender-related differences in humor, while during the early years, girls and boys show greater similarities. Thus, gender-related changes in humor appear through maturation as a result of a variety of environmental factors. Mcghee (1974a) argues that the difference in humor behaviors regarding gender might be related to differences in the level of moral development. Importantly, it was revealed in the current study that girls attained higher mean scores in affiliative humor styles whereas boys had higher mean scores in aggressive and self-defeating humor styles.

When the related literature was examined, the tendency of males toward the aggressive humor style was also revealed, in comparison to females (Kazarian & Martin, 2004; Lefcourt et al, 1997; Martin & Kuiper, 1999; Sarı & Aslan, 2005; Saroglou & Scariot, 2002; Yerlikaya, 2007).

In their study, Fox et al. (2013), state that an aggressive humor style is associated with high self-perceived social competence and low anxiety for boys. On the other hand, for girls, an aggressive humor style is related to low global self-worth and high depression. Thus, it is possible to conclude that gender differences according to the outcomes related to humor, might be the source for explaining humor differences. Moreover, whereas an aggressive humor style is associated with social competence for boys, it can result in peer rejection for girls (Parker & Asher, 1987). Furthermore, as seen in the Superiority Theory, humor is defined as the feeling of superiority over others (Morreall, 1997), but differences regarding gender are explained by Underwood (2003), as a “gender paradox”. In other words, using different humor styles produces different outcomes for boys and girls. For example, according to Rigby and Slee (1991), boys are expected to be dominant, competitive, independent, ambitious, and not show weaknesses. For this reason, aggressive humor behaviors can be beneficial for boys within their social group, showing that gender role socialization and socio-cultural influences are vital in understanding differences in humor preferences related to gender (Kazarian & Martin, 2004).

McGhee (2002) states that as age progresses, individual differences emerge in children's humor skills. The Incongruity Theory also describes humor as the cognitive or intellectual dimension of "laughter" which develops with age (Morreall, 1997). From this point of view, age is another focus for developing a detailed explanation of children’s humor styles. Due to the current study only focusing on 60-72-month-old children, no difference was observed related to age. Thus, this is why the age gap between children was not significant enough for comparison. On the other hand, according to the related literature, age is a determinant factor for humor preferences. Namely, humor tendencies may differ with increasing age coinciding with the associated development of cognitive and moral abilities. Therefore, as they mature, children develop knowledge and sensitivity related to social norms, and as a

result, the consciousness formed through social norms can cause changes in people's humor styles (Kuipers, 2009). Moreover, Tsai et al. (2021), investigated humor preferences at different ages, and the results of their study revealed that older aged individuals prefer adaptive humor compared to younger individuals. When people get older, they also appear to prefer self-enhancing humor rather than any other humor style. Even if the related literature reports possible chances in humor preferences regarding age, cultural factors cannot be underestimated in regard to changes in humor related to age. That is, in the Western culture, humor might be a natural feature required within social relations (Grant, 1924). While on the other hand, in Eastern cultures, humor might be something that may be done in certain situations regarding certain topics by certain people (Yue, 2011). Therefore, whereas in Eastern cultures humor tendencies tend to improve with age, this situation appears to the opposite in Western cultures. In relation to that, to adequately understand how children's humor styles are formed due to age, both developmental and cultural indicators should be investigated.

Masui and Ura (2016) emphasize the importance of the childhood environment on establishing our beliefs, interpersonal strategies, and behaviors. Thus, the childhood environment can also affect children's humor styles. Repetti et al. (2002), state that low socioeconomic status is associated with aggressive behaviors, and Orim et al. 2022, assert that aggressive behaviors can result in social rejection and chronic stress experienced through low SES. Additionally, Yanagisawa et al. (2013), state that deficits coping skills are observed in children with low SES, thus, this situation can cause aggressive humor behaviors. Finally, Ökdem et al. (2018), report that students from high SES show more affiliative and self-enhancing humor style behaviors in comparison to those from other socioeconomic statuses.

In their study investigating the difference between humor styles in different social groups, Tsai et al. (2022), report humor style differences according to social structure as well as reconfirmed the influence of social structure on one's humor. In accordance with these findings, Sherman (2009) argues that moral values may differ among socio-economic groups and that these differences can also affect individuals' humor style preferences. From this point, the level of moral sensitivity of differing

SES may also be the reason behind differences in humor behaviors. While it is reported in the related literature that differences in humor behaviors among differing socio-economic statuses occurred, in the current study, no meaningful difference was found. This may be due to the data being collected in the same city as well as data collected only within public preschools. In other words, even if children come from families with differing income levels, they did have similar characteristics in terms of their education and environmental factors.

Another factor, the father's and mother's age were also investigated within the scope of the current study. When the correlational analyses were investigated, self-defeating humor was found to be related to both the father's and mother's age. In another example, Baroody and Dobbs-Oates (2011), argue that parental expectations related to children's development and learning are affected by the parents' demographic characteristics. Thus, self-defeating humor is described as a maladaptive humor style and is based on amusing others by revealing one's own weaknesses to gain others' acceptance (Martin et al., 2003). As a result, individuals might see self-defeating humor as a way of being part of a social group, but is nevertheless negatively correlated with self-esteem and optimism (Dozois et al., 2009).

Using a self-defeating humor style might be related to anxious attachment, neuroticism, depression, anxiety, and psychiatric conditions (Dozois et al., 2009). Additionally, the related literature suggests that younger children prefer to use self-defeating and aggressive humor styles compared to older individuals (Fritz, 2022; Jiang et al., 2020). Even though the literature provides different explanations regarding self-defeating humor, the relationship between parents' age and self-defeating humor has not been well-established. Still, it is clear that family structure, child-parent relationships, and/or parent's positive reappraisal, do play a mediating role in the relationships between humor styles and other variables such as psychological well-being (Fritz, 2022). In this respect, further studies should be focused on providing a deeper and broader examination of the relationship between parents' age and self-defeating humor which was found in the current study.

Finally, no correlation related to parents' educational level, sibling gender, and/or number of siblings was determined as a result of the correlational analyses. Although a relationship between these variables is not found in the related literature, Vernon et al. (2008), mentions the effect of family environment on the formation of humor styles. In this context, although the relationship between parent-related variables and children's humor styles was not found within the current study, these relationships can be revisited through different participant groups in future studies. Additionally, Paine et al. (2019), emphasize the importance of siblings in children's humor development due to the sibling relationship being one of the building blocks of socialization as well as gender and the number of siblings can also affect children in relation to their social and emotional abilities such as humor.

Importantly, children can experience different types of humor among siblings of different genders, and they can also get different reactions from older or younger siblings (Paine et al., 2020). In other words, while children's humor can develop according to sibling characteristics, some situations may also inhibit children's humor. Regarding this, the quality of sibling relationships is another factor that affects humor (Paine et al., 2022). In the current study, no relationship was found related to the number and/or gender of siblings, however, this can be revisited in future studies among different participant groups as well as applying different research methods.

Humor can also be associated with cultural norms and values. For this reason, the importance of cultural factors should not be ignored when evaluating humor. The relationship between gender and humor styles found in this study is also supported in internationally conducted studies (Fox et al., 2013; Underwood, 2003). However, no significant relationship was determined between demographic variables such as socioeconomic level, parents' occupation, number of siblings, and siblings' gender. There are several sources highlighting differences related to humor such as social norms (Yue et al., 2016) and language (Bell, 2007). Importantly, in Turkish culture, it is possible to argue that humor and rationality are used in combination (Sak, 2007). Thus, in Turkish culture humor is related to problem-solving (Sak, 2007), critical thinking (Özdemir, 2010), verbal analogical reasoning, and verbal reasoning (Arslan

et al., 2021). Additionally, humor in Turkish culture is found to be related to despising and ridiculing others as well as it is often believed that laughing at someone can result in negative consequences (Ersöz, 2017). Thus, even if humor in Turkish culture is associated with a positive aspect such as cognitive skills, which might be a reason to use humor, it may also be seen as a way of despising others and might be a valuable reason for avoiding humor. From this point, it is clear that Turkish humor has a different structure compared to other cultures. This situation might be the reason for not finding results supported with international studies. With more studies that investigate humor in Turkey, deeper understanding on the relationships between humor styles and demographic variables can be developed in the scope of humor in Turkish culture.

The predominant humor styles in people may vary depending on their sense of humor and personality traits. Although some humor styles are dominant in each individual, Martin et al. (2003), argue that all individuals may show behaviors related to other humor styles. To put it differently, everyone has the characteristics of each humor style, but although some humor styles are dominant, others are obliviously observed less. For example, Leist and Müller (2013), state that people tend to have one dominant humor style and show the characteristics of that specific humor style more often in comparison to other styles. To illustrate this point, the affiliative humor style can be preferred by people who enjoy bringing others together. Whereas the self-defeating humor style might meet the needs of individuals who are coping with stress (Martin et al., 2003). With this perspective, cluster analyses was carried out within the current study. As a result of these analyses, groups that had different characteristics related to humor styles were determined.

In this study, three meaningful groups were formed. In one group named “balanced”, the children earned similar mean points for all humor styles, and as a result, it was concluded these children were more likely to show all humor styles at a similar rate. It was also found in previous research that it is rare for people to have an equal proportion of each humor style (Fredriksson & Henrik, 2020; Martin et al, 2003). Thus, humor styles can vary depending on several variables such as personality traits, life experiences, and cultural factors (Fredriksson & Henrik, 2020; Martin et

al, 2003). For example, it has been shown in some research that self-defeating humor is less common in individuals who are able to cope with stress more effectively (Ak Seven, 2012; Ayduğ et al., 2018). Furthermore, given that individuals with a humorous perspective can manage negative emotions, it is stated that self-enhancing humor can be more frequently used within negative situations (Akça Erdoğan, 2018). However, people's humor styles may change in differing situations as well as when interacting with different types of people. To provide an example, people may use more of a relationship-building style of humor when with friends, while using more of a self-enhancing style of humor in other parts of their life (Oktuğ et al., 2018). For this reason, it is even argued in the related literature that it is rare for people to have an equal proportion of all humor styles, and that humor styles can vary depending on personality traits, life experiences, and cultural factors. In the current study, an opposite finding to the literature was found. The reason for this might be related to including children who had limited life experiences as well as had similar living conditions and SES. Therefore, a longitudinal study is needed to better explain how the balance of children's humor behaviors can change along with how these humor behaviors are shaped.

The second cluster created as a result of the analyses is called "only adaptive", and the children in this cluster showed higher affiliative and self-enhancing humor styles compared to others. Additionally, according to the findings from related literature, individuals with an adaptive humor style have a realistic perspective, have the ability to manage negative emotions, and tend to have better psychological health. The Relief Theory also supports this idea and argues that the sense of relaxation that relieves this tension is the primary element of humor, for example, people who get rid of unnecessary energy through laughter tend to relax (Güler & Güler, 2010). However, humor styles may vary from person to person and may be influenced by cultural factors (Ak Seven, 2012; Akça Erdoğan, 2018; Akdur & Durak Batıgün, 2017; Bag, 2021; Kara, 2014). Jiang et al. (2020). argue that adaptive and maladaptive humor styles have different reasons and consequences as well as meet different needs for each individual. For instance, whereas psychological well-being, better quality of life, and resilience are associated with affiliative and self-defeating humor (Jiang et al., 2020; McCullars et al., 2020; Scall, 2020), self-defeating and

aggressive humor have been found to be related to lower psychological well-being, hostility, and aggression (Jiang et al., 2020; Wang et al., 2022). Therefore, it is meaningful to display the patterns of adaptive humor styles (both affiliative and self-enhancing) together.

When it comes to the third cluster; different patterns are provided in terms of humor styles. In other words, children in the cluster called “adaptive but confused” have higher mean values for affiliative, self-enhancing, and self-defeating humor. The characteristics of this cluster are similar in some ways to the “only adaptive” cluster, but having a higher mean value in self-defeating humor is a distinguishing feature. Although self-defeating humor is characterized by self-deprecation and mocking one's own weaknesses, other humor styles are used for different purposes and can create a more harmonious and positive effect (Martin et al., 2003). For example, when similar studies are examined, it is possible to conclude that the self-defeating humor style has similar characteristics in terms of low self-esteem, low psychological well-being, disinhibition, and negative personality traits (Ford et al., 2016; Martin et al., 2003; Zeigler-Hill et al., 2016). In this regard, it is possible to conclude that there were contrary results in the current study. When we look at the aim of individuals to use a specific humor style, affiliative and self-defeating humor styles share common ground. According to Martin et al. (2003), both self-defeating and affiliative humor are used to enhance social relationships, however, the way of enhancing these relationships differs.

Whereas in self-defeating humor, individuals prefer to use humor at their own expense which harms them in various ways, affiliative humor develops relationships in a more positive manner (Zeigler-Hill et al., 2016). Thus, even though the literature does not provide similarities between self-defeating and self-enhancing humor due to their contrasting approaches, the similarity between affiliative and self-defeating humor in terms of their aim may be the source of having this cluster named “adaptive but confused”. Having a well-developed sense of humor which includes both adaptive and maladaptive humor styles can be beneficial for coping with stress and negative emotions (Wang et al., 2022). Thus, it can be argued that not only having a

specific humor style but also having a developed sense of humor is essential for using humor as an effective tool.

As a result, in the findings related to cluster analysis it was shown that children may exhibit different humor style patterns. Thus, to provide a broader explanation of children's humor behaviors, the characteristics of their humor styles should be investigated simultaneously, and in doing so, the clusters might aid in describing children's tendencies related to humor. It is clear that children's humor styles are influenced by several factors such as developmental factors, the social environment, and culture (James & Fox, 2019). As a result, due to these different sources which cause differences in humor styles, it may not be possible to describe children with only one humor style. Therefore, these clusters can better enhance an understanding of children's humor behaviors.

In conclusion, the quantitative data obtained with the scale developed in the current study revealed that several sources are needed when attempting to understand children's humor styles. Even if the current study aim was to develop a scale to investigate preschool children's humor styles, it was also important to discover possible relationships between different variables such as age, gender, and SES. In addition, individuals tend to exhibit each humor style rather than just having one specific humor style, and as a result, discovering the clusters created by humor styles can aid in developing a greater understanding of behavior patterns regarding children's humor styles. In this way, it could be possible to make more comprehensive and meaningful explanations regarding children's humor styles.

5.1. Conclusion

In the current study, the aim was to develop a valid and reliable scale for revealing preschool children's humor styles. In accordance with this aim, the "Pictorial Humor Styles Scale for Preschool Children" was improved by following the scale development steps suggested by DeVellis (2014), and in light of the Humor Styles Model developed by Martin et al. (2003). A pilot study was conducted in two cities located in Türkiye, Tokat and Ankara, with a total of 495 preschool children (150

children in Tokat and 345 children in Ankara) included in the study. Based on the results of exploratory and confirmatory analyses, it was concluded that the scale was valid and reliable for learning more about preschool children's humor styles. Moreover, data related to the demographics of children as well as their views regarding the scale items were collected through the scale application process. As a result, by using these data, correlational analyses, cluster analyses, and content analyses were conducted to develop a more comprehensive explanation of children's humor styles. First of all, it was determined in the correlational analyses that gender was correlated with affiliative and aggressive humor. Namely, girls tended to use affiliative humor more often compared to boys, whereas aggressive humor was more common among boys. Besides this, it was also determined that self-defeating humor was negatively correlated with the father's and mother's age. On the other hand, there were no correlations to age, socioeconomic status, parents' education level, the number of siblings, and/or gender.

Cluster analysis was also applied to the data to reveal possible humor style patterns along with the combinations of these among children. In other words, because all humor styles exist in all individuals at differing levels, it is not possible to have only one humor style (Martin et al., 2003). Thus, as a result of these analyses, three different clusters were created which exhibited different humor tendencies. These clusters were named "adaptive but confused, "only adaptive", and "balanced." Due to these clusters, humor style combinations that might be observed in children were presented, and as a result, clearer explanations of children's behaviors regarding their humor were revealed.

Overall, it is an inevitable fact that humor is associated with every aspect of life. Although humor is a concept that enters our lives from childhood, the way humor is used is the most important factor that determines the effect of humor within our lives. In this context, it is important to define and shape humor behaviors to increase the positive effect of humor and reduce its negative effect. Especially during the preschool period, where the foundations of many features such as attitude, belief, and character are established, revealing that our tendencies to be humorous can pave the way for using humor as an effective and useful method in our lives as we mature. As

a result, the current study provided a way to better investigate children's humor styles as well as create opportunities for parents, educators, researchers, and policymakers to learn more about children's humor styles along with arranging further approaches related to child development and education with regard to children's humor styles.

5.2. Limitations

The current study aimed to improve upon a scale for measuring preschool children's humor styles. Even if the validity and reliability of the scale were proven through statistical methods, there continued to be some limitations within the current study in terms of scale format, data collection process, and sample composition.

Since the scale was first developed for preschool children and these children have not yet learned to read and/or write, visuals were used instead of written question items. Additionally, these visuals were supported with a story that the children could follow without being distracted. Also, the children were asked to evaluate how funny the situations in the visuals were to them. However, using visuals in the scale may have affected the children's responses. This was due to the children possibly changing their answers due to characters' behaviors as part of the visuals as well as the characters' facial expressions. This may have corrupted the validity and reliability of the scale. As a result, to overcome this limitation, the data used with the prepared scale can be supported through other sources such as observations and interviews as well as the scale can be applied to different groups.

Another limitation of the study was related to the data collection process. The developed scale was applied through one-on-one interviews with children. For this reason, children's answers may have changed due to the presence of the researcher. In other words, children may have presented their answers in a way to gain approval of the researcher. Thus, to prevent this situation, the researcher attempted to create a bond of trust with the children by including play activities with the children prior to the scale being administered and did this as a means of establishing rapport with the children. However, since the time spent with the children was limited, this limitation was considered within the scope of the study.

The final limitation in this study related to the relationship with participants included within the study. For example, the research pilot study was conducted in Tokat, Türkiye, while Ankara, Türkiye was the preferred city in the main study. As a result, conducting the pilot and main study in two different cities may have caused uncontrolled factors that could have ultimately affected the results of the scale. This was due to the environmental conditions of children living in different cities which may have caused a change. Thus, to examine the results of the scale from different cities, the scale can be further tested as part of future studies.

5.3. Implications

With regard to the findings of the current study, some implications can be developed for parents, educators, researchers, and/or policy-makers. First of all, parents are most often the first individuals with whom children experience social relationships. Therefore, their attitudes, beliefs, and behaviors are extremely important in children's development, well-being, personality characteristics, and humor styles. On the other hand, without learning about the humor style tendencies of children, it could be impossible to determine the appropriate ways of supporting adaptive humor styles in children. For this reason, with the "Pictorial Humor Styles Scale for Preschool Children", parents are provided an opportunity to learn more about their child's humor tendencies as well as attempt to better support positive humor behaviors, and attempt to reduce maladaptive humor behaviors according to each child's needs. Additionally, by learning about their child's humor style tendencies, parents can discover the possible effect why their child has a specific humor style with regard to the parents' own characteristics, family background, and/or home environment. Thus, they can realize their own shortcomings and attempt try to determine means of creating a positive home atmosphere and healthy parent-child relationships.

After the family's impact, preschool education also has an undeniable influence on the development of children and their future maturation. In this regard, a variety of characteristics among children should be considered to provide a more suitable educational environment for children. Humor is an important concepts that should be

included within all educational environments. For children who are adept at creating play and humor, the most important task of the teacher is to provide child-focused activities and instruction as well as support children's play-humor initiatives. According to Mireault et al. (2012), encouraging children to play and initiate humor is the most important step in this process. For example, by taking part in a tea party and pretending to eat a delicious cake or by guessing the answer to a riddle and laughing at the children's funny games or by allowing children to play funny tricks, teachers' can support the initiation of children's humor and play (Loizou & Recchia, 2019). Furthermore, teachers and caregivers who behave in this way make children feel more comfortable about initiating play and turning boring tasks into fun activities. For example, a child that feels more comfortable ultimately becomes adept at both initiating play and generating humor. The more accepting and sensitive teachers are to children's attempts at humor, and the more they encourage play, the more they help children produce humor and take their play to higher levels of humor. Identifying children's humorous predispositions and preparing the educational environment to suit them can maximize the effectiveness of both the educational environment in terms of supporting play as well as the teacher-child relationship. For this reason, the scale developed in the current study can ultimately be a tool for teachers to improve the classroom environment along with getting to know their students better.

Apart from the changes that teachers make in their classrooms, policymakers should also contribute to these changes. For example, policymakers have a significant impact on getting to know the children as well as creating educational programs and classroom environments for them. For this reason, besides the systems used in getting to know children, the humor styles scale can be used as another way to get to know children and plan their education. Thus, in this context it can be useful for creating a more effective educational environment. Moreover, informing teachers about the use of humor in the classroom and developing behaviors toward children's humor styles can help teachers meet their needs in terms of knowing children and their humor styles. At this point, the importance of pre-service teachers should also not be ignored. For example, providing courses to improve the knowledge of pre-service teachers in this field can offer the necessary infrastructure for the effective

use of humor within the classroom along with meeting the needs of observing children's humor styles. As a result, this scale can be an effective tool and among the first steps taken regarding humor and humor styles within preschool education.

Final implications can be suggested for the researchers. For instance, researchers can provide guidance to families, educators, and policymakers as well as fill gaps within the field. In this respect, another aim of the current study was to contribute to and guide future studies. Due to this study being a scale development study, it can provide researchers a variety of benefits. First of all, although in this study, the developed scale was determined to be a valid and reliable in revealing preschool children's humor styles, applying the scale to preschool children within differing conditions such as in terms of demographics can be useful in testing the reliability and validity of the scale among various sample groups. Therefore, the first suggestion for researchers may be to administer the scale with different groups and with a greater number of participants.

Secondly, only having knowledge of specific humor styles is not enough for fully understanding them and/or planning the appropriate steps for improving humor styles. To achieve this, it is necessary to investigate concepts stated in the literature which may be related to the context of humor styles. Thus, the developed scale can also be used to investigate not only preschool children's humor styles but also their character traits, developmental factors, or environmental factors as they may be related to humor styles. Researchers may reveal existing relationships between humor styles and factors affecting these humor styles. Additionally, with these relationships, the developed scale can be used to test the effectiveness of educational approaches and/or programs which are planned and implemented in developing adaptive humor styles as well as providing solutions to reduce maladaptive humor styles. Also, by conducting multivariate analyses, a deeper understanding of other variables that could be related to a particular humor style can be investigated.

In addition to using the scale in different ways for future studies, findings related to the correlation and cluster analyses, can be utilized as a source of information. This is why the analyses in the current study revealed that a humor style is a complex

issue and needs to be examined through various sources. Every child is unique and even if they show similar patterns in quantitative analyses, the reasons for their behaviors can change. Therefore, supporting the findings by including observation and interviews can also be a beneficial way to develop a better understanding of children's humor styles within future studies.

To conclude, the importance of humor in human life is an undeniable fact. Unfortunately, there is a gap in the literature in terms of studies defining children and their humor and humor styles. Importantly, children are the adults of the future, and as a result, due to an increase in the importance given to humor and humor styles by families, educators, policymakers, and researchers; it can affect the development, learning, and well-being of children, and every attempt to improve upon them is vital. From this perspective, "Pictorial Humor Styles Scale for Preschool Children" might be the first step to describing humor styles of children, and develop implications for the stockholders related to children.

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APPENDICES

A. PARENT CONSENT FORM

Tarih

Sayın Veli,

Orta Doğu Teknik Üniversitesi, Okul Öncesi Eğitim Bölümünde doktora öğrencisiyim. "Erken Çocukluk Dönemi Çocukları için Resimli Mizah Tarzları Ölçeğinin Geliştirilmesi" başlıklı bu doktora tezi kapsamında 60-72 ay-grubu çocuklarının mizah tarzlarını belirlemek üzere ölçek uygulanacaktır.
Bu formun yollanış amacı çocuğunuzun çalışmamıza katkı sağlaması konusunda onayınızı almaktır. Çalışmamızın amacı okul öncesi dönem çocuklarının mizah tarzları konusunda bilgi toplamaktır. Toplanan bilgiler eğitimcilere, ailelilere ve araştırmacılara mizahı eğitime ne şekilde dahil edilebileceği konusunda çıkarımlar yapılabileceği de tartışılacaktır. Bu durum sınıf ortamının iyileştirilmesi, sınıf yönetimine mizahın dahil edilmesi gibi konularda da öğretmenlere yol göstereceğinden çocukların gelişimi ve öğrenmesi de desteklenmiş olur.
Çalışma sürecinde çalışmaya katılan çocuklar ile mizah tarzları ölçeği uygulanacaktır. Bu süreç yaklaşık 10 dakika ile sonlanacaktır. Görüşme sırasında verilerin eksiksiz aktarımını sağlamak için ses kaydı kullanılacak ve bu ses kaydı yalnızca araştırmacı tarafından kullanılacaktır.
Çalışmada elde edilen veriler bilimsel amaçlarla kullanılacak olup katılımcıların gizliliği korunacaktır. Katılımcılardan isimleri yerine kodlama kullanılacak ve yaş bilgisi haricinde herhangidir kimlik bilgisi talep edilmeyecektir
Çalışmaya katılım gönüllülük esasına bağlıdır. Velilerden alınan onay formunun yanı sıra çocukların da sözlü onayı doğrultusunda çalışmaya başlanacaktır. Arzu edildiği takdirde, herhangi bir yaptırıma maruz kalmadan katılımdan vazgeçme hakkı katılımcılara sunulacaktır.
Çalışmaya ya da çocuğunuzun katılımına yönelik daha fazla bilgi için aşağıda iletişim bilgileri bulunan
Betül YILMAZ ÇAM'a ulaşabilirsiniz.
Teşekkür Ederim,

Betül YILMAZ ÇAM
İmzası

Yukarıda açıklamasını okuduğum çalışmaya, oğlum/kızım _____'nin katılımına izin veriyorum. Ebeveynin:

Adı, soyadı: _____ İmzası: _____ Tarih:
Çocuğunuzun katılımı ya da haklarının korunmasına yönelik sorularınız varsa ya da çocuğunuz herhangi bir şekilde risk altında olabileceğine, strese maruz kalacağına inanıyorsanız Orta Doğu Teknik Üniversitesi Etik Kuruluna (312) 210-7348 telefon numarasından ulaşabilirsiniz.

B. STATEMENTS RELATED TO PICTURES
(Turkish and English Versions)

Items related to Self-Enhancing Humor Style

1. The character laughs at himself/herself (The character laughs by looking at his/her childhood pictures /the character laughs at the singing animals in the picture he/she made).

2. In annoying situations, the character finds a point to amuse himself. (The child whose milk spills on the floor laughs at the shape the milk makes on the floor. The child who falls to the ground laughs at himself. /The child who gets paint on his face laughs looking at it / The child whose clothes look strange because they are wet pretends to discover fish under the sea by making a game out of this situation.)

3. In a challenging situation, the character finds a point to entertain himself/herself (The character has difficulty throwing the basketball into the hoop, but tries to throw the ball by imitating animals/rabbits while jumping).

4. In a scary situation, the character finds a point to amuse himself. (The boy who is afraid of the dark is laughing by singing a funny song / making funny shadow movements.)

5. In an awkward situation, the character finds a point to amuse himself. (The character laughs at himself for accidentally putting dry paint on his watercolor palette.)

Items related to Affiliative Humor Style

1. The character jokes and laughs when he/she is with others. (The child makes jokes/imitates animals while playing with his/her friends to make them laugh.)

2. The character makes others laugh by telling his/her funny memories. (The child tells his/her friends about the bag he/she saw on the floor the day before and was scared because he/she thought it was a cat.)

3. The character makes others happy by making them laugh. (The child pretends to be in a car to go fast in a game where they have to run with their friends.)

4. The character finds funny things when he/she is with others. (The child makes the clouds in the sky look like animals and make them talk while sitting with his/her friends./The child makes his/her friends laugh by drawing a dog eating with a fork in the picture they drew with him/her.)

Items related to Self-Defeating Humor Style

1. The character is unhappy when others laugh at him/her. (The child who fell down is sad when his/her friends laugh at him/her.)

2. The character does strange things to make his friends laugh (The child makes strange noises and makes strange facial expressions to make his friends laugh).

3. The character makes jokes about his/her weaknesses and weaknesses. (The child laughs at himself/herself when the tree picture he/she draws is not like his/her friends' /The child with glasses makes fun of his/her glasses in front of his/her friends.)

4. The character pretends to be happy when he/she is sad (The child whose toy falls on the ground and breaks is still acting happy. (The child who is sad because he/she misses his/her mother pretends to be happy instead of sharing this with his/her friends.)

5. The character does not interfere with his/her friends laughing at him/her even though he/she is not happy about it. (The child who is sad because food spilled on him/her does not stop his/her friends laughing at him/her.)

Items related to Aggressive Humor Style

1. The character makes jokes that may disturb others. (The child laughs by taking his/her friend's crayon and throwing it on the floor. / The child laughs by scribbling on his friend's picture.)

2. The character makes jokes that hurt others' feelings. (The boy makes fun of his friend for breaking his favorite toy.)

3. The character laughs at others' mistakes (The child laughs at his friend for not hitting the target with the ball).

4. The character laughs at others' weaknesses. (The boy laughs at his friend for not being able to run fast.)

5. The character laughs at a friend in the group who is different to him/her/they have difficulty getting along with. (The child jokes and laughs about the hair of his/her friend who is the only one with blond hair in the group.)

6. The character makes jokes that make his/her friends in the group look weird/weird. (The child makes his/her friend look weird by throwing pieces of paper in his/her hair and laughs)

RESİMLERLE İLGİLİ İFADELER

Kendini Geliştiren Mizah Tarzı ile ilgili öğeler

1. Karakter kendi kendine güler. (Karakter kendi çocukluk resimlerine bakarak güler./karakter yaptığı resimdeki şarkı söyleyen hayvanlara güler.)

2. Can sıkıcı durumlarda karakter kendini eğlendirecek bir nokta bulur. (Sütü yere dökülen çocuk sütün yerde oluşturduğu şekle gülüyor. Yere düşen çocuk kendine gülüyor. /Yüzüne boya bulaşan çocuk buna bakarak gülüyor/ Kıyafetleri ıslandığı için garip görünen çocuk bu durumu oyunlaştırarak deniz altında balıkları keşfediyor gibi davranıyor.)

3. Zorlu bir durumda karakter kendini eğlendirecek bir nokta bulur. (Karakter basketbol topunu potaya atarken zorluk yaşamasına rağmen zıplarken hayvan/tavşan taklitleri yaparak topu atmaya çalışıyor.)

4. Korkutucu bir durumda karakter kendini eğlendirecek bir nokta bulur. (Karanlıktan korkan çocuk komik şarkı söyleyerek / komik gölge hareketleri yaparak gülüyor.)

5. Tuhaf bir durumda karakter kendini eğlendirecek bir nokta bulur. (Karakter sulu boya paletine yanlışlıkla kuru boya sürdüğü için kendine gülüyor.)

Affiliative Humor Style ile ilgili öğeler

1. Karakter başkaları ile birlikteyken şakalar yapıp güler. (Çocuk arkadaşları ile oyun oynarken onları güldürecek hareketler/hayvan taklitleri yapıyor.)

2. Karakter komik anılarını anlatarak başkalarını güldürür. (Çocuk bir önceki gün yerde gördüğü poşeti kedi sanıp korktuğunu arkadaşlarına anlatıyor.)

3.Karakter başkalarını güldürerek mutlu olur. (Çocuk arkadaşlarına komik taklit yapıyor./Çocuk arkadaşları ile koşmaları gereken oyunda hızlı gitmek için arabadaymış gibi davranıyor.)

4. Karakter başkaları ile birlikteyken komik şeyler bulur. (Çocuk arkadaşları ile otururken gökyüzündeki bulutları hayvanlara benzetip onları konuşturuyor./ çocuk arkadaşları ile çizdikleri resimde çatal ile yemek yiyen bir köpek çizerek onları güldürüyor.)

Kendini Yıkıcı Mizah Tarzı ile ilgili öğeler

1. Karakter başkaları ona güldüğünde mutsuz olur. (Yere düşen çocuk arkadaşları ona güldüğünde üzülüyor.)

2. Arkadaşlarını güldürmek için tuhaf şeyler yapar. (Çocuk arkadaşlarını güldürmek için tuhaf sesler çıkarıp tuhaf yüz ifadeleri yapar.)

3. Karakter kendi zayıflıkları ve güçsüz yanları ile ilgili şakalar yapar. (Çizdiği ağaç resmi arkadaşlarınınki gibi olmayınca kendisine gülüyor /Gözlüklü çocuk arkadaşlarının yanında kendi gözlüğü ile dalga geçiyor.)

4. Karakter üzgün olduğu durumlarda mutluymuş gibi davranır (Yere oyuncağı düşüp kırılan çocuk yine de mutlu davranıyor.(Annesini özlediği için üzgün olan çocuk bunu arkadaşları ile paylaşmak yerine mutlu gibi davranıyor.)

5. Karakter bu durumdan memnun olmasa da arkadaşlarının ona gülmesine müdahale etmez. (Üzerine yemek döküldüğü için üzülen çocuk ona gülen arkadaşlarına engel olmuyor.)

Agresif Mizah Tarzı ile ilgili öğeler

1. Karakter başkalarını rahatsız edebilecek şakalar yapar. (Çocuk arkadaşının boya kalemini alıp yere atarak gülüyor. / Çocuk arkadaşının resmini karalayarak gülüyor.)

2. Karakter başkalarının duygularına zarar verecek şakalar yapar. (Çocuk arkadaşının en sevdiği oyuncağı kırıldığı için onunla dalga geçiyor.)

3. Karakter başkalarının hatalarına güler. (Çocuk arkadaşına topla hedefi vuramadığı için gülüyor.)

4. Karakter başkalarının zayıf yönlerine güler. (Çocuk arkadaşına hızlı koşamadığı için gülüyor.)

5. Karakter grup içinde ona farklı gelen/ anlaşmakta zorluk çektiği arkadaşına güler. (Çocuk grup içinde tek sarı saçlı olan arkadaşının saçlarıyla ilgili şaka yapıp gülüyor.)

6. Karakter grup içindeki arkadaşlarını tuhaf-garip gösterecek şakalar yapar. (Çocuk arkadaşının saçına kâğıt parçaları atarak onun garip görünmesini sağlıyor ve gülüyor)

C. SCALE (Turkish and English Versions)

*The example items ofr each humor styles are provided below. To reach the full version of the scale, it is required to contact the author.

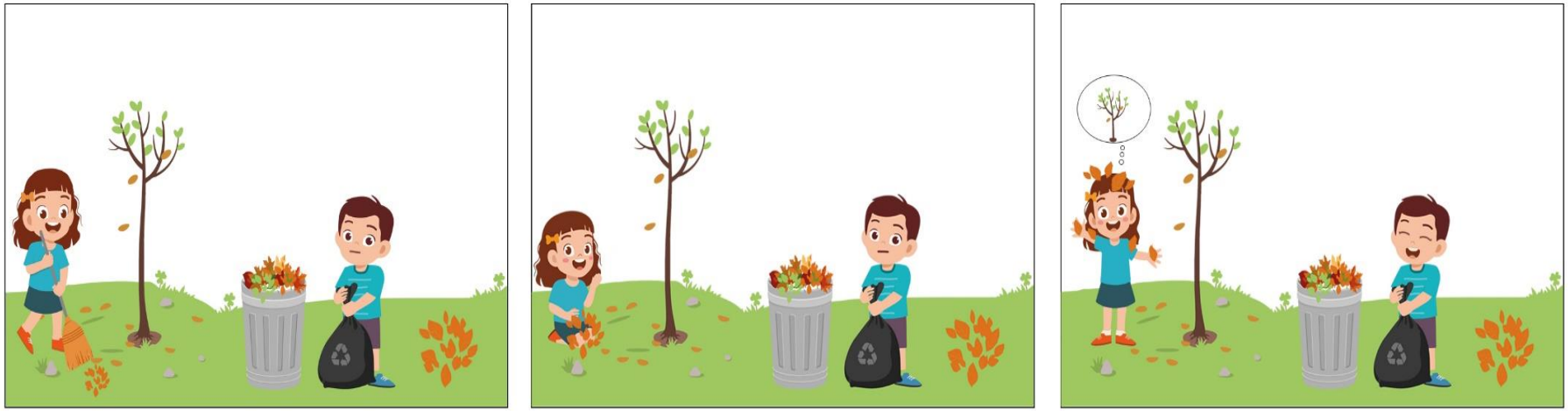
Our Memory Book

INTRODUCTION

Hello children. Today I am going to introduce you to my friends who all go to the same class and play together every day. They told me about the things that happened to them. But I was very confused when I listened to them. So I drew pictures of what happened to them to get your opinion. Now we will look at these pictures together and I will ask you questions. But before we start, let me introduce my friends.

ALİ **ECE** **METE** **AYŞE**

After watering the flowers, they started collecting leaves from the garden. But Ali was very bored while doing this. Seeing that he was bored, Ayşe pretended to be a tree by putting the leaves in her hair and made Ali laugh.

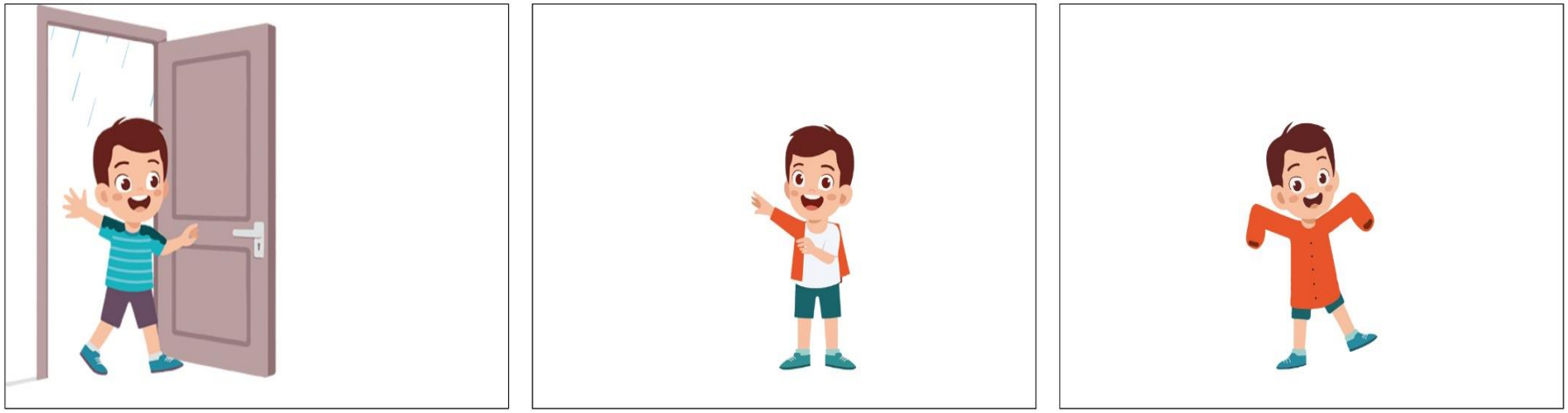


How much funny do you think this situation is?

The next day Ali and his father came to school, but Ali cried a little when he left his father. Ayşe told her classmates that Ali was crying and they all looked at Ali and started laughing.

How much funny do you think this situation is?

Because Ali was wet, he went home and quickly put on a sweater. When Ali looked at himself, he realized that the sweater was too big for him. Realizing that this sweater belonged to his brother, Ali started laughing thinking about his mistake.



How much funny do you think this situation is?

That day Ali wanted to build big towers. But Ayşe seeing him, demolished one of the towers Ali had built. Ali was very sad at first. But when he saw his friends laughing, he demolished the other tower himself and started laughing.

How much funny do you think this situation is?

And at the end of the day, all the children went home. When they went to bed in the evening, they fell asleep thinking about what they would experience the next day.

THE END

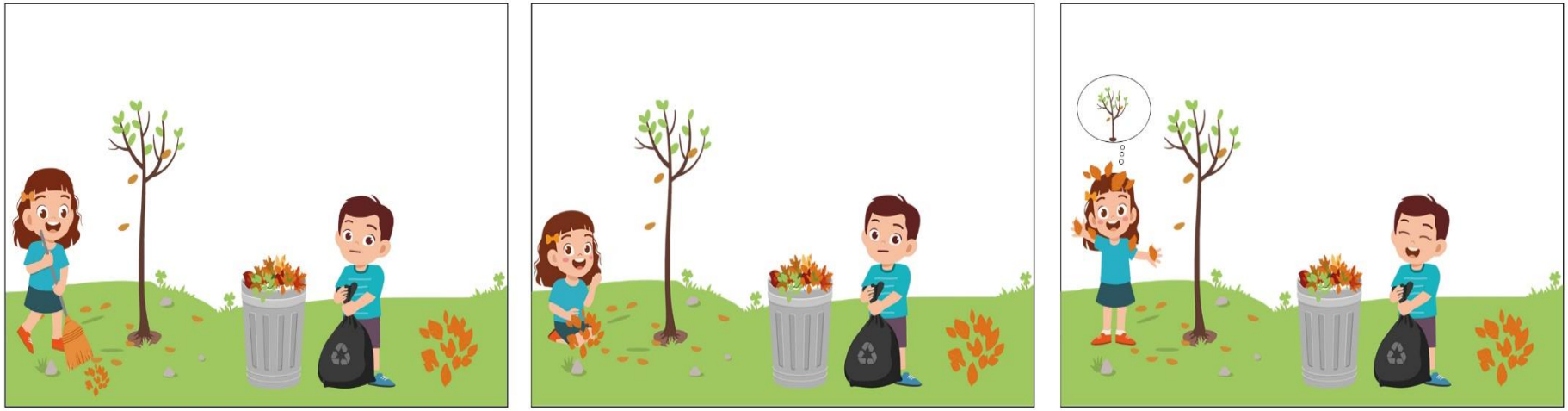
Anı Defterimiz

GİRİŞ

Merhaba çocuklar. Bugün sizinle arkadaşlarımı tanıştıracağım. Bu arkadaşlarımın hepsi aynı sınıfa gidiyor ve her gün birlikte oyunlar oynuyorlar. Bana başlarına gelen olayları anlattılar. Ama onları dinlerken kafam çok karıştı. Bu yüzden sizin fikirlerinizi almak için bu başlarına gelen olayların resimlerini çizdim. Şimdi birlikte bu resimlere bakacağız ve size sorular soracağım. Ama başlamadan önce size arkadaşlarımı tanıtayım.

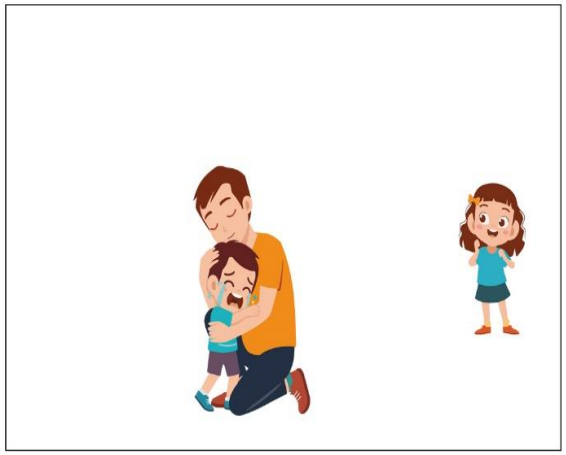
ALİ **ECE** **METE** **AYŞE**

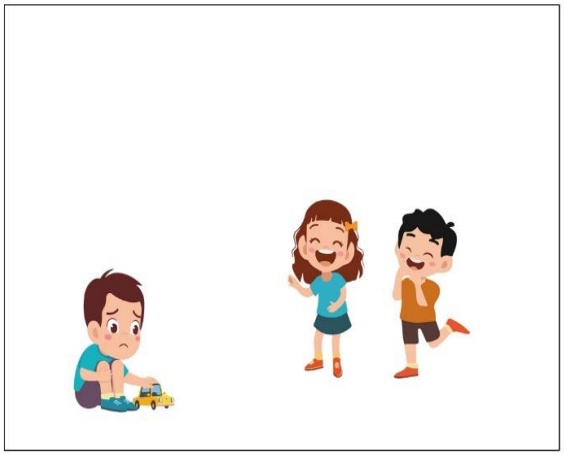
Çiçekleri suladıktan sonra bahçedeki yaprakları toplamaya başlamışlar. Ama Ali bunu yaparken çok sıkılmış. Onun sıkıldığını gören Ayşe, yerdeki yaprakları saçlarına koyarak ağaç taklidi yapmış ve Ali'yi güldürmüş.



Sence bu durum ne kadar komik?

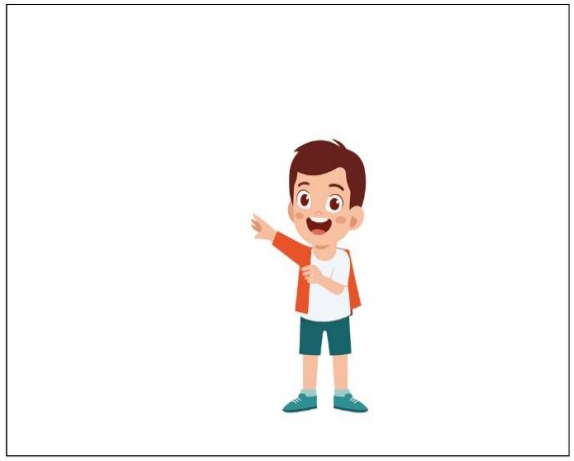
Ertesi gün Ali ve babası okula gelmişler ama Ali babasından ayrılırken biraz ağlamış. Ayşe ise sınıftaki arkadaşlarına Ali'nin ağladığını anlatmış ve hep birlikte Ali'ye bakarak gülmeye başlamışlar.

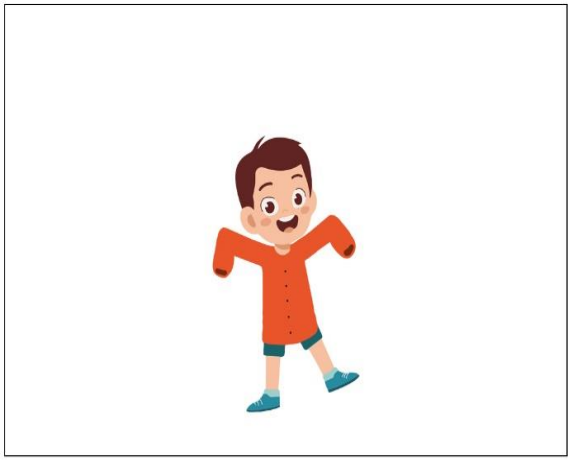




Sence bu durum ne kadar komik?

Ali üzeri ıslandığı için hemen eve gitmiş ve hızlıca bir kazak giymiş. Ali kendisine baktığında kazağın ona büyük geldiğini görmüş. Bu kazağın abisine ait olduğunu fark eden Ali yaptığı hatayı düşünerek gülmeye başlamış.





Sence bu durum ne kadar komik?

O gün Ali büyük kuleler yapmak istiyormuş. Ancak onu gören Ayşe Ali'nin yaptığı kulelerden birini yıkmış. Ali önce çok üzülmüş. Ama arkadaşlarının güldüğünü görünce diğer kulesini de kendi yıkıp gülmeye başlamış.

Sence bu durum ne kadar komik?

Ve gün sonunda tüm çocuklar evlerine gitmişler. Akşam yataklarına girdiklerinde bir sonraki gün yaşayacakları şeyleri düşünerek uykuya dalmışlar.

SON

D. DEMOGRAPHIC INFORMATION FORM

Çocuğun Bilgileri:	
Doğum tarihi:	
Cinsiyet:	
Okulun adı:	
Kardeş sayısı:	
Kardeşlerin cinsiyeti:	
Annenin yaşı:	
Annenin eğitim seviyesi:	
Annenin mesleği:	
Babanın yaşı:	
Babanın eğitim seviyesi:	
Babanın mesleği	
Ailenin gelir düzeyi	

E. APPROVAL OF THE METU HUMAN SUBJECTS ETHICS COMMITTEE

UYGULAMALI ETİK ARAŞTIRMA MERKEZİ
APPLIED ETHICS RESEARCH CENTER

ORTA DOĞU TEKNİK ÜNİVERSİTESİ
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07 NİSAN 2023

Konu: Değerlendirme Sonucu

Gönderen: ODTÜ İnsan Araştırmaları Etik Kurulu (İAEK)

İlgi: İnsan Araştırmaları Etik Kurulu Başvurusu

Sayın Prof. Dr. Feyza TANTEKİN ERDEN

Danışmanlığını yürütmüşünüz Betül YILMAZ ÇAM'ın **"Okul Öncesi Dönem Çocukları İçin Resimli Mizah Tarzları Ölçeğinin Geliştirilmesi"** başlıklı araştırması İnsan Araştırmaları Etik Kurulu tarafından uygun görülerek **0159-ODTÜİAEK-2023** protokol numarası ile onaylanmıştır.

Bilgilerinize saygılarımla sunarım.

Prof. Dr. Ş. Halil TURAN
Başkan

Prof.Dr. İ.Semih AKÇOMAK
Üye

Doç. Dr. Ali Emre Turgut
Üye

Doç.Dr. Şerife SEVİNÇ
Üye

Dr. Öğretim Üyesi Murat Perit ÇAKIR
Üye

Dr. Öğretim Üyesi Süreyya ÖZCAN KABASAKAL
Üye

Dr. Öğretim Üyesi Müge GÜNDÜZ
Üye

F. ETHICAL PERMISSION FROM THE MINISTRY OF NATIONAL EDUCATION

T.C.
MİLLÎ EĞİTİM BAKANLIĞI
Temel Eğitim Genel Müdürlüğü

Sayı : E-70297673-605.01-76060929 11.05.2023
Konu : Araştırma İzin Talebi
(Betül YILMAZ ÇAM)

ORTA DOĞU TEKNİK ÜNİVERSİTESİ REKTÖRLÜĞÜNE
(Öğrenci İşleri Daire Başkanlığı)

İlgi : a) Bilâ tarihli ve 54850036-044-E.377 sayılı yazınız.
b) Millî Eğitim Bakanlığının 21.01.2020 tarihli ve 1563890 Sayılı Araştırma Uygulama izinleri 2020/2 Nolu Genelgesi.

Üniversitenizin Temel Eğitim Anabilim Dalı Okul Öncesi doktora programı öğrencisi Betül YILMAZ ÇAM, Prof. Dr. Feyza TANTEKİN ERDEN'in danışmanlığında yürütmekte olduğu "Okul Öncesi Dönem Çocukları İçin Resimli Mizah Tarzları Ölçeğinin Geliştirilmesi" konulu anket çalışma talebine ilişkin ilgi (a) yazısı ve ekleri Genel Müdürlüğümüzce incelenmiştir.

Söz konusu araştırmanın eğitim ve öğretimi aksatmayacak şekilde gönüllülük esasına dayalı olarak uygulanması, uygulamalarda sadece yazımız ekinde gönderilen yer alan mühürlü formların kullanılması ve elde edilen kişisel verilerin gizliliğine dikkat edilmesi gerekmektedir. Bu çerçevede araştırmanın Genel Müdürlüğümüze bağlı okullarda yürütülmesi uygun görülmüştür.

Bilgilerini ve gereğini rica ederim.

Burcu DAĞITAN
Bakan a.
İzleme ve Değerlendirme Daire Başkanı V.

Ekler: Mühürlü Formlar

Dağıtım:
Gereği :
Orta Doğu Teknik Üniversitesi Rektörlüğüne
(Öğrenci İşleri Daire Başkanlığı)

Bilgi:
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(İl Millî Eğitim Müdürlüğü)

Bu belge güvenli elektronik imza ile imzalanmıştır.

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G. PLAY ACTIVITY USED BEFORE THE SCALE APPLICATION

Find the Toy Activity

In this activity, the teacher brings the puppets of the characters in the scale and says that "Hello children, today I am here to introduce my friends to you. They are Ali, Ayşe, Ece and Mete. There are friends who are going to the same school and play activities together. However, there is one play that they love the most. What do you think it is?" In this way, the researcher took children's attention to the characters and start a conservation about their favorite play activities. When children share their ideas, the researcher says that "Children, the name of the play is 'Find my toy'. Have you ever played this play?" Again, the researcher gives time to children to talk and share ideas. In this way, the researcher aims to develop connections. When all children share their ideas, the researcher introduces the play. In the game, the researcher wants children to think about their favorite toy in the classroom, but not tell. Thus, the researcher asks children to bring their favorite toys and sit in the circle. After all, children are ready, the researcher asks children to introduce their toys to friends. After that, the researcher says "Now, you should keep the friends' toys in your mind." When all children look at their friends' toys, the researcher say that she starts to count to 10 and want children to walk around the classroom. When she says 10, she wants children to exchange their toys with the friend who is the nearest. This process can continue for a few times when the researcher is sure that all children change their toys. After that when all children have different toys, the researcher asks children to think of the first owner of the toy that they currently have. When they share their estimations, other children can give clues. When the child finds the first owner of the toy, the researcher asks some questions about the toy's first owner friend such as "What might be your friends' favorite color/fruit/vegetable/cartoon/book?" with these questions, children can make estimations about each other and develop interaction. The researcher not only manages the process but also participates in the play. So, children can also make

estimations about the researcher and she may develop a relationship. When all children make their sharing, the researcher tells that “Children, this is the favorite play of the children that I have introduced to you. They also told me about different plays and events that they experience in the classroom. But some of them made me confused. Thus, I prepare a book that has their stories. Now, I want to ask questions about them. Let’s look at my story.” After this explanation, the researcher tells the children that she calls them one by one and show them the place where she tells the story, so children can visualize the story reading time in their minds and feel comfortable in the process.

H. ITEM CORRELATION MATRIX

	Affilia tive1	Affiliati ve2	Affiliati ve3	Affiliati ve4	Affiliati ve5	Aggressi ve1	Aggressi ve2	Aggressi ve3	Aggressi ve4	aggressi ve5	Selfenhanci ng1	Selfenhanci ng2	Selfenhanci ng3	Selfenhanci ng4	Selfenhanci ng5	Selfdefeati ng1	Selfdefeati ng2	Selfdefeati ng3	Selfdefeati ng4	Selfdefeati ng5
Affiliative1	1,000	,271	,360	,384	,405	,153	-,017	,040	,051	,002	,254	,175	,161	,226	,226	,054	,123	,019	,094	-,004
Affiliative2	,271	1,000	,358	,274	,401	,074	,114	-,053	,073	-,070	,254	,202	,318	,182	,277	,071	,075	,186	,081	,135
Affiliative3	,360	,358	1,000	,413	,479	,256	,179	,280	,213	,162	,327	,435	,480	,341	,385	,230	,064	,212	,108	,182
Affiliative4	,384	,274	,413	1,000	,320	,103	,066	,178	,086	,028	,237	,267	,276	,186	,260	,228	,096	,071	,010	-,007
Affiliative5	,405	,401	,479	,320	1,000	,128	,100	,078	,202	,176	,204	,238	,234	,206	,205	,157	,067	,074	,166	,117
Aggressive1	,153	,074	,256	,103	,128	1,000	,530	,454	,597	,531	,169	,056	,035	-,012	,119	,051	,282	,109	,216	,048
Aggressive2	-,017	,114	,179	,066	,100	,530	1,000	,430	,470	,489	,104	,050	,074	-,059	,091	,084	,155	,046	,209	,047
Aggressive3	,040	-,053	,280	,178	,078	,454	,430	1,000	,460	,460	,312	,234	,218	,179	,165	,233	,242	,291	,228	,150
Aggressive4	,051	,073	,213	,086	,202	,597	,470	,460	1,000	,533	,108	,075	,017	-,037	,033	,062	,249	,048	,130	,021
aggressive5	,002	-,070	,162	,028	,176	,531	,489	,460	,533	1,000	,175	,151	,055	,102	-,011	,023	,075	,083	,184	,077
Selfenhancing 1	,254	,254	,327	,237	,204	,169	,104	,312	,108	,175	1,000	,481	,437	,317	,318	,270	,100	,261	,199	,206
Selfenhancing 2	,175	,202	,435	,267	,238	,056	,050	,234	,075	,151	,481	1,000	,407	,389	,428	,326	,218	,403	,276	,401
Selfenhancing 3	,161	,318	,480	,276	,234	,035	,074	,218	,017	,055	,437	,407	1,000	,501	,372	,252	-,015	,310	,207	,284
Selfenhancing 4	,226	,182	,341	,186	,206	-,012	-,059	,179	-,037	,102	,317	,389	,501	1,000	,411	,172	,065	,306	,084	,243
Selfenhancing 5	,226	,277	,385	,260	,205	,119	,091	,165	,033	-,011	,318	,428	,372	,411	1,000	,230	,227	,286	,139	,246
Selfdefeating 1	,054	,071	,230	,228	,157	,051	,084	,233	,062	,023	,270	,326	,252	,172	,230	1,000	,305	,427	,387	,468
Selfdefeating 2	,123	,075	,064	,096	,067	,282	,155	,242	,249	,075	,100	,218	-,015	,065	,227	,305	1,000	,373	,466	,358
Selfdefeating 3	,019	,186	,212	,071	,074	,109	,046	,291	,048	,083	,261	,403	,310	,306	,286	,427	,373	1,000	,473	,711
Selfdefeating 4	,094	,081	,108	,010	,166	,216	,209	,228	,130	,184	,199	,276	,207	,084	,139	,387	,466	,473	1,000	,514
Selfdefeating 5	-,004	,135	,182	-,007	,117	,048	,047	,150	,021	,077	,206	,401	,284	,243	,246	,468	,358	,711	,514	1,000

I. CURRICULUM VITAE

PERSONAL INFORMATION

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EDUCATION

Degree	Institution	Year of Graduation
PhD	METU Elementary and Early Childhood Education	2023
MS	METU Early Childhood Education	2019
BS	METU Early Childhood Education	2016
High School	Gaziosmanpaşa Kız Meslek ve Anadolu Meslek Lisesi, Ankara	2013

WORK EXPERIENCE

Year	Place	Enrollment
2017- Present	Tokat Gaziosmanpaşa University	Research and Teaching Assistant

FOREIGN LANGUAGES

Advanced English

PUBLICATIONS

Master Thesis

Yılmaz, B. (2019). *Examining humor in the early childhood period from teacher and child aspects.* [Master Thesis]. Middle East Technical University.

Peer-Reviewed Journal Papers

Çam, B., (2023). An investigation of the relationship between early childhood teachers' classroom management profiles and humor styles. *Journal of Teacher Education and Educators, 12*(1), 29-52. https://dergipark.org.tr/en/pub/jtee/issue/77184/1198384

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Aksoy, P. & Yılmaz, B. (2021). Karakter Gelişiminde ve Eğitiminde Aile, Okul ve Çevre. In A. Yıldırım (Eds.) *Karakter Gelişiminde ve Eğitiminde Aile, Okul ve Çevre* (pp. 50-92). Pegem Akademi

Conference Presentations

Tonga, F. E., Sevinç, E. & Yılmaz, B. (2018). PISA'da başarı gösteren ülkelerin eğitim programlarının değerler eğitimi açısından incelenmesi. Paper presented at *The Third International Congress on Values Education*, Zonguldak

Erden, F., & Yılmaz, B. (2018). Preservice Early Childhood Teachers' Attitudes towards Values Education. Paper presented at *17th Primary Teacher Education Symposium,* Kızılcahamam

Sevinç, E., Yılmaz, B., & Tonga, F. E. (2018). Pre-service and in-service early childhood education teachers' views on physical activity: knowledge, practice and teacher role. Paper presented at *Vth International Eurasian Educational Research Congress,* Antalya.

Yılmaz, B., Tonga, F. E. & Sevinç, E. (2018). Examining the studies including in-service early childhood teachers' personal factors affecting classroom management. Paper presented at *17th Primary Teacher Education Symposium,* Kızılcahamam.

Aksoy, P., Yılmaz, B., & Canaslan B. (2017). Okul öncesi dönemde oyun içerikli deneysel çalışmaların incelenmesi: derleme bir çalışma. Paper presented at *Eyfor-8 Uluslararasi Eğitim Yönetimi Forumu*, Ankara

RESEARCH INTERESTS

Humor in Early Childhood Education
Values Education in Early Childhood Education
Classroom Management in Early Childhood Education
WPCK in Early Childhood Education

J. TURKISH SUMMARY / TÜRKÇE ÖZET

OKUL ÖNCESİ DÖNEM ÇOCUKLARI İÇİN RESİMLİ MİZAH TARZLARI ÖLÇEĞİNİN GELİŞTİRİLMESİ

GİRİŞ

Yaygın bir Amerikan deyişine göre, "kahkaha en iyi ilaçtır". Mizahın insanların yaşamları üzerinde nasıl bir etkiye sahip olabileceğini anlamak için bu cümle farklı açılardan incelenebilir. Yani mizah, övgüye değer bir özellik ve yaşamdaki zorluklarla başa çıkmanın olumlu bir yolu olarak görülmektedir (Berk, 2015). Örneğin, bazı araştırmacılar mizahı bir ego savunması olarak tanımlarken (Vaillant, 2000), diğer bazı çalışmalar mizahı psikolojik iyi oluş (Kuiper ve McHale, 2009) ve depresyonla başa çıkma (Frewen, Brinker, Martin ve Dozois, 2008) için bir araç olarak tanımlamaktadır. Mizahın işlevine ilişkin psikolojik açıklamalara ek olarak Martin, Puhlik-Doris, Grey, Larsen ve Weir (2003) mizahın bilişsel yetenek, estetik bir tepki ve bir kişilik özelliği olarak tanımlanabileceğini belirtmektedir. Mizahla ilgili bu tanımlara ek olarak Martin ve arkadaşları (2003), mizah tepkilerinde ve insanlar arasındaki iletişimde mizahı kullanma yollarındaki bireysel farklılıkları da fark etmiştir. İnsanlar olumlu mizah kullandıklarında mizahın olumlu etkilerini deneyimleseler bile, sosyal bağlara ya da kişinin psikolojik uyumuna zarar verebilecek mizah davranışları da olabilmektedir. Dolayısıyla Martin ve arkadaşlarının geliştirdiği Mizah Tarzları Anketi'nin (HSQ) çıktılarına göre, uyumlu ve uyumsuz mizah tarzları vardır ve insanların ne tür mizah tarzlarına sahip oldukları mizahın insan yaşamındaki çıktılarını olumlu ya da olumsuz açıdan etkilemektedir.

Uyumlu mizah tarzlarını kullanmak, düşük kaygı düzeyiyle gerçekçi bir bakış açısına sahip olmayı destekleyebilecek bir savunma mekanizması olarak görülebilirken, uyumsuz mizah tarzları kişinin ihtiyaçlarını görmezden gelmesine ve olumsuz

duygularını bastırmasına neden olan savunmacı bir inkâr olarak insanlara hizmet edebilir. Sonuç olarak, Martin ve arkadaşlarına (2003) göre, insanların ne tür mizah davranışları sergilediğiyle ilgili eğilimler, kişinin bilinçaltının bir ifadesidir.

Yetişkinler kadar çocuklar da mizahı anlar, takdir eder ve üretirler (Southam, 2005). Ancak gelişimsel özelliklerine bağlı olarak, takdir ettikleri mizah türü ya da mizahı üretme biçimleri farklılık gösterebilir (Lampert, 2014). McGhee (1971), mizah gelişimini bilişsel becerilerdeki değişimlerle açıklar ve şöyle der: "Mizah, çocuğun oyunculuğu yakın zamanda ustalaştığı fikirlere ve imgelere, ayrıca nesnelerle açık oyunlara uzandıkça gelişir. Kendi kendilerini yönlendirdikleri oyunlarında bu tür deneyimleri anlamlandırabilir ve mizah girişimlerinde bu bilişsel uyumsuzluklara dikkat çekmekten zevk alırlar" (s. 61). Bergen (2019) oyunu mizah davranışları için önemli bir kaynak olarak tanımlamakta ve çocukların mizahi girişimlerinin oyun sırasında gözlemlendiğini ve yetişkinlerin bu mizahi davranışlara yönelik tepkilerinin çocukların mizah davranışlarını azalttığını/arttırdığını ya da şekillendirdiğini savunmaktadır.

Çocuklar mizahı yetişkinlere kıyasla farklı şekillerde deneyimleseler de, mizahi deneyimlerde bulunma biçimleri ya da mizahi davranışları birbirlerinden farklılık gösterebilir. Yetişkinlere benzer şekilde, uyumlu ya da uyumsuz mizah davranışlarını kullanmanın sonuçları çocuklarda da sosyal ilişkiler ve psikoloji açısından farklı sonuçlar doğurmaktadır (Klein & Kuiper, 2006). Örneğin, küçük düşürücü şakalar yapmakla ilgili olan kendini aşağılayıcı mizaha sahip olmak, içsel muhtaçlığın ve düşük özsaygının bir göstergesi olabilir. Benzer şekilde, başkaları hakkında küçük düşürücü şakalar yapmak olarak tanımlanan saldırgan bir mizah tarzı kullanmak, akranlar açısından olumsuz görüşler geliştirmeye ve akranlar arasında sınırlar oluşturmaya neden olabilir (Klein ve Kuiper, 2006).

Mizah tarzlarının çocuklar üzerindeki etkileri değerlendirildiğinde eğitim ortamının mizah tarzları açısından değerlendirmek de önem taşımaktadır. Farklı kültürler mizaha farklı tepkiler verse bile, mizahın olumlu bir öğrenme ortamı yaratmadaki, çocukların gelişimini desteklemedeki ve sınıftaki sağlıklı ilişkileri geliştirmedeki rolü küçümsenemez (Chabeli, 2008; Hunsaker, 1988). Chabeli (2008) öğretmenlerin

her zaman öğrenmeyi kolaylaştırmanın ve geliştirmenin yollarını aradığını ve bu süreçte mizahın öğrencilerin kendilerini rahat hissetmelerine, öğrenmekten keyif almalarına, akranları ve öğretmenleriyle güvenli ilişkiler geliştirmelerine yardımcı olan etkili araçlardan biri olduğunu savunur.

Öte yandan, mizahın öğrenme ve eğitim üzerinde bir dizi olumlu etkisi olsa bile, mizaha nasıl yer verildiği hayati önem taşır. Şöyle ki, mizah öğrenmeyi, eleştirel düşünmeyi ve duygusal zekâyı teşvik edebilirken (Goodman, 2005), aşağılayıcı ve zararlı mizah kullanılırsa, öğrenciler arasında olumsuz bir atmosfer gözlemlenebilir ve öğrenme ortamına zarar verebilir (Kelly, 2005). Bu noktadan hareketle mizah tarzlarının araştırılması bir gereklilik haline gelmektedir çünkü Martin'e (1988) göre mizah tarzları, sosyal durumlarla etkileşim halinde olan kişilik özelliği için bir gösterge olabilir. Wanzer ve Frymier (1999) mizahın eğitimin etkinliğini etkileyebileceğini ve mizah tarzlarının öğrencilerin okul performansını doğrudan ya da dolaylı olarak etkileyebileceğini öne sürmektedir. Okul performansına ek olarak, Cheung ve Yue (2012) mizah tarzlarının öğrencilerin okuldaki stres düzeylerinin belirleyicisi olabileceğini savunmaktadır. Ayrıca, kendi kültürlerinde saldırgan ve kendini yıpratan mizah kabul görse bile, sonuçların uyumlu mizah tarzlarını desteklemenin önemini gösterdiğinden bahsetmişlerdir. Cheung ve Yue'nin (2012) çalışması, çocukların iyi olma hali için mizah tarzlarının araştırılmasının önemine ve kültürel zorlukların bazı mizah tarzlarının geliştirilmesinde nasıl etkili olabileceğine kanıt olabilir. Böylece, kültürel beklentiler mizah tarzları üzerinde etkili olsa dabireysel deneyimlerden etkilenebilir ve çocuklarda gelişimi ve öğrenmeyi güçlendirmek için istenen şekilde yönlendirilebilir (Qian, 2007). Mizah tarzlarının eğitimin etkililiğini artırmadaki önemi düşünüldüğünde, çocukların mizah tarzlarının araştırılması ve eğitim ortamlarının bu mizah tarzlarına göre şekillendirilmesi bir gereklilik haline gelmektedir.

DeVellis'e (2014) göre, tüm anabilim dallarında araştırmacılar, belirli bir alan hakkında fikir sahibi olmak ve bununla ilgili değişiklikleri gözlemlemek için araştırma alanlarındaki şeyleri ölçmeye ihtiyaç duyarlar. Sosyal bilimlerde, ölçmek istediğimiz olgu teoriden gelir ve teoriler ölçmek istediğimiz boyuta anlam vermemize yardımcı olur (DeVellis, 2014). Ayrıca, Hinkin (1995) teorileri

geliştirmek ve test etmek için standartlaştırılmış testlerden elde edilen bulgulara ihtiyaç olduğunu savunmaktadır. Tüm araştırmacılar, belirli araştırma sorularıyla ilgili anlamlı bağlantılar ve yorumlar yapabilmek için güvenilir ve geçerli bir ölçüme ihtiyaç duymaktadır. Bu noktadan hareketle, bilimde geçerli ve güvenilir ölçekler geliştirmek araştırma için bir gereklilik haline gelmektedir. Ayrıca, birden fazla ölçüm aracı olsa bile yaş, cinsiyet ya da gelişimsel özellikler gibi farklı değişkenlerin varlığı farklı ölçüm araçlarının geliştirilmesi ihtiyacını doğurmaktadır (DeVellis, 2014). Doğrudan gözlemlenemeyen psikolojik olgular için kuramlar, ölçüm araçlarının oluşturulmasına kaynaklık etmektedir (DeVellis, 2014). Dolayısıyla, bu çalışma da hem büyükler için var olan mizah tarzları ölçeklerinden farklı olarak küçük çocuklar için mizah tarzlarına ilişkin bir ölçüm aracı oluşturmayı hem de daha güvenilir ve geçerli bir ölçüme sahip olmak için ölçeği şekillendirirken Martin'in teorisini kullanmayı amaçlamaktadır. Sonuç olarak, insanlar antik çağdan bu yana belirli bir olguyu ölçmek için birçok çaba göstermiştir. Sözcüklerin ve insanların ihtiyaçlarının değişmesiyle birlikte ölçeklere duyulan ihtiyaç da artmaktadır. Böylece ölçek geliştirme çalışmaları, araştırmacıların insan anlayışını geliştirmek ve araştırma sorularını etkili bir şekilde yanıtlamak için bir gereklilik haline gelmektedir.

Bu nedenle, ilgili alanyazın göz önünde bulundurularak, erken çocukluk dönemindeki çocuklar ve onların mizah tarzları bu çalışmanın odak noktasını oluşturmaktadır. James ve Fox (2019) çocukların da mizah davranışlarında farklılık gösterdiğini savunmaktadır. Böylece, yetişkinlerde olduğu gibi, farklı mizah tarzları sosyal, duygusal ve bilişsel deneyimler açısından mizahla ilgili farklı çıktılara sahip olunmasına neden olabilir. Bu noktadan hareketle, küçük çocukların ne tür bir mizah tarzına sahip olduğunu ve bunun onların gelişimi, öğrenmesi ve iyi olma haliyle nasıl ilişkili olabileceğini öğrenmek önem kazanmaktadır. Bununla birlikte, erken çocukluk dönemi mizah tarzları için uygun ölçümler geliştirmek ve mizah tarzları ile dolaylı olarak çocukların gelişimi, öğrenmesi ve iyi olma hali arasındaki ilişkileri araştırmak çalışmanın amacını oluşturmaktadır.

Problem

Mizah, çocuklar da dâhil olmak üzere insanların hayatında çok önemli bir yere sahiptir. Bu nedenle, insanların bilişsel, sosyal ve duygusal durumları hakkında daha

fazla bilgi sahibi olmak için davranışlarını incelemek, insanı anlamak, güçlü yönlerini desteklemek ve zayıf yönlerini geliştirmek için kaynak sağlayabilir (Polimeni & Reiss, 2006). Çocukların ve yetişkinlerin mizah davranışlarını karşılaştırdığımızda bazı farklılıklar olduğu görülebilir. Bu farklılıklar çocukların gelişimsel özelliklerinden kaynaklanmaktadır (McGhee, 1983). Bu farklılıklardan dolayı çocukların mizahının araştırılması farklı yollar gerektirmektedir. Loizou'nun (2006) anaokulu çocuklarının görsel mizahı keşfetmelerini konu alan çalışması ve Loizou'nun (2011) çocuklara çevrelerindeki "komik" şeylerin fotoğraflarını çektirerek nelere güldüklerini öğrenmeye çalıştığı çalışması buna örnek olarak gösterilebilir. Erken yaşlarda çocuklar neyin komik olduğunu açıklamakta zorlanabilirler. Bu yüzden, görsel veri toplamak bir yol olarak görülmüştür. Çocuklar için neyin komik olduğunu öğrenmenin yanı sıra, daha küçük çocuklar için farklı bir ölçek geliştirmek de bir gerekliliktir (Fox vd., 2013).

Thorson (1990) mizahla ilgili sağlıklı bir ölçüm geliştirmek için ölçeğin sadece birkaç mizah unsurunu içermesi değil, mizahta çok boyutlu faktörlere yönelik tasarlanması gerektiğini savunmaktadır. Loizou (2006) da çocukların mizahı hakkında bilgi edinmenin en etkili yolunun görseller olduğunu belirtmektedir. Çocukların mizahı hakkında bilgi edinmek için görsellerin kullanıldığı çeşitli örnekler de vardır (Chik vd., 2005; Guo vd., 2011; Pien & Rothbart, 1976; Zoroğlu, 2015). Sonuç olarak, daha küçük yaştaki çocukların mizah tarzları hakkında bilgi edinmek için görsellerden oluşan bir ölçek çocukların mizah tercihleri hakkında daha doğru bilgi verebilir (Halford, 2014). Görseller daha fazla duyuya hizmet edeceği için küçük çocukların mizahı anlamaları ve kendilerine uygun olup olmadığına karar vermeleri daha kolay olacaktır (Eisenberg et al., 2010). Bu çalışmalardan hareketle çocuklar için geliştirilecek mizah tarzları ölçeği çocukların seviyesine uygun görsellerle hazırlanacaktır.

Çalışmanın Önemi

Kişilerin kişilik, iyi oluş, biliş ve sosyal yaşamları ile ilgili tahminlerde bulunmak için bireylerin mizah tarzlarını öğrenmek önem kazanmaktadır. Bu amaçla mizah tarzlarını öğrenmek için geçerli ve güvenilir bir ölçme aracına sahip olmak çok önemlidir. Martin ve arkadaşları (2003) mizah tarzlarını tanımlamada ve yetişkinler

için "Mizah Tarzları Anketi" adlı ölçeği geliştirmede ilk adımı atmışlardır. Yetişkinler için bir ölçek olsa bile Klein ve Kuiper (2006) çocukların mizah tarzlarının araştırılmasına ve betimlenmesine ihtiyaç olduğunu belirtmektedir. Bu amacı karşılamak için Fox, Dean ve Lyford (2013), Martin ve arkadaşlarının (2003) Mizah Tarzları Modeli'ni dikkate alarak bir mizah tarzları ölçeği geliştirmişlerdir. Ancak bu ölçek dokuz ila 15 yaş arasındaki daha büyük çocuklarla kullanılmıştır. Bu ölçek çocukların gelişimsel özelliklerine uygun olmadığı için James ve Fox (2016) sekiz ila 11 yaş arasındaki daha küçük çocuklar için başka bir ölçek geliştirmiştir.

Bu üç ölçek de okuma yazma bilen yetişkinler ve çocuklar için uygundur. Yukarıda belirtildiği gibi kültür, insanların mizah davranışlarına yönelik daha iyi bir anlayış geliştirmek için bir diğer önemli boyuttur. Bu nedenle mizah tarzlarıyla ilgili ölçekleri uygulamak için bazı uyarlama çalışmaları yapılmıştır. Örneğin Yerlikaya (2003) Martin'in Mizah Tarzları Ölçeği'nin yetişkinlere uygulanabilecek bir Türkçe uyarlamasını yapmıştır. Ayrıca Anlı (2021) çocuklar için 11-14 yaş arası çocuklarla kullanılabilecek bir uyarlama daha yapmıştır. Öte yandan erken çocukluk yıllarındaki çocukların mizah tarzlarının da ölçülmesi gerekmektedir (Klein & Kuiper, 2006).

Mevcut çalışma, çocukların mizah tercihlerini öğrenmek için görsellerin etkililiğini göz önünde bulundurarak bir ölçüm aracı oluşturmayı amaçlamaktadır. Bu çalışmanın çıktıları araştırmacılar, eğitimciler ve ebeveynler için çocukların mizah tarzları hakkında bilgi edinmek ve uyarlanabilir mizah tarzlarını destekleyecek gerekli deneyimleri sağlamak için bir kaynak olabilir. Ayrıca, ilgili değişkenlerle ilişkileri inceleyerek uyumsuz mizah davranışlarının nedenlerini keşfetmenin yollarını bulabilirler. Böylece mevcut çalışma, küçük çocukların mizah tarzlarının ölçülmesiyle ilgili boşluğu doldurabilir ve çocukların gelişimsel özellikleri ile mizah tarzları arasındaki ilişkiyi keşfetmek için bir kaynak olabilir.

Çalışmanın Amacı

Çalışmanın öncelikli amacı çocukların mizah tarzları hakkında bilgi edinmek için geçerli ve güvenilir veriler sağlayacak ve çocukların gelişimsel özelliklerine uygun bir ölçek geliştirmektir. Ölçek dört mizah tarzını yansıtan mizahi resimlerden oluşmakta ve çocukların resimlerden yaptıkları seçimler onların mizah tarzlarına

ilişkin bir anlayış oluşturmaktadır. Böylece çalışma, çocukların gelişimsel özelliklerine uygun ve farklı mizah tarzlarının özelliklerini yansıtan resimler geliştirmeyi amaçlamaktadır. Ölçek geliştirme basamakları takip edilerek okul öncesi dönem çocuklarının mizah tarzlarını ortaya koyacak geçerli ve güvenilir bir resimli ölçek geliştirilmesi ve bu ölçeğin 60-72 aylık çocuklara uygulanması çalışmanın temel amacını oluşturmaktadır. Bu ana amaca ek olarak çalışmada toplanan veriler çeşitli değişkenler açısından incelenecek ve mizah tarzlarıyla ilişkili olabilecek demografik değişkenler ortaya çıkarılacaktır. Ek olarak, çocukların sahip olduğu mizah tarzları bağlamında anlamlı gruplar oluşturarak çocukların mizahi davranışları tek bir mizah tarzı bağlamında değerlendirmek yerine sahip oldukları tüm mizah tarzlarıyla geniş bir çerçeve oluşturulacaktır.

Araştırma Soruları

Bu amaçlara ulaşmak için araştırmacı aşağıdaki araştırma sorularını takip etmiştir.

AS1: "Okul Öncesi Dönem Çocukları İçin Resimli Mizah Tarzları Ölçeği" okul öncesi dönem çocuklarının mizah tarzlarını ölçmek için geçerli midir?

AS2: "Okul Öncesi Dönem Çocukları İçin Resimli Mizah Tarzları Ölçeği" okul öncesi dönem çocuklarının mizah tarzlarını ölçmek için güvenilir midir?

AS3: Okul öncesi dönem çocuklarının demografik özellikleri ile mizah tarzları arasında istatistiksel olarak anlamlı bir ilişki var mıdır?

AS3a: Okul öncesi dönem çocuklarının cinsiyetleri ile mizah tarzları arasında istatistiksel olarak anlamlı bir fark var mıdır?

AS3b: Okul öncesi dönem çocuklarının ayları ile mizah tarzları arasında istatistiksel olarak anlamlı bir ilişki var mıdır?

AS3c: Okul öncesi dönem çocuklarının SED'i ile mizah tarzları arasında istatistiksel olarak anlamlı bir ilişki var mıdır?

AS3d: Okul öncesi dönem çocuklarının babalarının eğitimi ile mizah tarzları arasında istatistiksel olarak anlamlı bir ilişki var mıdır?

AS3e: Okul öncesi dönem çocuklarının annelerinin eğitimi ile mizah tarzları arasında istatistiksel olarak anlamlı bir ilişki var mıdır?

AS3f: Okul öncesi dönem çocuklarının babalarının yaşı ile mizah tarzları arasında istatistiksel olarak anlamlı bir ilişki var mıdır?

AS3g: Okul öncesi dönem çocuklarının annelerinin yaşı ile mizah tarzları arasında istatistiksel olarak anlamlı bir ilişki var mıdır?

AS3h: Okul öncesi dönem çocuklarının kardeş sayısı ile mizah tarzları arasında istatistiksel olarak anlamlı bir ilişki var mıdır?

AS3i: Okul öncesi dönem çocuklarının kardeşlerinin cinsiyeti ile mizah tarzları arasında istatistiksel olarak anlamlı bir ilişki var mıdır?

AS4: Okul öncesi dönemdeki çocukların baskın mizah tarzlarına ilişkin oluşan kümeler nelerdir?

YÖNTEM

Çalışma Deseni

Çalışmanın temel amacı, erken çocukluk dönemindeki çocukların mizah tarzlarına ilişkin bir ölçme aracı geliştirmek ve bu ölçeği geçerlik ve güvenirlik açısından kontrol etmektir. Bu amaca ulaşmak için araştırmacı madde geliştirme, pilot test, alan testi ve doğrulama olmak üzere dört adım izlemiştir (DeWellis, 2014). Yani bu çalışmalar, var olan durumu ortaya koymak için birçok öğeden, bir kitap koleksiyonundan ya da evren hakkında genel bir yargı oluşturmak için bir grup insandan oluşur (Karasar, 2016).

Ölçek geliştirme kısmına ek olarak, katılımcıların mizah tarzları açısından daha iyi anlaşılmasını geliştirmek için nicel analizler ve korelasyonel yöntemler kullanılmıştır. Korelasyonel yöntem, iki ya da daha fazla değişken arasındaki birlikte değişimin varlığını ve/veya derecesini belirlemeyi amaçlayan bir araştırma modelidir (Fraenkel vd., 2012). Ayrıca Ward's yöntemi, klasik kareler toplamı kriterine dayalı her bir ikili füzyonda grup içi dağılımın minimize edilerek kümelerin oluşturulmasını sağlayan aglomeratif kümeleme yöntemleri arasında tek yöntemdir (Murtagh & Legendre, 2014).

Katılımcılar

Araştırmanın amacına uygun olarak, Türkiye'de erken çocukluk eğitimine devam eden 60-72 aylık çocuklar araştırmanın evrenini oluşturmaktadır. Ana araştırmanın verileri Ankara'da toplandığı için araştırmanın ulaşılabilir evreni Ankara'da erken çocukluk eğitimine katılan 60-72 aylık çocuklardır. Öte yandan, pilot çalışma Tokat'ta gerçekleştirilmiştir. Bu nedenle, Tokat'ta erken çocukluk eğitimine katılan 60-72 aylık çocuklar pilot çalışmaya dahil edilmiştir. Çalışma amacına ulaşmak için ilk ölçek formu oluşturulmuş ve maddelerin beklendiği gibi çalışıp çalışmadığını test etmek için 150 çocuğa uygulanmıştır. Çocukların %46,7'si kız, %53,3'ü ise erkektir. Ayrıca yaş ortalaması 65,43 aydır. Son olarak, pilot çalışma katılımcılarının %24,6'sı yüksek SED'ten, %40,6'sı orta SED'ten gelirken, düşük SED'ten gelen katılımcılar toplamın %34,6'sını oluşturmaktadır.

Ana çalışmaya 345 çocuk katılmış olup, çocuklara ilişkin demografik bilgiler Tablo 1'de sunulmuştur.

Tablo 1. *Çocuklara ilişkin demografik bilgiler*

Yaş			
	Min	Max	Ort.
Ay	60,00	72,00	67,0762
Cinsiyet			
	f	%	
Kız	161	47,2	
Erkek	180	52,8	
Toplam	341	100,0	

Veri setindeki aykırı değerler çıkarıldıktan sonra 341 çocuk ana çalışmaya dahil edilmiştir. Bu çocukların 161'i kız, 180'i ise erkektir. Çocukların yaşları 60 ila 72 ay arasındadır ve yaş ortalamaları 67,07'dir.

Çocuklarla ilgili demografiklerin yanı sıra ailelere ilişkin veriler de toplanmştır. Bu veriler sonucunda, annelerin yaş ortalamasının 35,31 olduğu ve minimum yaşın 22, maksimum yaşın ise 50 olduğu bulunmuştur. Ayrıca annelerin %38,4'ü lisans mezunu iken 35,8'i lise mezunudur. Annelerin geri kalanı ortaokul ve altı, lise ve yüksek lisans mezunudur ve yüzdeleri sırasıyla %14,1, %9,7 ve %2,1'dir. Ayrıca, annelerin %39,6'sı aktif olarak çalışırken, %60,4'ü çalışmamaktadır.

Annelerin yanı sıra babalara ilişkin veriler de baba yaşı ortalamasının 38,70 olduğunu ortaya koymaktadır. Ayrıca, babaların yaşı için minimum değer 25, maksimum değer ise 65'tir. Babaların %39,9'u lisans derecesine sahipken, 31,4'ü lise mezunudur. Geri kalan babalar ortaokul ve altı, lise ve yüksek lisans mezunudur ve yüzdeleri sırasıyla %12, %10,9 ve %5,9'dur. Son olarak, babaların %98,2'sinin çalıştığı, %1,8'inin ise çalışmadığı ortaya çıkmıştır.

Ek olarak, çocukların %46,9'unun bir kardeşi, %32,3'ünün ise iki kardeşi olduğu tespit edilmiştir. Ayrıca, çocukların %12,9'unun hiç kardeşi yoktur. Üç (%6,2) ve dört (%1,8) kardeşi olan çocuklar da bulunmaktadır. Kardeşin cinsiyeti ortaya çıktığında, kız kardeşi olan çocuklar örneklemin %30,5'ini oluşturmaktadır. Ayrıca, katılımcıların %42,5'inin erkek kardeşi ve %14,1'inin hem kız hem de erkek kardeşi vardır.

Son olarak, katılımcıların gelir düzeyleri incelendiğinde, katılımcıların %33,7'sinin düşük SED'ten, %40,5'inin orta ve %25,8'inin yüksek SED'ten olduğu tespit edilmiştir.

Veri Toplama Araçları

Veri toplamaya başlamadan önce mizah tarzları ölçeği geliştirilmiş ve pilot çalışmanın ardından aracın son hali şekillendirilmiştir. Ölçek hazırlama süreci tamamlandığında izinlerin ikinci aşamasına geçilmiştir. Öncelikle araştırmacı ve Üniversitenin Etik Kuruluna başvurmuştur (Ek E). Gerekli izinler alındıktan sonra erken çocukluk eğitimi kurumlarından veri toplayabilmek için Milli Eğitim Bakanlığı'na başvurulmuştur (Ek F). Milli Eğitim Bakanlığından da izin alındıktan sonra araştırmacı, okullarından veri toplayabilmek için okul yöneticilerine ve öğretmenlere başvurmuştur. Ayrıca, velilere çocuklarından veri toplamak için izin almak üzere bir onay formu gönderilmiştir (EK A). Son olarak çocuklara çalışmaya katılmak isteyip istemedikleri sorulmuş ve katılmak isteyenlerle veri toplama süreci başlatılmıştır. Çocuklar araştırmacıyı tanımadıkları için bu süreçte kendilerini rahatsız hissedebilmektedirler. Bu durumu engellemek için araştırmacı veri toplama öncesinde sınıfı ziyaret etmiş ve çocuklarla bazı oyun etkinlikleri yapmıştır (Ek G).

Süreç boyunca araştırmacı, çocukların cevaplarıyla ilgili herhangi bir noktayı kaçırmamak için notlar almış ve bunları kaydetmiştir.

Veri Analizi

Veri analizi sırasında betimsel analiz yöntemleri kullanılmıştır. Verilerin analizinde SPSS 22.00 ve IMB AMOS programı kullanılmıştır. Pilot çalışmadan elde edilen verilerle SPSS 22.00'de açımlayıcı faktör analizi yapılmıştır. AFA, birbiriyle ilişkili değişkenleri bir araya getirerek maddeleri tanımlamayı, özetlemeyi ve değişkenleri ortak faktörler altında toplamayı amaçlamaktadır (Watkins, 2018). Ayrıca, IMB AMOS programında doğrulayıcı faktör analizi yapılmıştır. DFA, yapıyı test ederek yapı geçerliliğini doğrulamak için kullanılan gelişmiş bir tekniktir ve değişkenler arasındaki örtük süreçleri ve bu süreçlere ilişkin teorik bilgiyi açıklar (Harrington, 2009). Bu analizlerin sonuçları ölçeğin son halini şekillendirmiştir.

Veriler normal dağılmadığı için mizah tarzları ile çocukların demografik özellikleri arasında bir ilişki olup olmadığını ortaya koymak için parametrik olmayan testler kullanılmıştır. Mizah tarzları ile demografik değişkenler arasındaki ilişkileri ortaya koymak için korelasyonel analizler kullanılmıştır. Korelasyonel tarama modelinde, iki ya da daha fazla değişken arasındaki ilişkinin varlığını ya da değişim derecesini belirlemek için kullanılır (Fraenkel vd., 2012). Ayrıca demografik özellikleri ve mizah tarzlarına ilişkin gruplar üzerinde anlamlı açıklamalar oluşturabilmek için çalışma kapsamında küme analizlerinden yararlanılmıştır. Verileri özellikleri bakımından benzerliklerine göre sınıflandıran yöntemler bütünü olan kümeleme analizlerinin (Çokluk vd., 2010) temel amacı, bir veri seti içerisinde farklı grupların olup olmadığını belirlemektir. Bu doğrultuda, kümeyi oluşturan birimler ya da değişkenler arasındaki benzerlikler (yakınlık) ve diğer kümelerle olan farklılıklar (uzaklık) esas alınmaktadır. Bu bağlamda veri setinden oluşturulan kümelerin kendi içlerinde homojenlik, kendi aralarında ise maksimum heterojenlik göstermesi beklenir (Çokluk vd., 2010). Tüm bu analizlerin sonucunda elde edilen veriler bulgular bölümünde sunulmuştur.

BULGULAR VE TARTIŞMA

Bulgular kısmında araştırma soruları ışığında hem ölçek geliştirme kısmına hem de çocukların mizah tarzlarının demografik değişkenler ile ilişkili olarak betimlenmesine ilişkin verilere yer verilmiştir. Ek olarak küme analizi sonucunda ortaya çıkan veriler de bu bölümde sunulmuştur.

Açımlayıcı Faktör Analizine İlişkin Veriler

Çalışma amacı kapsamında cevaplanması planlanan "Okul Öncesi Dönem Çocukları İçin Resimli Mizah Tarzları Ölçeği okul öncesi dönem çocuklarının mizah tarzlarını ölçmek için geçerli midir?" sorusuna yönelik açımlayıcı ve doğrulayıcı faktör analizleri yapılmıştır. Çalışmada ilk olarak AFA'nın uygulanması için gerekli varsayımlar uygulanmıştır. Veri setinin uygunluğunu test etmek için KMO ve Barlett Testi uygulanmış (Worthington & Whittaker, 2006) ve Tablo 2'ya göre KMO değeri ,815 ve Bartlett Küresellik testi ($\chi 2$=1062,300, p<.001) ile veri seti uygun bulunmuştur.

Tablo 2. *KMO ve Bartlett's Testi*

Kaiser-Meyer-Olkin Örnekleme Yeterliliği Ölçümü.		,815
Bartlett'in Küresellik Testi	Approx. Chi-Square	1062,300
	Df	190
	Sig.	,000

İlgili faktör yapısına ulaşmak için öncelikle faktörlerin toplam varyansın %56,922'sini açıkladığı görülmüştür. Dört faktörün toplam varyansları sırasıyla %25,817, %13,618, %10,962 ve %6,525'tir. Tablo 2'ya göre hipotezin P-değeri 0,000 < 0,05 olduğu için hipotez reddedilmiştir. Başka bir deyişle, değişkenler arasındaki ilişkinin anlamlı olduğu sonucuna varılmıştır. KMO değeri de oldukça yüksek ve mükemmel olduğu için AFA yapılabilir.

Doğrulayıcı Faktör Analizine İlişkin Bulgular

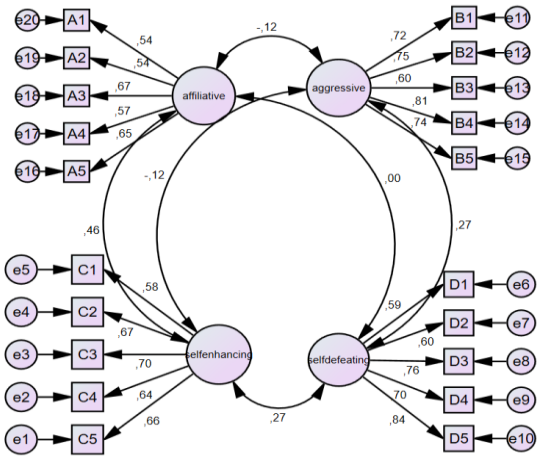
Açımlayıcı faktör analizinin ardından, hem önceden belirlenen yapıyı doğrulamayı hem de açımlayıcı faktör analizinden ortaya çıkan değişken gruplarının faktörler tarafından yeterince temsil edilip edilmediğini anlamayı amaçlayan doğrulayıcı

faktör analizi gerçekleştirilmiştir (Aytaç & Öngen, 2012; Özdamar, 2013). DFA, yapısal eşitlik modellemelerinden biridir ve maddeler, örtük değişkenler ve faktörler arasındaki ilişkileri ortaya çıkarır (Brown, 2006).

Table 3. *Model Uyum İndeksleri*

İndeksler	CMIN/DF	GFA	NFI	CFI	RMSEA
Değer	1,481	,938	,883	,962	,038

Kline'a (2005) göre, CMIN/DF değerinin 3'ün altında olması mükemmel uyumu göstermektedir. Bu noktadan hareketle, mevcut çalışmanın CMIN/DF değerinin mükemmel bir uyum gösterdiği sonucuna varmak mümkündür. GFI ve CFI için kesme değerinin .9 (Kelloway, 1998), PMSEA için ise 0,6 olması beklenmektedir (Hu & Bentler, 1999). Şekil 1'da görüldüğü gibi Mizah Tarzları için faktör yükleri .54 ile .84 arasında değişmektedir. Harrington'a (2009) göre faktör yükleri 0,30'un altında olmamalıdır. 0.71 ve üzeri mükemmel, 0.63 çok iyi, 0.55 iyi, 0.45 iyi/kabul edilebilir ve 0.32 zayıftır. Alanyazından elde edilen bu değerler ışığında, mevcut çalışmanın model uyum indekslerinin gerekliliklerini karşıladığı sonucuna varmak mümkündür. Modelin faktör yükleri Şekil 1'da gösterilmektedir.



Şekil 1. *Okul Öncesi Çocuklar İçin Resimli Mizah Tarzları Ölçeği Faktör Yükleri*

Faktör yükleri, her bir faktöre ait maddelere giden oklar üzerinde verilmiştir. Model uyum indekslerinin kabul edilebilir uyum düzeyinde olduğu görülmüştür.

Ölçeğin Güvenilirliği

Araştırmanın 2. araştırma sorusu olan "Okul Öncesi Dönem Çocukları İçin Resimli Mizah Tarzları Ölçeği okul öncesi dönem çocuklarının mizah tarzlarını ölçmek için güvenilir midir?" sorusuna yönelik güvenirlik analizleri yapılmıştır. Pilot çalışmada 20 maddelik Mizah Tarzları ölçeğinin toplam iç tutarlılık katsayısı .85 Cronbach α olarak bulunmuştur. Alt faktörler için güvenirlik değeri incelendiğinde değerler sırasıyla katılımcı, saldırgan, kendini geliştirici ve kendini yıkıcı mizah tarzları için .744, .828, .773, .803'tür. Ana çalışmada Cronbach α değeri ç79 olarak bulunmuştur. Ayrıca ana çalışmada alt faktörler için güvenilirlik değerleri katılımcı ve saldırgan mizah tarzları için sırasıyla .731 ve .845 iken kendini geliştirici ve kendini aşağılayıcı mizah tarzları için sırasıyla .783 ve .824'tür. Nunnally ve Bernstein'a (1994) göre, güvenilirlik puanı .7'den büyük olmalıdır. Dolayısıyla, mevcut çalışmanın değeri Okul Öncesi Çocuklar İçin Resimli Mizah Tarzları Ölçeği'nin güvenilirlik düzeyi için kabul edilebilir bir değer olarak değerlendirilmektedir.

Öte yandan, ana çalışmanın güvenilirliğinin pilot çalışmanın güvenilirliğinden daha düşük olduğu gözlemlenmiştir. Katılımcı sayısındaki artış göz önünde bulundurulduğunda bu durumun dikkat çekici olduğu ifade edilebilir. Savalei ve Reise (2019), yüksek sayıda örneklemin her zaman popülasyon güvenilirliğini garanti edemeyeceğini öne sürmektedir. Bu nedenle, pilot ve ana çalışmalar için şehirlerin değiştirilmesi güvenilirlikteki bu düşüşün nedeni olabilir. Bu nedenle, güvenilirlik değeri farklı ve daha fazla sayıda örneklem ile yeniden test edilmelidir.

Mizah Tarzları ve Demografik Değişkenlere İlişkin Bulgular

"Okul öncesi dönem çocuklarının demografik özellikleri ile mizah tarzları arasında istatistiksel olarak anlamlı bir ilişki var mıdır?" sorusu kapsamında nicel analizler, parametrik olmayan testler kullanılarak mizah tarzları ve demografik özellikler arasındaki ilişkileri bulmak için yapılmıştır. Mizah tarzları ile cinsiyet arasındaki ilişki Tablo 3'te verilmiştir.

Tablo 3. *Cinsiyet ve mizah tarzlarına ilişkin Mann-Whitney U testi sonuçları*

	Katılımcı	Agresif	Kendini geliştirici	Kendini Yıkıcı
Mann-Whitney U	12018,000	12436,500	13718,500	13138,000
Wilcoxon W	28308,000	25477,500	26759,500	26179,000
Z	-2,761	-2,292	-,856	-1,498
Asymp. Sig. (2-tailed)	,006	,022	,392	,134

Tablo 3'e göre, kızların erkeklere göre katılımcı mizahta anlamlı derecede daha yüksek olduğu görülebilir (U=12018,00 p=,006). Ayrıca, erkeklerin saldırgan mizahı kızlardan anlamlı derecede daha yüksektir (U=28308,00 p=,022). Öte yandan, kız ve erkeklerin kendini geliştirici mizahı arasında istatistiksel olarak anlamlı bir fark yoktur (U=13718,50, p=,392). Son olarak, kız ve erkeklerin kendini yıkıcı mizahları arasında istatistiksel olarak anlamlı bir fark bulunmamıştır (U=13138,00 p=,134). Katılımcı ve saldırgan mizahın sıra ortalamaları incelendiğinde, kızların erkeklere kıyasla daha katılımcı oldukları sonucuna varılabilir. Öte yandan, saldırgan mizah tarzı incelendiğinde, mizah tarzları açısından erkeklerin kızlara kıyasla daha saldırgan olduğu bulunmuştur. Öte yandan cinsiyet ile kendini aşağılayıcı ve kendini geliştirici mizah tarzları arasında istatistiksel olarak anlamlı bir ilişki bulunmamıştır.

Bergen (2020), ileri yaşlarda bile mizah konusunda cinsiyete bağlı farklılıklar görmenin mümkün olduğunu, erken yaşlarda kız ve erkeklerin benzer olduğunu belirtmiştir. Böylece mizahta cinsiyete bağlı değişiklikler, çevresel faktörlerin bir sonucu olarak ilerleyen yaşla birlikte ortaya çıkmaktadır. McGhee (1974) mizah davranışlarında cinsiyete ilişkin farklılığın ahlaki gelişim düzeylerindeki farklılıklarla ilişkili olabileceğini savunmaktadır. Bu çalışmada kızların katılımcı mizah tarzlarında, erkeklerin ise saldırgan ve kendini aşağılayıcı mizah tarzlarında daha yüksek puan ortalamaları aldıkları ortaya çıkmıştır. İlgili literatür incelendiğinde erkeklerin kızlara göre saldırgan mizah tarzına daha yatkın oldukları ortaya çıkmıştır (Kazarian & Martin, 2004; Lefcourt, vd, 1997; Martin & Kuiper, 1999; Saroglou & Scariot, 2002; Sarı & Aslan, 2005; Yerlikaya, 2007). Erkeklerin oluşturduğu arkadaşlık yapısı ve gruplardaki akranların özellikleri, saldırgan ve kendine zarar veren mizah tarzının tercih edilmesinin göstergeleri olarak tanımlanmıştır (Fox vd., 2013). Bu noktadan hareketle, toplumsal cinsiyetin sosyal

rollerinin kızlar ve erkekler arasındaki mizah tercihlerindeki farklılıkları anlamak için kaynaklardan biri olması gerektiği sonucuna varmak mümkündür.

Tablo 4. *Ebeveynlerin yaşı ile mizah tarzı arasındaki korelasyon*

Spearman's rho		Katılımcı	Agresif	Kendini geliştirici	Kendini yıkıcı
Baba yaşı	Correlation Coefficient	-,103	,007	,022	-,135*
	Sig. (2-tailed)	,057	,896	,682	,013
	N	341	341	341	341
Anne yaşı	Correlation Coefficient	-,034	-,058	,071	-,176**
	Sig. (2-tailed)	,534	,284	,190	,001
	N	341	341	341	341

Tablo 4'de görüldüğü gibi, kendini yıkıcı mizah arasında tespit edilen tek korelasyon ebeveynlerin yaşıyla ilgilidir. Yani, kendini yıkıcı mizah ile babanın yaşı arasında istatistiksel olarak anlamlı negatif bir korelasyon vardır ($r_{(341)}$= -,135, p=,013). Benzer şekilde, annenin yaşı da kendini aşağılayan mizah ile negatif ilişkilidir ($r_{(341)}$= -,176, p=,001). Dolayısıyla, ebeveynlerin yaşı ne kadar yüksekse, çocuklar tarafından o kadar az kendini yıkıcı mizah sergilenmektedir. Kendini yıkıcı mizahın aksine, babaların yaşı ile katılımcı mizah ($r_{(341)}$= -,103, p=,057), saldırgan mizah ($r_{(341)}$= ,007, p=,896) ve kendini geliştirici mizah tarzı ($r_{(341)}$= ,022, p=,682) arasında istatistiksel olarak anlamlı bir korelasyon bulunmamıştır. Benzer şekilde, annelerin yaşı katılımcı mizah ($r_{(341)}$= -,034, p=534), saldırgan mizah ($r_{(341)}$= -,058, p=,284) ve kendini geliştirici mizah ($r_{(341)}$= ,071, p=,190) ile ilişkili değildir.

Baroody ve Dobbs-Oates (2011), çocukların gelişimi ve öğrenmesiyle ilgili ebeveyn beklentilerinin ebeveynlerin demografik özelliklerinden etkilendiğini savunmaktadır. Kendini yıpratıcı mizah, uyumsuz mizah tarzlarından biri olarak tanımlanır ve başkalarının kabulünü kazanmak için kendi zayıflıklarını ortaya koyarak başkalarını eğlendirmekle ilgilidir (Martin vd., 2003). Bireyler kendini aşağılayıcı mizahı sosyal bir grubun parçası olmanın bir yolu olarak görseler bile, öz saygı ve iyimserlikle olumsuz yönde ilişkilidir (Dozois vd., 2009). Ayrıca ilgili literatür, daha küçük yaştaki çocukların daha büyük yaştakilere kıyasla kendini aşağılayıcı ve saldırgan mizah tarzlarını kullanmayı tercih ettiklerini öne sürmektedir (Fritz, 2022; Jiang vd., 2020). Literatürde kendini aşağılayan mizaha ilişkin farklı açıklamalar olsa da

ebeveynin yaşı ve kendini aşağılayan mizah arasındaki ilişki tam olarak ortaya konmamıştır.

Araştırma soruları kapsamında SED ve çocukların yaşına ilişkin yapılan ki-kare testi analizlerinde anlamlı bir ilişki bulunmamıştır. McGhee (2002) yaş ilerledikçe çocukların mizah becerilerinde bireysel farklılıkların ortaya çıktığını belirtmiştir. Bu açıdan bakıldığında yaş, çocukların mizah tarzına yönelik ayrıntılı bir açıklama geliştirmek için bir başka odak noktasıdır. Çalışma sadece 60-72 aylık çocuklara odaklandığı için yaşa bağlı bir farklılık gözlenmemiştir. Bu nedenle çocuklar arasındaki yaş farkı karşılaştırma yapmak için yeterli olmamıştır. Öte yandan, ilgili alanyazına göre yaş, mizah tercihleri için belirleyici bir faktördür. Yani mizah eğilimleri, bilişsel ve ahlaki yeteneklerin gelişmesiyle birlikte ilerleyen yaşla birlikte farklılık gösterebilir. Sonuç olarak, sosyal normlarla oluşan bilinç, insanların mizah tarzlarında değişikliklere neden olabilir (Kuipers, 2009).

Son olarak, analizler sonucunda ebeveynlerin eğitim düzeyi, kardeş cinsiyeti ve kardeş sayısı ile ilgili herhangi bir ilişki bulunamamıştır. İlgili alanyazın bu değişkenler arasında bir ilişkiye işaret etmese de Vernon ve arkadaşları (2008) aile ortamının mizah tarzlarının oluşumu üzerindeki etkisinden bahsetmektedir. Bu bağlamda, mevcut çalışmada ebeveynle ilişkili değişkenler ile çocukların mizah tarzları arasında bir ilişki bulunamamış olsa da gelecek çalışmalarda farklı katılımcı gruplarıyla bu ilişkiler tekrar gözden geçirilebilir. Ayrıca Paine ve arkadaşları (2019)'na göre kardeş ilişkisi sosyalleşme için erken adımlardan biri olduğundan, kardeşlerin cinsiyeti ve sayısı çocukları mizah da dahil olmak üzere sosyal ve duygusal yeteneklerde etkileyebilir. Çocuklar farklı cinsiyetteki kardeşlerde farklı mizah türlerini deneyimleyebilir, büyük ya da küçük kardeşlerinden farklı tepkiler alabilirler (Paine vd., 2020). Başka bir deyişle, çocukların mizahı kardeş özelliklerine göre gelişebilirken, bazı durumlar çocukların mizahını engelleyebilir. Bu bağlamda, kardeş ilişkilerinin niteliği mizah davranışlarını etkileyen bir diğer faktördür (Paine vd., 2022). Sonuç olarak, mevcut çalışmada kardeş sayısı ya da cinsiyeti için herhangi bir ilişki bulunamamış olsa da, ileride farklı katılımcı grupları ve farklı araştırma yöntemleri ile yapılacak çalışmalarda bu durum tekrar gözden geçirilebilir.

Mizah Tarzlarına İlişkin Küme Analizlerine İlişkin Bulgular

Verileri özellikleri bakımından benzerliklerine göre sınıflandıran yöntemler topluluğunu sergilemek ve bir veri seti içinde farklı grupların olup olmadığını belirlemek amacıyla mevcut çalışmada küme analizlerine de yer verilmiştir. Dolayısıyla çocuklarda mizah tarzlarının ne kadar kalıcı olduğu hakkında daha fazla bilgi edinmek ve çocuklar arasındaki mizah davranışlarının örüntülerini anlamak için küme analizleri ile bazı kümeler oluşturulmaya çalışılmıştır. Hiyerarşik kümeleme yöntemleri arasında Ward'ın yöntemi kullanılmıştır. Ward yöntemi sonucunda, tüm mizah tarzlarının birbirleriyle istatistiksel olarak anlamlı bir ilişkiye (a,05 alfa düzeyinde p=,000 ile) sahip olduğu, dolayısıyla bu mizah tarzları kullanılarak anlamlı kümeler oluşturulabileceği bulunmuştur.

Tablo 5. *Küme Analizlerinin Sonuçları*

	(1) uyumlu ama karışık	(2)Sadece uyumlu	(3) dengeli
Katılımcı	**2,58**	**2,33**	**2,29**
Agresif	1,30	1,26	**2,22**
Kendini geliştirici	**2,67**	**2,11**	**2,08**
Kendini yıkıcı	**2,28**	1,33	**2,14**

Yukarıdaki tablo mizah tarzlarının ortalama değerlerini vermektedir. Tabloda görüldüğü gibi üç küme oluşmuştur ve bu kümelerin hepsi farklı mizah örüntülerine sahiptir. Şöyle ki, birinci küme "uyumlu ama karışık" olarak adlandırılmıştır, birinci kümedeki çocukların kendini geliştirici (μ =2,67) mizah davranışları gösterdikleri açıktır ve katılımcı mizah tarzı (μ =2,58) bu çocuklarda gözlemlenen ikinci mizah tarzıdır. Bu uyarlanabilir mizah tarzlarına ısrarlı bir şekilde sahip olmak ilgili literatür tarafından da desteklense de (Martin vd., 2004), birinci kümedeki çocuklarda üçüncü ısrarlı mizah tarzı kendini yıkıcı mizahtır (μ =2,28).

İkinci olarak, "sadece uyumlu" olarak nitelendirilebilecek kümede ise katılımcı (μ =2,33) mizahın kalıcı olduğu ve bunu literatürün önerdiği gibi kendini geliştirici mizah tarzının izlediği açıktır. Ayrıca, üçüncü kümedeki çocuklar tüm mizah tarzları için benzer bir ortalama değer sergilemektedir. Tüm mizah tarzları bireylerde aynı anda gözlemlenebildiği için üçüncü grup bu kuramsal açıklamaya örnek olarak gösterilebilir.

Kişilerdeki baskın mizah tarzları, mizah anlayışlarına ve kişilik özelliklerine bağlı olarak değişebilir. Her bireyde bazı mizah tarzları baskın olsa da Martin ve arkadaşları (2003) tüm bireylerin diğer mizah tarzlarına ilişkin davranışlar gösterebileceğini savunmaktadır. Yani, insanların hepsi tüm mizah tarzlarının özelliklerine sahiptir, ancak bazı mizah tarzları baskınken, bazıları daha az gözlemlenmektedir. Leist ve Müller (2013), insanların baskın bir mizah tarzına sahip olma eğiliminde olduklarını ve diğer tarzlara kıyasla belirli mizah tarzının özelliklerini gösterdiklerini belirtmiştir. Örnek vermek gerekirse, başkalarını bir araya getirmeyi seven kişiler için katılımcı mizah tarzı tercih edilebilir. Öte yandan, kendini yenilgiye uğratan mizah tarzı bireylerin stresle başa çıkma ihtiyacını karşılayabilir (Martin vd., 2003).

Sınırlılıklar

Bu çalışma, okul öncesi dönem çocuklarının mizah tarzlarına yönelik bir ölçek geliştirmeyi amaçlamıştır. Ölçeğin geçerlik ve güvenirliği istatistiksel yöntemlerle kanıtlanacak olsa da mevcut çalışmada ölçek formatı, veri toplama süreci ve örneklem açısından bazı sınırlılıklar bulunmaktadır.

Ölçek ilk olarak okul öncesi çocuklar için geliştirildiğinden ve çocuklar okuyamadığından, yazılı maddeler yerine görseller kullanılmıştır. Görseller çocukların dikkatleri dağılmadan takip edebilecekleri bir hikâye ile desteklenmiştir. Ancak ölçekte görsel kullanılması çocukların cevaplarını etkileyebilir. Çünkü çocuklar görsellerdeki karakterlerin davranışları ya da yüz ifadeleri nedeniyle cevaplarını değiştirebilirler.

Araştırmanın bir diğer sınırlılığı veri toplama süreciyle ilgilidir. Geliştirilen ölçek çocuklarla birebir görüşmeler yoluyla uygulanmıştır. Bu nedenle çocukların cevapları araştırmacının varlığı nedeniyle değişmiş olabilir.

Çalışmanın son sınırlılığı ise çalışmaya dâhil edilen katılımcılarla olan ilişkidir. Çalışmanın pilot çalışması Tokat'ta gerçekleştirilmiştir. Ana çalışma için Ankara

tercih edilmiştir. Pilot ve ana çalışmanın iki farklı şehirde gerçekleştirilmesi ölçek sonuçlarını etkileyebilecek kontrol dışı faktörlerin ortaya çıkmasına neden olmuş olabilir.

İleriki Çalışmalara Yönelik Öneriler

Bu çalışmanın bulguları ışığında ebeveynler, eğitimciler, araştırmacılar ve politika yapıcılar için bazı çıkarımlar geliştirilebilir. Öncelikle, ebeveynler çocukların sosyal ilişki kurdukları ilk bireylerdir. "Okul Öncesi Çocuklar İçin Resimli Mizah Tarzları Ölçeği" ile ebeveynler çocuklarının mizah eğilimleri hakkında bilgi edinme şansı bulabilir ve çocuklarının ihtiyacı doğrultusunda olumlu mizah davranışlarını desteklemek ve uyumsuz mizah davranışlarını azaltmaya çalışmak için yeni yaklaşımlar geliştirebilirler.

Ailelerden sonra okul öncesi eğitim de çocukların gelişimi ve gelecekteki yaşamları üzerinde yadsınamaz bir öneme sahiptir. Bu bağlamda çocuklara uygun bir eğitim ortamı sağlamak için çocukların her türlü özelliği göz önünde bulundurulmalıdır. Mizah da eğitim ortamında yer alması gereken önemli kavramlardan biridir. Bu nedenle çocukların mizahi yatkınlıklarının tespit edilerek eğitim ortamının hazırlanması hem eğitim ortamının hem de öğretmen-çocuk ilişkisinin verimliliğini en üst düzeye çıkarabilir. Bu nedenle geliştirilen ölçek, öğretmenlerin sınıf ortamını iyileştirmek ve çocukları tanımak için kullanabilecekleri bir araç olabilir.

Öğretmenlerin sınıflarında yapabilecekleri değişikliklere ek olarak, politika yapıcılar da bu değişikliklere katkıda bulunmalıdır. Politika yapıcılar, çocukları tanıma ve onlar için eğitim programları ve sınıf ortamları oluşturma konusunda önemli bir etkiye sahiptir. Bu nedenle çocukları tanımak için kullanılan sistemlere ek olarak mizah tarzları ölçeğinin çocukları tanımanın bir başka yolu olarak kullanılması ve eğitimin bu bağlamda planlanması daha etkili bir eğitim ortamı yaratılmasında faydalı olabilir. Öğretmen adaylarının bu alandaki bilgilerini geliştirmeye yönelik dersler verilmesi, çocukların mizah tarzlarını gözlemleyerek mizahın sınıf ortamında etkili kullanımı ve bu alandaki ihtiyaçlarının karşılanması için gerekli altyapıyı

sağlayabilir. Sonuç olarak bu ölçek, okul öncesi eğitimde mizah ve mizah tarzlarına ilişkin atılacak ilk adımlarda etkili bir araç olabilir.

Araştırmacılar için nihai çıkarımlar önerilebilir. Araştırmacılar ailelere, eğitimcilere ve politika yapıcılara rehberlik etmekte ve alandaki boşlukları doldurmaktadır. Bu bağlamda, bu çalışmanın bir diğer amacı da gelecekteki çalışmalara katkıda bulunmak ve yol göstermektir.

Araştırmacılar için ilk öneri, ölçeğin farklı katılımcılarla ve daha fazla sayıda katılımcı ile tekrar uygulanması olabilir.

İkinci olarak, sadece mizah tarzlarını bilmek, mizah tarzlarını tam olarak anlamak ve mizah tarzlarını geliştirmek için uygun adımları planlamak için yeterli değildir. Bu nedenle mizah tarzları bağlamında mizah tarzları ile ilişkili olabileceği alanyazın tarafından belirtilen kavramların araştırılması gerekmektedir. Bu ilişkilerle bu ölçek, uyumlu mizah tarzlarını geliştirmek ve uyumsuz mizah tarzlarını azaltmak için çözümler üretmek üzere planlanan ve uygulanan eğitim yaklaşımlarının veya programlarının etkililiğini test etmek için kullanılabilir.

Ölçeğin gelecek çalışmalarda farklı şekillerde kullanılmasının yanı sıra korelasyon, ve küme analizlerine ilişkin bulgular da kaynak olarak görülebilir. Zira analizler mizah tarzının karmaşık bir konu olduğunu ve farklı kaynaklardan incelenmesi gerektiğini ortaya koymuştur. Her çocuk kendine özgüdür ve nicel analizlerde benzer örüntüler gösterseler bile davranışlarının nedenleri değişebilir. Bu nedenle, bulguların gözlem ve görüşmeleri de içerecek şekilde desteklenmesi, gelecekteki çalışmalarda çocukların mizah tarzlarına ilişkin daha iyi bir anlayış geliştirmek için faydalı bir yol olabilir.

Sonuç olarak, mizahın insan hayatındaki önemi yadsınamaz bir gerçektir. Çocukları mizah ve mizah tarzları açısından tanımlayan çalışmalar açısından literatürde bir boşluk bulunmaktadır. Çocuklar geleceğin yetişkinleridir. Aileler, eğitimciler, politika yapıcılar ve araştırmacılar tarafından mizaha ve mizah tarzlarına verilen

önemin artması çocukların gelişimini, öğrenmesini ve iyi olma halini etkileyeceğinden bu alanda yapılan ve yapılacak her girişim hayati önem taşımaktadır.

Sonuç

Bu çalışmada okul öncesi dönem çocuklarının mizah tarzlarını ortaya koymaya yönelik geçerli ve güvenilir bir ölçek geliştirmek amaçlanmıştır. Bu amaç doğrultusunda Martin ve diğerleri (2003) tarafından geliştirilen Mizah Tarzları Modeli ışığında DeVellis (2014) tarafından önerilen ölçek geliştirme adımları takip edilerek "Okul Öncesi Dönem Çocukları İçin Resimli Mizah Tarzları Ölçeği" geliştirilmiştir. Pilot çalışma Tokat ve Ankara'da gerçekleştirilmiş ve 495 okul öncesi çocuk (Tokat'ta 150, Ankara'da 345 çocuk) çalışmaya dâhil edilmiştir. Açımlayıcı ve doğrulayıcı analizlerin sonuçlarına göre ölçeğin okul öncesi dönem çocuklarının mizah tarzlarını öğrenmek için geçerli ve güvenilir olduğu sonucuna varılabilir. Ayrıca ölçek uygulama sürecinde çocukların demografik özelliklerine ilişkin veriler toplanmıştır. Bu veriler kullanılarak ve analizler gerçekleştirilerek çocukların mizah tarzlarına ilişkin daha kapsamlı açıklamalar yapılmıştır.

Mizahın kullanılış biçimi mizahın hayatımızdaki etkisini belirleyen en önemli unsurdur. Bu bağlamda mizahın olumlu etkisini artırmak ve olumsuz etkisini azaltmak için mizah davranışlarını tanımlamak ve şekillendirmek önemlidir. Özellikle tutum, inanç ve karakter gibi birçok özelliğimizin temellerinin atıldığı okul öncesi dönemde mizahi eğilimlerimizin ortaya çıkarılması, ilerleyen yıllarda mizahı hayatımızda etkili ve faydalı bir yöntem olarak kullanmamızın önünü açabilir. Sonuç olarak bu çalışma, çocukların mizah tarzları hakkında bilgi edinmek için bir yol sağlayabilir ve ebeveynler, eğitimciler, araştırmacılar ve politika yapıcılar için çocukların mizah tarzları hakkında bilgi edinmek ve çocuk gelişimi ve eğitimi ile ilgili yaklaşımları onların mizah tarzlarına göre düzenlemek için fırsatlar yaratabilir.

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TEZİN ADI / TITLE OF THE THESIS (**İngilizce** / English): DEVELOPMENT OF PICTORIAL HUMOR STYLES SCALE FOR PRESCHOOL CHILDREN

TEZİN TÜRÜ / DEGREE: **Yüksek Lisans** / Master ☐ **Doktora** / PhD ☒

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