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Nezahat Hamiden KARACA[1]
[1]Afyon Kocatepe Unıversity

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Development Process of "Scale for the Attitudes towards Risky Play at Early Childhood (SATRPEC) - Parent Form"

Nezahat Hamiden KARACA[1*]
[1]Afyon Kocatepe University

Abstract

In this study, it was aimed to develop Scale for the Attitudes towards Risky Play at Early Childhood (SATRPEC) for the parents whose children currently attend to a preschool institution. The sample was comprised of 742 parents whose children were attending to a nursery class or a kindergarten located in Afyonkarahisar – Turkey and affiliated to Turkish Ministry of National Education during 2018-2019 academic year. In order to develop the scale, initially a comprehensive literature review was performed. As a result of a detailed screening, a pool of 50 five-point Likert type items was created. The initial form was presented to a total number of 13 experts, i.e. five academicians, one measurement and evaluation specialist, five teachers and two parents. CVR and CVI were calculated according to expert opinions and the scale was reduced to 28 items. This form was first piloted and reliability coefficient was calculated. For construct validity, exploratory factor analysis was performed first. The construct validity of the scale was also tested by confirmatory factor analysis. The obtained values showed that the instrument was reliable and had acceptable psychometric properties.

Keywords: Risky play, Early childhood, Scale, Parents, Attitudes.

Introduction

Early experiences play a critical role in the development of children. Especially the natural course of children's early development increases this importance even more. Children are born with natural curiosity in the process of adapting to the world (Louv, 2008). Thanks to their curiosities, they enjoy the challenges they face; they learn to cope with uncertainty and new situations, push the boundaries, be independent and determined, and also interact with their physical, personal and socio-cultural environment through their curiosities (Tovey, 2007). In this context, the growth process of children includes taking risks and moving away from the safe zone in order to gain new experiences and perspectives (Dweck, 2000). When children are given the opportunity to play free plays, children will be supported to plan their movements, to develop their feelings of independence and creativity, to lead, to make decisions and to increase their confidence (Sanseter, 2010; Little, 2008). Otherwise, these feelings will be suppressed, and these children will develop feelings of guilt about their own interests and needs, and therefore will grow up as obedient individuals lacking initiative (Nikiforidou, 2017).According to Erikson's (1959) theory, children are in the period of *initiative versus guilt* especially in the age of three to six years. Since this is a period of development of independence for children (Lester and Russell, 2008), children show more risk-taking behaviors to test limits (Sandseter, 2010; Little and Wyver, 2008; Stephenson, 2003).
Children experience risky behaviors during their childhood. The concept of risk, which is defined as the risk of harm, is used synonymously with the danger and implies a negative value judgment. Although the concept of risk has negative connotations, it is a way of participation in behaviors related to the possibility of consequences and courage (Boyer, 2006). In another study, it was defined as an infinite range of behaviors and activities that could lead to both positive and negative consequences socially constructed from one context to another (Madge and Barker, 2007). Risky play is defined as a play that offers opportunities to challenge, test borders, explore boundaries and learn about injury (Ball, 2002; Little and Wyver, 2008). Play is an inseparable part of children's lives and a dominant activity in their daily lives. Children learn social roles, values and limits through play and risky play. At the same time, they become aware of their physical and cognitive competence. It helps them to develop numerous skills such as decision-making, problem solving, self-control, following the rules, regulating their emotions, discovering dangerous environments and activities, voluntarily moving away from this environment and developing peer relationships. Children take risks in their play, gain experience that will test their own limits, develop confidence, and benefit their future lives as independent and talented, entrepreneurial

* Corresponding Author: *Nezahat Hamiden KARACA, nhamiden@gmail.com*

adults (Ball, 2002). There are studies suggesting that children prefer challenging plays that require risk taking from an early age (Sandseter, 2010; Stephenson, 2003) and that risk taking positively supports children's development (Ball, 2002; Fiskum, 2004; Fjortoft, 2000). According to Greenland (2010), risky play can develop rough and fine motor movements, balance, coordination and body consciousness in children in line with the behaviors in the categories. At the same time, children can be more motivated to achieve their goals and cope with new situations (Stephenson, 2003). Because when children play, they desire unconsciously to discover the risk. This allows children to learn how to manage the risk they will use for life and to understand safety. In addition, children meet their innate risk requirements. Through exploration and risky play, they become familiar with their environment, possibilities and boundaries. They learn what is dangerous and how to deal with the risks they face (Gill, 2007).

Risky play is described as an exciting process involving the possibility of injury (Sandseter, 2007; Stephenson, 2003; Greenfield, 2004) and Sandseter (2007) further explained the risky play behaviors in six categories. These categories are; (1) Great heights (climbing, standing on high objects, balance, hanging down, swinging, etc.); (2) high speed (swinging, running, cycling etc.); (3) dangerous tools (using tools such as knives, saws, ropes); (4) dangerous elements (playing in places such as above a high rock, deep pond or edge of a lake, near a burning fire); (5) rough and tumble play (wrestling, fighting plays, swords, sticks, etc.); (6) disappearance / moving away from the sight (conducting research alone or playing alone in unfamiliar environments). Children can perform these risky behaviors that foster their development only in natural play settings. However, in recent years, especially in developed or developing settlements, as a result of changes in social and environmental conditions, children's play characteristics have been changing and this situation has been the focus of attention in the literature. Today's world has forced children to spend most of their time under adult supervision in more structured closed environments, and since these environments restrict children's upbringing naturally, they have raised concerns that they may adversely affect children's healthy development (Meire, 2013). Due to the vertical construction, children started to lose the chance to play in the open-air play environments over time. Due to the overprotective parental attitudes (Carver, Timperio and Crawford, 2008), parents' safety concerns, the risk of injury to their children (Lester and Russell, 2008), lack of geographical freedom (Hofferth, 2009; Schwebel and Barton, 2005), children have started to play in controlled environments and structured play environments (Little, 2015). Because of its easy control, convenience and fast access, parents or educators direct the children to computer, television or adult activities such as music, painting and sports instead of taking risks. In this case, children are prevented from playing free play on their own. Adams (2001) states that many decisions about risk-taking are made by adults during children's research and discovery experiences. Studies have shown that adult's perceptions, attitudes and beliefs affect their practice in allowing and supporting risky play (Stephenson,2003; Sandseter, 2012). Little et al. (2011), although the teachers and mothers of the children stated that they believe the importance of risk play in terms of learning and development, they found that they offer limited risky play opportunity to children. Cevher-Kalburan and Ivrendi (2015) examined the relationship between risky play and parenting attitudes and found that the parental consent status of the parents varied according to parental attitudes. This study indicated that as parents' scores on overprotective parenting style increase their scores on the practices and benefits of risky play decrease. Different from the practices subscale, democratic parenting was a predicting variable for and positively correlated with the benefits of risky play subscale. Existence of such positive correlation suggests that parents with democratic parenting style have supportive thoughts about benefits of risky play. Güler and Demir (2016) stated that teachers were cautious against risky plays and that the importance given to the physical health of children was an obstacle to their risk taking and that this could be caused by perceiving the concept of risk as dangerous and harmful. Alat, Akgümüş and Cavalı (2012) suggested that preschool teachers and parents do not allow children to play risky plays in Turkey, while Erbay and Saltalı (2012) emphasized that mothers are concerned about their children playing outdoors. In addition, Gill (2007) emphasized that many activities are reduced in places where all risks are eliminated as a result of adult avoidance of risk in children's play environments. Many studies also support the view that independent mobility of children is limited as a result of reduced risk of children's activities and opportunities for outdoor play (Madge and Barker, 2007; Gill, 2007; MacDougall et al., 2009; Kinoshita, 2009; Tranter and Pawson, 2001). Elimination or reduction of risky play behaviors provides positive results in the short term; in contrast it was emphasized that in the long-term children may have negative consequences such as inactivity and lack of self-confidence (Little and Wyver, 2008). Eager and Little (2011) stated that children who do not play risky games may be more sensitive to problems such as obesity, mental health disorders, lack of independence, learning, perception and judgment. In this context, Fjortoft (2000) stated that children find structured play environments where they cannot easily run, jump, hop, roll, tumble, sway and they prefer natural play environments.

Current studies in the literature emphasized the importance of children playing in natural environments and focused on the importance of playing risky play after taking safety measures in these environments. In

particular, studies conducted in recent years have focused on the positive consequences and benefits for children rather than the dangerous and damaging consequences of risk play (Sandseter, 2007; Sandseter, 2009 (a, b); Little, Wyver and Gibson, 2011; Brussoni, Olsen, Pike and Sleet, 2012; Little, Sandseter and Wyner, 2012; Sandseter, 2014; Brussoni et al., 2015; Little, 2015; Güler and Iron, 2016; Brussoni, Ishikawa, Brunelle and Herrington, 2017; Coe, 2017; Harper, 2017; Nikiforidou, 2017; Ünüvar and Kanyılmaz, 2017; Brussoni, Ishikawa, Han, Pike, Bundy, Faulkner and Mâsse, 2018; Kleppe, 2018; McFarland and Laird, 2018). In this study, a scale development study was conducted in order to determine the opinions of parents about why they do not allow their children to be engaged in risky plays or how much they allow them. It is thought that this study will make an important contribution especially for researchers, educators and parents about children playing risky games.

Method

In this study, it was aimed to develop Scale for the Attitudes Towards Risky Play at Early Childhood (SATRPEC) for the parents of preschoolers. For this purpose, survey model was used in the study. Survey models are research approaches aiming to describe a situation in the past or present (Karasar 2005).

Sample

The population of the study was comprised of the parents whose children were attending to a nursery class and a kindergarten located in Afyonkarahisar – Turkey and affiliated to Turkish Ministry of National Education during 2018-2019 academic year. For the sampling and data collection, the researcher contacted all the preschool centers located in Afyonkarahisar provincial center and informed the parents about the use of the scale. In this process, 900 scale forms were distributed to one parent (either the mother or the father) of the child while only a total number of 742 forms from the parents, which constituted the sample, returned.

Among the children included in the developmental process of SATRPEC-Parent Form; it was found that 49.3% were female, 50.7% were male, 11.6% were single child, 88.4% had one or more than one sibling. 29.9% of the mothers of children were 29 year olds or younger, 59.4% were 30-39 year olds and 10.6% were 40 year olds and older; 64.2% were primary and 20.1% were high school and 15.8% were university graduates. Among the fathers; 7.8% were aged 29 and under, 70.2% were between 30-39 year olds and 22% were 40 year olds and above; 43.4% were primary, 33.7% were high school and 22,9 were university graduates.

Development of the Scale

In order to develop the SATRPEC-Parent Form, firstly a comprehensive literature review was performed. Studies conducted by Brussoni et al. (2018) and Sandseter (2007a, 2007b) were used in the development of the scale. The initial form included 72 five-point Likert type items which enabled the rater mark as 1-No, 2-Sometimes No, 3-Undecided, 4- Sometimes Yes and 5-Yes. A draft form consisting of pool of items was prepared in this stage. This form was presented to a total number of 13 experts including five academicians (preschool education and child development), one measurement and evaluation specialist, five teachers and two parents.

Data Analysis

In order to collect data, the scales were given to the parents by the researcher. The content validity, Cronbach alpha, exploratory factor analysis and confirmatory factor analysis were analyzed using SPSS and LISREL program. In order to determine the factor structure of the scale, exploratory factor analysis (EFA) was performed in SPSS program and confirmatory factor analysis (CFA) was performed in LISREL program to test the factor structure.

Findings

The aim of the study was to develop Scale for the Attitudes towards Risky Play at Early Childhood (SATRPEC) – Parent Form. For this purpose, the validity and reliability testing procedure of the scale is presented below.

During the development of the scale, firstly the literature was reviewed, and an item pool was created. Content validity (Thorndike and Thorndike-Christ, 2009) was tested to determine the ability of the scale to reliably predict and explain the results of other relevant variables. For the content validity of the guidelines and

evaluation criteria included in the scale, the scale was presented to experts. The experts were asked to evaluate the guidelines and evaluation criteria of the scale on the triple rating scale as “Appropriate”, “Not Appropriate”, “Appropriate in accordance with the changes”. After the expert opinions were collected, the opinions of the experts for each item in the measurement tools were combined in a single form and therefore evaluated and analyzed. In the evaluation of expert opinions, the content validity ratio (CVR) of each item was calculated.

Table 1. Results of Item Total Correlation for Scale for the **Attitudes towards Risky Play at Early Childhood (SATRPEC)** – Parent Form

Item Number	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
S1	131,4137	489,201	,602	,916
S2	131,3315	487,544	,630	,916
S3	131,3423	486,765	,633	,916
S4	132,5040	502,804	,264	,920
S5	131,3814	486,293	,623	,916
S6	131,3315	486,522	,631	,916
S7	132,6765	488,554	,601	,916
S8	131,2345	507,025	,203	,920
S9	131,1604	501,336	,315	,919
S10	131,1604	501,336	,315	,919
S11	131,2345	507,025	,203	,920
S12	131,4245	492,882	,527	,917
S13	131,4838	487,065	,639	,916
S14	131,4272	490,844	,591	,917
S15	132,4663	486,441	,595	,916
S16	132,8221	517,636	-,042	,922
S17	132,3531	484,658	,618	,916
S18	132,2372	489,204	,504	,917
S19	131,9151	483,732	,637	,916
S20	131,0000	518,795	,101	,916
S21	131,1725	418,643	,109	,916
S22	132,5243	486,800	,621	,916
S23	132,2358	488,024	,560	,917
S24	131,7803	506,709	,182	,921
S25	131,1604	501,336	,315	,919
S26	132,3086	506,027	,183	,921
S27	132,9191	507,222	,174	,921
S28	132,7116	508,354	,135	,921
S29	132,2345	485,988	,598	,916
S30	131,1213	492,701	,500	,917
S31	132,0445	484,148	,622	,916
S32	132,5485	503,290	,273	,920
S33	131,9151	483,732	,637	,916
S34	132,2013	515,450	,246	,919
S35	132,4663	486,441	,595	,916
S36	131,7803	506,709	,182	,921
S37	131,7803	506,709	,182	,921
S38	132,2992	478,215	,422	,920
S39	132,2372	489,204	,504	,917
S40	132,3679	484,581	,591	,916
S41	131,7399	521,423	-,110	,924
S42	133,0000	506,213	,263	,919
S43	132,5485	503,290	,273	,920
S44	132,5040	502,804	,264	,920
S45	131,3227	319,995	,171	,926
S46	131,9010	417,551	,175	,924
S47	132,2013	515,450	,246	,919
S48	131,1725	418,643	,109	,916
S49	132,3930	517,675	,227	,917
S50	131,0000	518,795	,101	,916

Then, the content validity index (CVI) was determined by averaging the calculated validity ratios. In line with expert opinions, the items considered to best measure the specified behavior were taken out of the pool consisting of 50 items with the selected content validity ratio below 0.75 and eventually a draft form consisting of 28 items was prepared. Content validity index was calculated by taking the average of the remaining 28 items

and its value was determined as 0.91. These values mean that all items in the scale are required and the content validity is ensured. The total correlations of items applied to the scale were between .182 and .639. Karasar (2005) stated that if the item total correlation is .30 or higher, it distinguishes the items at a good level; if it is between .20 and .30, the items can be included to the scale if deemed necessary; and items less than .20 should be removed. In line with this opinion, it was decided to remove the items in the range of .10 to .30. The scale, which eventually consisted 28 items, was analyzed in terms of construct validity..

In order to determine the degree of measurement of Scale for the Attitudes Towards Risky Play at Early Childhood (SATRPEC) – Parent Form, a preliminary application was applied to the parents of the children (n=50) who attend to a nursery school or a kindergarten affiliated to Afyonkarahisar Provincial Directorate of National Education. As a result of the preliminary application, it was concluded that the reliability coefficient perfectly differentiated for the whole measurement tool ($\alpha = 0.929$). After the preliminary application study, the scale was made ready for application in the sample group determined for the validity and reliability study and the data used in the preliminary application were included in the sample group of the study.

The validity of the structure is expressed to what extent the scale can measure the structure it wants to measure (Thorndike and Thorndike-Christ, 2009). In order to determine the construct validity of the scale, exploratory factor analysis was performed using the principal component analysis. During exploratory factor analysis, KMO (Kaiser-Meyer-Olkin Measure of Sampling Adequacy), which determines whether the sample is sufficient or not, is found to be .90. According to Field (2000), .90 is considered to be excellent, .80 good, .70 moderate, .60 poor, and less than .60 bad for KMO. According to this result, it was concluded that the sample number was excellent. According to this result, it was concluded that the sample number was excellent.

The results of the exploratory factor analysis of the scale applied to the parents of preschoolers (n = 742) for the development of Scale for the Attitudes Towards Risky Play at Early Childhood (SATRPEC) – Parent Form are given in Table 2.

Table 2. Results of Factor Analysis for Scale for the Attitudes Towards Risky Play at Early Childhood (SATRPEC) – Parent Form

Item Number	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
He/She develops social skills.	.873				
He/She increases courage and self-confidence.	.870				
He/She is more curious about his surroundings.	.864				
His /Her imagination and creativity develop.	.862				
He/She learns to challenge.	.854				
He / She will be happier.	.825				
He/She does more skills on his own.	.813				
He/She iearns to cope with fears.	.790				
He/She learns to establish a cause and effect relationship.	.781				
He/She the problems faced in daily life on his/her own.	.451				
He/She can jump / climb high.		.801			
He/She can slide / climb reverse from the slide.		.782			
He/She can swing standing / reversed on the swing.		.773			
He/She can ride without a helmet and knee pads.		.733			
He/She can play at home and with sharp / penetrating materials (knife, hammer, screw, needle, grater…).		.723			
He/She can play with the materials he finds on the street (wood, stone, sand).		.711			

He/She can play in the neighborhood / park with peers without an adult next to you.	.626				
Although I encourage my child to play risky plays, my child is unwilling to play.		.980			
I create opportunities for my child to play risky games.		.980			
I try not to interfere while my child is playing risky games.		.980			
I encourage him/her to play risky games.		.980			
I am worried he/she will get hurt.			.933		
I do not think he/she knows how to protect himself/herself.			.933		
I fear that someone will harm my child (being attacked, bullied, or abducted by his peers).			.933		
I do not let him/her play risky games because of my worries and fears.			.933		
When I allow, I am criticized by my neighbors and friends as being a bad parent.					.969
I am in disagreement with my partner about our child playing risky games.					.969
I think my spouse, my spouse's mother and father were overprotective to our child.					.969

As it can be seen in Table 2, the factor analysis of Scale for the Attitudes Towards Risky Play at Early Childhood (SATRPEC) – Parent Form revealed that there are five factors. In the first factor, the loads were between .873 and .451, for the second factor they were between .801 and .626, for the third factor it was .980 and the fourth factor it was .933 and the fifth factor was .969. The factors were named considering the contents of the items.

The scale's eigenvalue was collected under five factors greater than 1. The first factor (item no: 1,2,3,4,5,6,12,13,14,30) was called *Pro-Beliefs*, the second factor (item no: 29,17,31,40,22,23,38) is *Distinguishing Risky Behaviors*, the third factor (item no: 25,9,10,21) was *Supporting Children*, the fourth factor (item no: 32,33,19,34) was named as *Feeling Anxiety* and the fifth factor (item no: 36,37,24) was called *Parental Support*. In addition, total variance of first factor was 40%, total variance of second factor was 55%, total variance of third factor was 66%, total variance of fourth factor was 73%, and total variance of fifth factor was 80%.

The five-factor structure formed by exploratory factor analysis was tested with confirmatory factor analysis and the results obtained are given below.

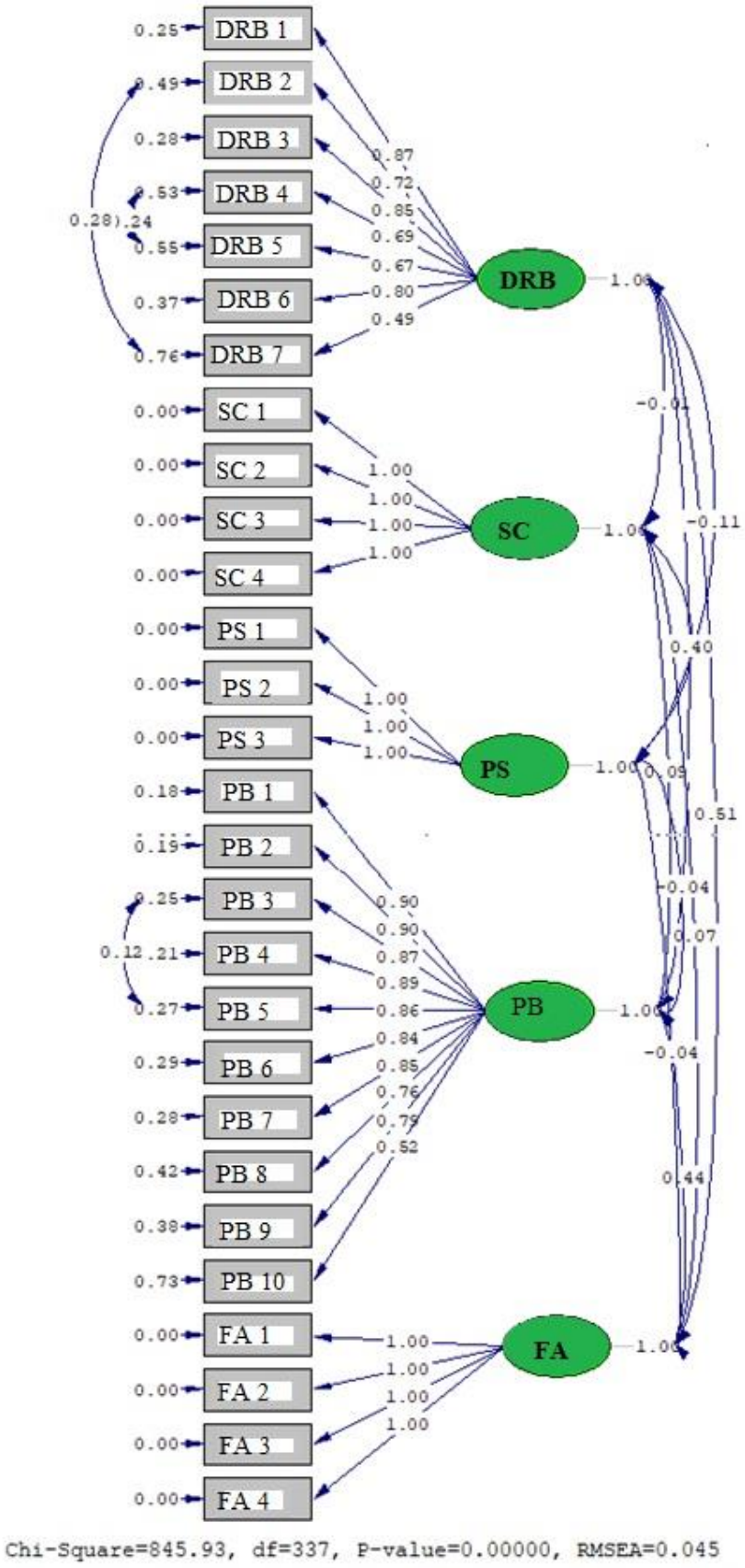

Figure 1. Pathways found as a result of confirmatory factor analysis of Scale for the Attitudes Towards Risky Play at Early Childhood (SATRPEC) – Parent Form

Table 3. Measurement model - Fit indices

Fit Indices	Perfect Fit	Acceptable Fit	Measurement Value
RMSEA	0 ≤ RMSEA ≤ 0.05	0.05 < RMSEA ≤ 0.10	0.045
NFI	0.95 ≤ NFI ≤ 1	0.90 < NFI< 0.95	0.98
NNFI	0.97 ≤ NNFI ≤ 1	0.95 ≤ NNFI < 0.97	0.99
CFI	0.97 ≤ CFI ≤ 1	0.95 ≤ CFI < 0.97	0.99
SRMR	0 ≤ SRMR< 0.05	0.05 ≤ SRMR < 0.10	0.040
GFI	0.95 ≤ GFI ≤ 1	0.90 ≤GFI < 0.95	0.92
AGFI	0.90 ≤ AGFI ≤ 1	0.85 ≤ AGFI < 0.90	0.91

When the fit indexes are examined as a result of confirmatory factor analysis of Scale for the Attitudes Towards Risky Play at Early Childhood (SATRPEC) – Parent Form; RMSA (.045), NFI (.98), NNFI (.99), CFI (.99), SRMR (.040) and AGFI (.91) correspond to perfect fit, and GFI (.92) corresponds to acceptable fit. In addition, according to chi-square results [(845.93 / 337) 251 <3], it can be said that the model shows perfect fit since the value found below 3 corresponds to perfect (Schermelleh-Engel at al., 2003).

Moreover, the alpha value of the scale (n = 742) was also analyzed. The alpha coefficient is used to measure the internal consistency of a measuring instrument (Thorndike and Thorndike-Christ, 2009). The reliability coefficient of the scale was found out to be (α = .919). The reliability coefficients of the factors were found to be as follows: α = .953 for the first factor (PB), α = 878 for the second factor (DRB), α = 1,000 for the third factor (SC), α = 1,000 for the fourth factor (FA), and α = 1,000 for the fifth factor (PS). In this sense, Alpar (2012) states that the reliability coefficient is between .80-1.000 shows high reliability. Therefore, Scale for the Attitudes Towards Risky Play at Early Childhood (SATRPEC) – Parent Form can be considered as a reliable tool.

Results and Discussion

The issue of children and play has been one of the most studied subjects for many years. However, the issue of risky play has recently emerged as a new discussion area. As the vital activities are important in the life of the individual, play is likewise important for the children. Children play without discrimination in any environment such as race, language, religion and gender. Play does not have a certain time because children can play at any moment with any material they find. However, in recent years, children have been confronted with restrictions on play environments and the materials they play. In the play environments, safety has been focused and arrangements have been made in the playgrounds in order to reduce the risk of injury to children. For example, in Ayan and Ulaş (2015) stated that the playing fields in Turkey in the city centers reflect the conventional structure which is characterized by high level safety precautions. In addition to the parks, there are playgrounds with the same characteristics in preschool education institutions. Also, in Turkey, the play environments in school playgrounds were determined to be sufficient in terms of natural features (Atabey, Yurt and Ömeroğlu, 2009, the Chancellor and Cevher Kalburan, 2014). However, it has been demonstrated by many researchers that it is an issue in which security becomes an exaggerated focus in order to control the risk in play. In particular, researches emphasized that taking serious precautions and forcing children to play in highly structured environments in order to protect them might very well limit the experiences and stimuli that are important for all developmental areas (Little, 2010; Little and Eager, 2010; Little and Wyver, 2008; Sandseter, 2012; Stephenson, 2003).Especially in the city centers, as a result of the increase in crime, child trafficking, peer bullying and the increasing number of overprotective parents, it is seen that children are forced to play in closed, easy-to-control areas instead of free play environments. However, children who play games in closed spaces or in environments under the supervision of adults are seen as disadvantaged today. Because these children have less contact with nature, experience less of their daily life skills, and have to spend a still life away from risk, away from natural life. Parents with especially overprotective parental attitudes do not allow children to play freely in the neighborhood environment without adulthood, compared to the past (Cevher Kalburan, 2014).

Children are affected by their parents in choosing areas to play. Children's risk-taking decisions are influenced by the way adults assess them and their parents' behavior in risk-taking situations (Sandseter, 2009a). In this context, children who are not allowed to take risks in their games are prone to be inexperienced, excessively cautious or take risks, do not act independently and even have anxiety disorders by making false evaluations about their capacity (Knight, 2012).

Today, health specialists and educators state that children are more confronted with problems such as emotion regulation, social development, behavioral problems and obesity because they live away from nature and away from movement. Wells and Evans (2003) stated that children who grew up close to nature had less psychological stress than children living far from nature in the city center and could cope with higher levels of stress on their own.Play has numerous positive contributions to children's development. The important thing is to give children a suitable environment and time to play. As a result of the research carried out by Clements (2004), it was determined that today's children spend more time on television and computer games in which they play less games outdoors. Now, instead of playing freely in the neighborhood environment, children have to meet their playing needs in the environments determined by adults, or in educational environments such as dance, music and drama under adult supervision or in structured playgrounds at shopping malls. However, there are some studies claiming that children have a common opinion that they want to play outdoors, outdoors, without strict adult supervision (Einarsdóttir, 2014; Nicholson, Kurnik, Jevgjovikj and Ufoegbune, 2011 as cited in Tuğrul et al., 2019). From this point of view, the result that children want to play freely at outdoors cannot be neglected. Free play not only supports children's creativity, decision making, planning, independent thinking, socializing, leadership skills, but also allows children to discover their own interests and skills (Tuğrul et al., 2019). It was emphasized that spending time with nature in the open air is important for health and therefore children should be allowed to play with outdoor plays and they should experience the risks themselves. Fjortoft (2004) argued that artificially colored safe playgrounds are less satisfying to children, so outdoor play environments are beneficial to children's development. At the same time, children's playgrounds in traditional schoolyard playgrounds and natural-outdoor playgrounds were compared, and there was a statistically significant increase in motor skills of children in terms of balance and coordination.

From this point, researchers have a common view that it can be beneficial for children to take risks in their games freely in the open air. For this reason, most researchers focused on the positive benefits rather than the negative outputs of risky play in the open air in their studies.Maller et al. (2006) argued that spending time in natural environments reduces mental fatigue in children, improves positive appearance and life satisfaction, copes with stress, and is effective in combating the increasing rates of obesity and diabetes. Thus, researchers focused on the positive benefits of risky play outdoors rather than the risks encountered. According to Cevher Kalburan (2014), risky play includes physical and affective benefits of movement plays played outdoor. According to Ünüvar and Kanyılmaz, children have fun while playing and at the same time they gain new experiences. They have the opportunity to retry the skills they have failed and succeed at last. They also take risks during they play and these risks play an important role in their development (Ünüvar and Kanyılmaz, 2017). In particular, according to Oktay, preschool period is the period in which the cognitive, social-emotional and motor development of children is the fastest, and the physical and social environment of the children is seen to be very important in reaching the highest limits of their potential in this period (Oktay, 2007).

In this study, it was aimed to develop Scale for the Attitudes Towards Risky Play at Early Childhood (SATRPEC) – Parent Form to determine the views of parents about their children playing risky plays. For this purpose, regarding the validity of the assessment tool; For the face and content validity, according to expert opinions CVR and CVI rates were calculated. Items of which validity value were below 0.75 were removed from the pool and a draft form consisting of 28 items was prepared. This form was first piloted and reliability coefficient was calculated. As a result of the pilot application (n=50), it was concluded that the reliability coefficient was excellent for the whole measuring instrument ($\alpha = 0.929$). For construct validity, exploratory factor analysis was performed first. As a result of the factor analysis of the scale, it was determined that there are five factors. The construct validity of the scale was also tested by confirmatory factor analysis. The 10 items in the first factor were named as "Pro-beliefs". These items evaluate parents' attitudes to how necessary risky play is for their children. The 7 items in the second factor are explained as "Distinguishing Risky Behaviors". These items evaluate what kind of risky games parents allow for their children. The 4 items in the third factor are named as "Supporting Children". These items evaluate whether parents support risky play. The 4 items in the fourth factor were named as "Feeling Anxiety". These items evaluate what feelings the parents experience if they give permission for the risky play. The 3 items in the fifth factor were named as "Parental Support". These items evaluate concensus on risky play between the parents. The highest total score that can be obtained from the scale is 140 and the lowest total score is 28. Scoring higher indicates that parents support the risky play more, and lower scores indicate that they are reluctant about risky play.

When the literature on five factors in the developed scale is examined; regarding the "Pro-beliefs and Supporting Children" factors, there are many studies that accept that risky play positively affects all areas of development of children and that children should be given the opportunity to play risky games (Gill, 2007; Ball, 2002; Sandseter, 2007; Sandseter, 2009a,b; Little, Wyver and Gibson, 2011; Brussoni, Olsen, Pike and Sleet, 2012; Little, Sandseter and Wyner, 2012; Sandseter, 2014; Little, 2015; Coe, 2017; Harper, 2017; Nikiforidou , 2017; Ünüvar and Kanyılmaz, 2017; Brussoni, Ishikawa, Han, Pike, Bundy, Faulkner and Masse, 2018; Kleppe, 2018; McFarland and Laird, 2018). However, regarding the "Feeling Anxiety and Distinguishing Risky Behaviors" factors; Cevher Kalburan (2014) reported that parents deprived their children of risky games due to their anxiety that their children could be injured, while Ball (2002) reported that parents put restrictions on risky play due to safety concerns. Little at al., (2011) suggested in his study that teacher and parents accepted the positive effects of risky play on the development areas of children, but they offered the children limited risk play opportunities. "Parental Support", the last factor in the scale, is the factor related to parental attitudes. Parents' attitudes towards their children affect their development and are effective in their upbringing as healthy individuals in the future. If children are required to be competent individuals who can express themselves in society, parents should be understanding, democratic and flexible. Contrary to these approaches, parents who are overly oppressive, protective, overly tolerant and insensitive attitude cause their children to be inconsistent and unsuccessful individuals. (Yavuzer, 2001; Nelsen, Lott and Glenn, 2002). It is very important in the development of children that both parents think and react the same, say yes or no to the same behavior and support each other in treating children. Accordingly, it is seen that the sub-factors of the study and the studies are supported. The obtained values and studies showed that the scale is reliable and has acceptable psychometric properties.

Recommendations

In line with the findings related to Scale for the Attitudes Towards Risky Play at Early Childhood (SATRPEC) – Parent Form, following suggestions may be presented to researchers, educators and health specialists: it is possible to inform parents by organizing seminars, family training activities, panels, conferences about the advantages of risky play and outdoor play for the development of children. A similar scale developing study can be carried out to determine the views of preschool educators about risky play. The research is limited to the sample within the borders of Afyonkarahisar/Turkey province. Therefore, similar studies can be conducted in different provinces. In addition, this study is suggested to be carried out with parents with various demographic characteristics, for example with parents of different socio-cultural / socio-economic levels.

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