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A MIXED METHODS APPROACH TO DEVELOPING A SCALE ON PARENTS' PRACTICES TO REWARD AND PUNISH THEIR CHILDREN

Abstract: This exploratory mixed method research aimed to develop parent and child forms of a scale to measure parents' practices to reward and punish their children. For the qualitative strand, semi-structured interviews were conducted with parents (n = 54) and their children (n = 39). The qualitative analysis revealed four major themes regarding parental rewarding practices (material rewards, activity-based rewards, permission, and verbal and emotional rewards) and three major themes regarding parental punishment practices (response cost, verbal and emotional punishment, and corporal punishment), which were used to develop two sets of prospective items. At the quantitative strand, EFA and CFA analysis were performed using data obtained from a total of 701 parents and 620 children to test the psychometric properties. As a result of the research, both Parent (PRPS-P) and Child (PRPS-C) forms of Parental Reward and Punishment Scale (PRPS) were developed for use at the K-12 level with favorable psychometric properties.

Keywords: rewarding, punishment, parents, child, exploratory mixed method.

Introduction

Most parents ardently seek to shape and structure their children's behaviors (Miller, 2002). Disciplinary practices, childrearing customs, and parenting styles that parents use to structure their child's behavior have a significant impact on the child's entire life (Goldin, 1969; O'Connor, 2002). Parents' consistent or inconsistent disciplinary practices affect children's values, beliefs, attitudes, and behaviors (Runions & Keating, 2007). Children who are punished harshly by their parents tend to model these behaviors, considering such punishment practices acceptable or even necessary (Bandura, 1978; White & Straus, 1981). These children can apply the same methods to their own children during adulthood (Bailey, Hill, Oesterle, & Hawkins, 2009; Reid & Davies, 2009), which can be associated with social learning theory. According to social learning theory, children take their parents as powerful role models while shaping their own behaviors (Bandura, 1999).

The effects of reward and punishment on children have been well-documented. Findings of these studies suggest that despite a general consensus regarding the negative effects of punishment on

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children, the discussions about the positive and negative effects of reward still persist. Since the research findings on the effects of reward and punishment on children are inconsistent, experts find it difficult to give precise recommendations to parents in this regard (Deater-Deckard & Dodge, 1997; Nieman & Shea, 2004). It is also reported that parents in Turkey, which has a large Muslim population, tend to use methods based on child development and psychology to discipline their children instead of the traditional teachings of reward and punishment methods (Aybars, 2014). Also considering that traditional methods of rewarding and punishing have changed especially with the invent of technologies popular among children (e.g. smartphones, tablet computers, social media etc.), we believe new researches on this subject will inform a better understanding on this issue, add to our current knowledge, and contribute to the theory.

Although there is no clear classification regarding the types of rewards in literature, the binary classification of material rewards (e.g. financial reward) and verbal rewards (e.g. praise, encouragement) is one of the most popular (Deci, 1971; Deci, Koestner, & Ryan, 1999; Pinder, 2011). Research does not provide consistent results on the positive and negative effects of rewards used by parents to shape their children's behavior. This ongoing debate on the effects of the reward has focused on the acquisition and sustainability of desired behaviors (Deci et al., 1999). The main argument of the researches which emphasize the negative effects of the reward is related with its undermining impact on intrinsic motivation: when the award is no longer given the desired behavior associated with the reward also disappears (Deci, 1971; Deci et al., 1999; Lepper, Keavney, & Drake, 1996).

Another common method that parents use to shape their children's behavior is punishment. Past research has focused on the nature and methods of corporal punishment such as spanking, pinching, pulling the ear, tapping with an object, long standing, or chair timeout, which are the most common punishment methods parents use to discipline their children (Caselles & Milner, 2000; Straus, 1994). Corporal punishment is defined as the use of physical force that causes the child to suffer physically or mentally (Gershoff, 2008). Straus (2001) likewise defines physical punishment as executing a painful physical force to control or correct the child's behaviors with no intention to injure and disable the child. In a research on punishment (Straus & Stewart, 1999), 94% of the participating American parents stated that corporal punishment can be used to tame their 3-4-year-old children when they misbehave. This prevalence of corporal punishment, which has negative effects on children, has attracted the attention of policy makers, and in some countries (Austria, Croatia, Denmark, Finland, Germany, Israel, Italy, Norway, and Sweden), such penalties are prohibited (Bitensky, 1997).

Although a limited number of studies say that corporal punishment is one of the effective methods to teach children the desired behaviors (Baumrind, 1996; Larzelere, 1996), most studies agree on the negative effects of punishment, making it a category of child abuse. Using corporal punishment on children has been reported to cause negative consequences on children such as aggression (Simons, Lin, & Gordon, 1998), criminal and antisocial behaviors (Patterson & Stouthamer-Loeber, 1984), parent-child conflicts (Grusec & Goodnow, 1994), depression (Turner & Finkelhor, 1996), anger (Grusec & Goodnow, 1994), low academic success and escaping from home (Vargas et al., 1993). Corporal punishment prevents children from internalizing the rules and also causes them to act with external imposed motives rather than taking responsibility for their own behavior (Grusec & Goodnow, 1994).

Despite its negative effects, there are also parents who still believe that the corporal punishment is a necessary and effective method (Hastings & Grusec, 1998; Holden, Miller, & Harris, 1999). Studies on the characteristics of parents who frequently use corporal punishment have revealed that these parents are generally authoritarian (Mah & Johnston, 2012), young (Dietz, 2000; Wissow, 2001), less educated (Aybars, 2014; Dietz, 2000), have emotional problems (Conger, Patterson, & Ge, 1995; Dix,

Reinhold, & Zambarano, 1990; Peterson, Ewigman, & Vandiver, 1994; Wissow, 2001), of low socioeconomic status (Dietz, 2000; Straus & Stewart, 1999; Xu, Tung, & Dunaway, 2000; Youssef, Attia & Kamel, 1998).

While corporal punishment methods are often used to discipline children, parents also use other punishment methods such as time-out, withdrawal of privileges (Grusec & Kuczynski, 1980), insulting, swearing (Jackson, Gyamfi, Brooks-Gunn, & Blake, 1998; Vissing, Straus, Gelles, & Harrop, 1991), shouting and threatening (Hemenway, Solnick, & Carter, 1994; Youssef et al., 1998). Youssef et al. (1998) stated in their study that 56% of parents used verbal warning and 37% used screaming and threatening in addition to physical punishment. Punishments such as verbal warning, shouting, threatening, swearing, yelling, screaming, disapproval, humiliation, and sarcasm are generally categorized as methods of verbal punishment (Aybars, 2014; Grusec & Goodnow, 1994; Vissing et al., 1991). Verbal punishment also causes negative behavioral and emotional states among children such as aggression (Vissing et al., 1991), confidence problem and anger (Grusec, & Goodnow, 1994). Another common method of punishment used by parents is withdrawal of love and prohibition of child's favorite activities (e.g. watching TV, going out with friends, playing games) (Aybars, 2014; Dadds, Adlington, & Christensen, 1987). Although withdrawal of love and prohibition may seem to be more acceptable than corporal punishment, Dadds et al. (1987) have reported that some children prefer physical punishment to such punishments.

When previous studies are examined, it seems there still remains a great deal of ambiguity in the field regarding the effects of both punishment and reward on children. This proves that more research is needed on the emotional and behavioral effects of reward and punishment methods used by parents on children (Holden, Vittrup, & Rosen, 2011). At this point, it is primarily necessary to determine parents' methods of rewarding and punishing their children. Due to the nature of the rewarding and punishment methods used by parents, in addition to ethical issues, it can be extremely difficult to spot real-time situations and observe how parents behave in these situations. Due to these difficulties, self-report-based instruments measuring the perceptions or views of parents and their children have been developed and used rather than observation-based instruments.

In most of these instruments, parents are asked which types of punishment methods are used to discipline their children in a certain period (e.g. last week, last year) (Arnold, O'leary, Wolff, & Acker, 1993; Bailey et al. 2009; Day et al., 1998; Gershoff, 2002; Knafo & Plomin, 2006; Straus, Hamby, Finkelhor, Moore, & Runyan, 1998). *Parent-Child Conflict Tactics Scale* is the most commonly used instrument to measure the methods of parents to punish their children (CTS; Straus et al., 1998). CTS measures the methods used by parents to solve conflicts with their children with items under factors such as non-violent discipline, ordinary corporal punishment, severe corporal punishment, ordinary psychological aggression, severe psychological aggression, and severe physical assault. Similarly, *The Parental Punitiveness Scale* (PPS; Epstein & Komorita, 1965) examines parents' methods of punishing their children in case of anger. PPS consists of 45 items including verbal, physical and indirect aggression dimensions.

Although the previous studies on this subject have contributed considerably to the field, many of these studies were pure quantitative or pure qualitative studies. This may pose some methodological limitations. In this study, we examined the rewards and punishments that parents give to their children by using both a qualitative and quantitative approach from the perspective of both parents and children. In addition, we tried to enable the future researchers to compare both parents' and their children' experiences in this regard by developing instruments including same items. Previous instruments on this subject were generally developed a few decades ago and focused more on the corporal punishment and tangible rewards. However, it is known that the nature of and reasons for conflicts between parents and their children change consistently since

parenting is a dynamic process and, especially in recent years, the internet and social media usage has become widespread. Today parents experience various problems with their children (e.g. excessive mobile phone or computer use) that their parents did not experienced in the past, and they are not sure about what methods of reward and punishment to use to discipline their children with their limited experience of role models from their parents in the past. Therefore, it is thought that up-to-date instruments are needed to measure the current rewarding and punishment methods used by parents. As is known, the age range of adolescence varies according to cultural and historical contexts. In many cultures, adolescence covers a period starting at the age of 10-13 and continues until the late teens (Santröck, 2012). Thus, in this study, we focused on the parents' methods of rewarding and punishing adolescents aged between 10 and 18. However, we used the term "child" instead of "adolescent" to refer to the son and daughter roles of this age group.

For the purpose of our research, we used exploratory mixed methods design, which is also defined as an instrument development variant of mixed-methods research (Creswell & Plano Clark, 2011; Johnson & Onwuegbuzie, 2007). In this regard, first, qualitative interviews were conducted with parents and their children about the reward and punishment methods used by parents to discipline their children, and the scale items were developed based on the result of qualitative analyzes. Then, to test the psychometric properties of the instrument, the validity and reliability analysis were made using the quantitative data obtained during the second stage. Lastly, the results of the quantitative and qualitative strands were compared to understand whether the obtained psychometric construct of the instrument confirms the themes emerged in the qualitative analysis, i.e. whether the qualitative findings have wider generalizability based on quantitative findings. Thus, our exploratory mixed-methods design research question is as follows:

RQ: Do the views of parents and children on the reward and punishment methods used by parents to discipline their children have generalizability to a larger sample of parents and their children?

Research Method & Design

Though mixed method researches have a rather recent history, dating back to late 1980s, many researchers have adopted and commonly used them since they combine the strengths of both quantitative and qualitative research methods. In addition to this power, since using quantitative or qualitative data alone may fall short in the face of the complexity of the problems in social sciences, the researchers have become more motivated to use the strengths of the two methods together (Creswell & Plano Clark, 2011; Johnson & Onwuegbuzie, 2007). Greene (2007) refers to this as "multiple ways of seeing". In this study, we used exploratory mixed method design to look from multiple ways at the complex problem of parents' reward and punishment methods (Johnson & Onwuegbuzie, 2007). The exploratory mixed-methods design has two strands: the researcher begins to explore the case or phenomenon under scrutiny qualitatively before doing so quantitatively. In many implementations of this sequential design, the researcher develops an instrument based on the qualitative results. Therefore, this design is also called as the instrument development variant (Creswell, Fetters, & Ivankova, 2004). Also, the data collected from a larger population during the second quantitative strand can be used to test the generalizability of the limited quantitative findings.

For all stages of the research, initial ethical permissions were granted from the the Scientific Research and Publication Ethics Committee of the university the researchers work for. Participating parents were informed about the purpose and content of the study and their verbal consents for themselves and their children were obtained during the voice recording. All participants were ensured that they did not have any legal obligations and could leave at any time during the research process. Participants of the qualitative phase of the research were told that their confidentiality and anonymity would be protected, and only nicknames will be used while the reporting process of the

data and no information would be used to disclose their personal identities. Similarly, during the quantitative phase, the participants were informed that their personal information would be protected to ensure that they feel confident enough to provide reliable answers to the instruments. In the first phase of the research, in-depth interviews were conducted with parents and their children to explore the nature of reward and punishment practices among parents. Next, based on qualitative findings, prospective scale items about reward and punishment methods used by parents were developed. In the second phase of the research, validity and reliability analyzes of the developed scale were conducted. Table 1 summarizes the key steps of the exploratory mixed methods research design. Detailed procedures about sampling, data collection and data analysis are described below.

Table 1. Exploratory mixed methods research design

Stages	Qualitative data collection	Qualitative data analysis	Instrument development	Quantitative data collection	Quantitative data analysis	Interpretation
Procedures	* Maximum variation sampling method (54 parents and 39 children * Semi-structured interviews	* Coding * Thematic Analysis	* Developing scale item based on 7 major themes	* n = 701 parents and n=620 children (for EFA and CFA) * n = 173 parents and n = 765 children (for Convergent and Divergent validity analysis)	* Exploratory factor analysis * Confirmatory factor analysis * Convergent and Divergent validity analysis * Reliability analysis	* Comparing the results with common benchmarks and interpretation
Outcomes	* Transcripts	* Coded documents * 7 themes (4 rewarding methods and 3 punishment methods)	* Two forms of PRPS with 58 initial items under 7 subscales (PRPS-P and PRPS-C)	* Four data sets obtained from 4 instruments (PRPS-P, PRPS-C, PAS, PSS)	* Factor loadings * Model fit indices * Correlation coefficients * Cronbach Alpha coefficients	* Factor definitions * Instructions about scoring

Stage 1: Qualitative Study

Participants

Participants were selected using purposeful sampling method, which is widely used in qualitative research to reach in-depth and rich information (Patton, 2002). In particular, maximum variation sampling method was used to explore the most common themes across a rather heterogeneous group of people. Thus, a total of 93 cases, including 54 parents and 39 children participated in the study. All parents and children had at least one children or parent involved in the study. Of the participating children, 15 were girls (38.5%) and 24 were boys (61.5%). Their ages ranged from 10 to 17 years old ($M = 13.71$ years, $SD = 2.06$). Among the participating parents, 31 (57.4%) were mothers and 23 were fathers (42.6%). They were aged between 28 and 57 years old ($M = 41.88$ years, $SD = 5.78$). Since collecting data about ethnicity in researchs in Turkey is not approved by ethics committees, this information could not be obtained from the participants. However, it can be said

that in the province, where the study was conducted, families of Turkish, Kurdish or mixed origin live together and they have a homogeneous structure with similar culturally characteristics.

Data Collection

The data were collected through semi structured interviews with parents and their children in 2017 and 2018. A total of 48 senior students studying at the counseling and guidance department of the university the researchers work for took active part in finding and interviewing the participants. To this end, first, these students were informed about the purpose of the research and the characteristics of potential participants. Next, they were asked to find volunteer parents (with children aged between 10-18) and their children, whom they knew (except their own parents and siblings), considering the requirements of maximum variation sampling method. In this research, children under 10 years of age were not included because of the reading and numerical comprehension skills needed to accurately complete the rating scales. When the parents accepted to take part in the research with their children, the time and place of the interviews were negotiated and scheduled with them. Most parents asked for the interviews to be held at their residences and with the counseling and guidance students who contacted them. Thus, all of the interviews were made by counseling and guidance students at the participants' residences. Three-session training, each session lasting 70 minutes, was given by the first author to the counseling and guidance students about conducting qualitative interviews. During these training sessions, the students were taught how to apply the interview protocol, how to ask the main and follow-up questions, and how to record the interviews. All of the interviews were conducted at the participants' homes. Separate interviews were conducted so that parents and children would not affect each other. Mostly, interviews were made with the parents first, and then with their children in a room without the presence of their parents. In interviews with parents with more than one child, the parents were asked to respond based on their experiences with their children between the ages of 10-18. Within the scope of the study, we assumed that parents with more than one child can use different methods of rewarding and punishing their children according to their individual differences, but despite these differences, parents may have general approaches that they use for all their children. The interview form consisted of five main questions asked to parents and children (Example question about reward for parents: *What behavior did you reward your child for and what did you give/do as a reward?* Example question about reward for children: *What did your mother / father last reward you for and what did he/she give/do as a reward?* Example question about punishment for parents: *What behavior did you punish your child for and what did you give/do as a punishment?* Example question about punishment for children: *What did your mother / father last punish you for and what did he/she give/do as a punishment?* Each interview took about 20-25 minutes, and interviews were recorded on mobile phones, which were then transcribed verbatim into Microsoft word by the researchers.

Data Analysis

Interviews transcripts were first imported to and then analyzed with the Nvivo11. The steps of inductive thematic analysis procedure, as defined by Braun and Clarke (2006), were used to find patterns of meaning in the data set and to describe them in a rich and detailed way. According to this procedure, first, the three researchers read the entire transcripts to become familiar with the data set. Then, the first cycle of coding was performed by the first researcher, which yielded 73 initial codes, 44 of which were related to the rewards and 29 related to the parental penalties. Next, these codes were discussed, negotiated, refined, and combined under more inclusive, deep and rich potential themes by all three researchers. Following this initial consensus, the second cycle of the analysis was conducted by all three researchers independently to achieve intercoder reliability. After comparing the results of independent analysis, minor disagreements were negotiated and a consensus was reached on a total of seven overarching themes.

Results of Stage I

The qualitative analyses of the interviews with parents and their children revealed that methods of rewarding used by parents to reinforce the desired behaviours of their children can be defined under four themes: *material rewards*, *activity-based rewards*, *permission*, and *verbal and emotional rewards*.

Material rewards

It was understood from the interviews that parents often give material rewards to their children to appreciate their positive and desired behaviors. Among the participating parents, 84% of the mothers (n = 26) and 74% of the fathers (n = 17) said that they often used *material rewards* such as “giving money”, “increasing pocket money”, or buying “clothes and shoes”, “a tablet”, “a phone” and “stationery products”. A 55-year-old father, who bought shoes for his 15-year-old daughter as a reward because her lessons were good, said: “She was dying for a pair of sneakers. I said I would buy them if she studied hard. She did her best. She studied her lessons at certain hours and I monitored her. After that, I rewarded her buying the shoes she wanted.” Although most parents stated they did not like to give money to their children as a reward, some parents said that they also used material rewards such as giving money or increasing pocket money. A 33-year-old mother said: “I gave money and he went to the cinema, because he made a good score on the exam, he was successful.”

Activity-based rewards

Activities such as going to the cinema, having a picnic or eating out together with their children are another method parent use to reward their children. Of the parents, 35% (n = 11) of the mothers and 35% of the fathers (n = 8) said that they rewarded their children by planning such activities. A 48-year-old mother who wanted to reward her son for his success in the exams said: “We went to the mall. After that, we went for a picnic. Altogether we ate outside. He was very happy.” A 15-year-old boy expressed a similar situation as follows: “On the day my exams finished, my parents and I had dinner outside and went to the movies. They rewarded me this way.”

Permission

Of the parents, 16% of the mothers (n = 5) and 13% of the fathers (n = 3) stated that as a method of rewarding their children they allowed their children to use technological devices such as computers, tablets, smartphones, to watch television or to spend time outside with their friends. For example, a father, who stated that his 17-year-old son enjoyed spending time on the computer a lot, said: “Our rewards are generally related with computers, because he plays a lot with his computer. We let him play with the computer.” A 16-year-old boy said when his parents ask him “What do you want as a reward?” he would say “I want to ride my bike outside more.”

Verbal and emotional rewards

Saying words such as 'well done', 'bravo', appreciating the child in the presence of others, saying ‘I’m proud of you’, kissing or hugging the child are among the verbal and emotional rewards that parents use. It was found that 35% (n = 11) of the participating mothers give positive verbal and emotional reactions to reward their children, while only 9% (n = 2) of the fathers do so. A 44-year-old mother explained that she used the verbal and emotional rewards together to reward her son: “When my child does something good, I sometimes kiss him, and say ‘well done’ and ‘thank you’”. When asked about the most meaningful reward he received throughout his life, a 16-year-old boy said, “My parents said they were proud of me. This was the biggest reward for me.”

The qualitative analyses of the interviews with parents and their children revealed three themes regarding the methods of punishment used by parents to discipline their children: *response cost*, and *verbal and emotional punishment*, *corporal punishment*.

Response cost

The analysis of the interviews revealed that most common punishment method used by parents was banning. Of the participants, 87% of the mothers (n = 27) and 78% of the fathers (n = 18) stated that they preferred to ban the activities their child like (e.g. using computer / tablet / smartphone, cycling, going out with friends, watching television etc.) for a certain period of time to punish them. A 42-year-old father said the following about banning some activities for his son: "I set up a password on his computer. He was not studying, so I didn't allow him use his computer." The 14-year-old daughter of this mother expressed as follows how harshly her mother punished her by taking her phone: "They had taken my phone because I was playing so much. They did not give the phone for about a month. It was tough." Another common method used by some parents (n = 38) to punish especially the boys was not allowing them to go out. A 16-year-old boy expressed his views on this situation as follows: "I think it was last week. I was a little late home after the school. They didn't let me go out on the weekend as a punishment."

Verbal and emotional punishment

During the interviews, 29% of the mothers (n = 9) and 26% of the fathers (n = 6) said that they used such verbal and emotional punishment methods as "insulting", "shouting", "getting angry", "scolding" and "stop communication" to punish their children. This finding shows that verbal and emotional punishment is the second most common method used by the participating parents after response cost. A 35-year-old father, who said he gets angry with his son when he does not study, explained it as follows: "I'd rather give my son little punishments. So, I just shout at him or I scold him." A 15-year-old boy who said that his family generally punishes him by scolding or shouting rather than beating, stated: "When my friends and I hang out a little too much after school, my friends usually say their families are going to beat them or so. But my mother and father don't beat me, they just shout or scold." Almost half of the mothers (48%, n = 15) said that they stop communication with their children to punish them when they misbehave. A 39-year-old mother, who wanted to punish her son 10-year-old son by stopping communication with him, said: "I punish the child by not talking. Sometimes he gets upset, sometimes he cries. He says 'Mother, please forgive me this time, I will not do it again.'" During the interviews, her son admitted that it is a very severe punishment to be emotionally excluded by his mother, saying "My mom sometimes doesn't talk to me. I try to talk to her, I beg, I apologize. I feel myself abandoned. No matter how hard I try, it takes too long for her to start talking again."

Corporal punishment

The analysis of the interviews suggested that corporal punishment is the least common method used by parents to discipline their children. Of the participants 10% (n = 3) of the mothers and 4% of the fathers (n = 1) said that they used the corporal punishment method. Some parents said that on rare occasions when they get very angry with their children, they happen to corporal punishment methods like 'spanking', 'pulling child's hair' and 'shaking child' body', but they regretted it afterwards. For example, a 42-year-old mother stated that sometimes she got very angry and beat her child, even though she was against corporal punishment: "I am against beating a child. However, I can't say I've never beaten. I've also beaten my child, you know, when I am at the end of my rope. I might have been so angry that I could have hit on his butts or something." Three of the interviewed children (boy = 2, girl = 1) said that their parents did not use corporal punishment, but they sometimes tapped them as a warning when they were very angry to them. For example, a 10-year-

old boy explained how his mother taps him slightly, when she gets angry: “Sometimes my mother gets a little angry with me; I mean it’s like hitting me. That’s it. Sometimes she hits me slowly, when she has no other choice.”

Stage II: Quantitative Study

Participants

In this second quantitative phase of the study, questionnaire forms were administered to children studying at different schools after necessary permissions were obtained from the school administration. On the other hand, data were collected from parents during parent meetings at the same schools, regardless of the children from whom quantitative data were collected (i.e. without matching parents with their children). At this quantitative stage of the study, data were collected from six different groups. First group comprised a total of 421 parents, with 255 mothers (61%) and 166 fathers (39%), aged between 29 and 61 ($M = 41.79$ years, $SD = 6.876$). Second group comprised a total of 372 children, with 190 girls (51%) and 182 boys (49%), aged between 10 and 18 ($M = 14.22$ years, $SD = 2.243$). Data obtained from these first and second groups were used for the Exploratory Factor Analysis of Parent (PRPS-P) and Child (PRPS-C) forms of *Parental Reward and Punishment Scale* (PRPS), respectively. The third and fourth data sets, used to confirm the construct obtained in EFA, were collected from 280 parents and 248 children. Of the parents in this third group, 166 were mothers (59%) and 114 were fathers (41%), aged between 28 and 69 ($M = 42.33$ years, $SD = 7.194$). Of the children in the fourth group, 121 were girls (49%) and 127 were boys (51%), and they were aged between 10 and 18 ($M = 13.88$ years, $SD = 2.332$). A total of 701 (98.17%) parents in the first and third groups completed the PRPS-P, while only 13 (1.83%) missed most of the items, thus excluded from the analysis. On the other hand, a total of 620 (97.02%) children in the second and fourth groups completed the PRPS-C, while only 19 (2.98%) missed most of the items, thus excluded from the analysis. Quantitative data were also collected from a fifth group of 173 parents and a sixth group of 765 children in order to test the convergent and divergent validity of the PRPS-P and PRPS-C forms, respectively. The fifth group ($n = 173$) comprised 83 mothers (48%) and 90 fathers (52%), who are aged between 28 and 58 ($M = 41.32$ years, $SD = 7.02$).

Measures

In this study, PRPS-C and PRPS-P forms of the *Parental Reward and Punishment Scale* were developed through EFA and DFA, while convergent and divergent validity of these forms were tested with *Parental Attitude Scale* (PAS; Kuzgun & Eldeleklioglu, 1999) and *Parent Stress Scale* (PSS; Ozmen & Ozmen, 2012). Information about the instruments used in this study is given below.

Development of PRPS-P and PRPS-C

The prospective items for the PRPS-P and PRPS-C were developed based on the major themes and their content regarding the parental reward and punishment methods emerged during the first stage of this research. One of the main purposes of this research was to examine the methods used by parents to reward and punish their children comparatively from the perspective of both parents and children. To do so, it was necessary to measure the views of parents and their children using similar scale items. For this reason, the statements of both parents and their children interviewed during Study 1 were analyzed comparatively in detail. As a result, the draft forms of the PRPS comprised 42 initial items concerning regarding parental rewards (*material rewards, activity-based rewards, permission, and verbal and emotional rewards*) and 43 initial items regarding parental punishment methods (*corporal punishment, response cost, and verbal and emotional punishment*). The same list of reward and punishment methods were placed into the both child and parent forms of the scale. However, while the expressions used in the PRPS-P form began with “I... (e.g. I ban my

son/daughter from watching TV), expressions in the PRPS-C form began with “My parents...” (e.g. My parents ban me from watching TV).

Next, these 85-item draft forms were reviewed by the researchers and a panel of experts for the content validity, item clarity, accuracy of grammar and applicability for parents and their children. Based on the expert views, a total of 27 items, 12 items about punishment and 15 items about rewarding methods were discarded from both forms of the scale. Eventually, the draft forms of PRPS-C and PRPS-P, each including 58 items (30 reward practices, 28 punishment practices), were developed. Both forms of PRPS-P and PRPS-C were developed in the form of 5-point Likert scale (0 = *never* to 4 = *always*).

Parental Attitude

To test the convergent and divergent validity of PRPS-C, correlation between children’s scores from PRPS-C and Parental Attitude Scale (PAS; Kuzgun & Eldeleklioglu, 1999) was analyzed. PAS is used to measure children’s perceptions about their parents’ attitudes. PAS comprises 40 items under three factors: 15 items in Democratic Attitude (e.g., “They ask for my opinion on everything as much as they can”), 15 items in Authoritarian Attitude (e.g., “They say they want what’s good for me, but they know what is good for me.”) and 10 items in Protective-Demanding Attitude (e.g., “They always see my flaws, not the positive aspects of anything I do, and criticize me”). In this study, only 30 items of PAS that constitute the democratic attitude and authoritarian attitude factors were used. Participants responded to each item using a 5-point Likert scale ranging from 1 (*not appropriate at all*) to 5 (*completely appropriate*). Average scores for each factor are considered in analysis. As the scores obtained from each factor increase, the parent’s level of attitude regarding that factor also increases. Kuzgun and Eldeleklioglu, (1999) reported the internal consistency of PAS for individual factors ranging from $\alpha = .75$ to $\alpha = .92$. In the current study the estimated internal consistency reliability coefficients ranged from $\alpha = .80$ to $\alpha = .92$.

Parental Stress

To test the convergent and divergent validity of PRPS-P, correlation between parents’ scores from PRPS-P and Parental Stress Scale (PSS; Ozmen & Ozmen, 2012) was analyzed. The scale, which consists of 16 items under one factor, measures the levels of stress that parents experience during their daily relationships with their children (e.g. “I feel that I cannot adequately meet my children’s needs” Participants respond to each item using a 5 point Likert scale ranging from 1 (*never*) to 5 (*always*). As the score obtained from the scale increases, the stress level experienced by the parent increases. Ozmen and Ozmen (2012) reported the internal consistency coefficient of the scale $\alpha = .85$. In the current study the estimated internal consistency reliability was $\alpha = .90$.

Data Analysis

At this stage of the analysis, we first screened our data for missing or erroneous data. Before the exploratory factor analysis, the adequacy of the data for the factor analysis was tested with KMO and Bartlett tests. For the factor retention, scree plot and parallel analysis (PA; O’Connor, 2000) and interpretability of factors were used. Varimax rotation technique was used in the exploratory factor analysis. Item selection was based on the factor pattern matrix considering the factor loading of .40 or above. Also, items with high loading on multiple factors with a difference of less than .10 were excluded from the analysis. CFA was performed (using AMOS Version 24) to evaluate the model-data fit for the construct obtained as a result of the EFA. Before the Convergent and Divergent Validity analysis, again the data sets were examined for missing and erroneous data. Next, the correlations were estimated between the relevant factors PSS and PRPS-P, and PAS and PRPS-C using Pearson correlation analysis.

Results of Stage II

Results of Exploratory Factor Analysis

As a result of the analyzes, the data sets for both PRPS-C (KMO = .84, Bartlett's = 11173,690825, $p < .001$) and PRPS-P (KMO = .83, Bartlett's = 11663,415030, $p < .011$) were found to be suitable for exploratory factor analysis. The first analysis for the PRPS-C form yielded 13 factors with Eigenvalues greater than 1, explaining 64.49% of the total variance. One thousand random PA data sets were computed. Eigenvalues for the first seven factors were higher in the actual data set (i.e., 11.01, 6.70, 3.61, 2.53, 2.33, 1.96, 1.80, 1.400, 1.31, 1.30, 1.21, 1.18, 1.02) than in the PA (i.e., 1.87, 1.79, 1.73, 1.68, 1.63, 1.59, 1.55), which suggested the retention of seven factors. It was detected that the seven themes (four about rewards and three about penalties) obtained in the first qualitative phase of the research were preserved as factors in the EFA and PA analyzes. However, 25 items were discarded from the scale, since 18 of them had low factor loadings and 7 had high loadings on multiple factors. After eliminating these items, the seven-factor PRPS-C scale with 33 remaining items was found to explain 62.697% of the total variance.

For the factor analysis of the PRPS-P form, again scree plot, parallel analysis (O'Connor, 2000) and interpretability of factors were used to extract adequate number of factors. The first analysis yielded 14 factors with Eigenvalues greater than 1, explaining 64.35% of the total variance. Eigenvalues for the first nine factors were higher in the actual data set (i.e., 9.42, 6.75, 4.12, 2.44, 2.03, 1.97, 1.762, 1.53, 1.46, 1.33, 1.23, 1.15, 1.05, 1.04) than in the PA (i.e., 1.81, 1.73, 1.67, 1.63, 1.59, 1.55, 1.51, 1.48, 1.44), which suggested for the retention of nine factors. However, the scree plot analysis strongly proposed a seven-factor structure based on the bend of the elbow. Considering the criteria for item selection, 23 items were discarded from the scale, since 16 of them had low factor loadings and 7 had high loadings on multiple factors. However, the item "*I resend him/her in the presence of others*" loaded under verbal and emotional punishment factor with a high loading value (.73), and the item "*I hit on his/her body other than face*" loaded under corporal punishment factor with a good loading value (.60) were decided to be discarded from PRPS-P to ensure that both child and parent forms of the PRPS practically include the same 33 items. Data from factor analysis and PA also supported this practical purpose. Seven-factor PRPS-P form explained 60.13% of total variance.

Results of Confirmatory Factor Analysis.

Values obtained as a result of the CFA analysis on the PRPS-C form [$\chi^2(468) = 841.489$, $p < .001$, $\chi^2/df = 1.798$, SRMR = .065, CFI = .903, TLI = .89, IFI = .904, and RMSEA = .057] showed favorable good fit statistics for the seven-factor model (Hu & Bentler, 1999). All factor loadings were significant ($p < .001$). Path coefficients ranged between .94 and .47 for verbal and emotional rewards factor, between .69 and .60 for activity-based rewards factor, between .87 and .64 for material rewards factor, between .79 and .42 for permission factor, between .87 and .69 for corporal punishment factor, between .77 and .53 for response cost factor, between .86 and .58 for verbal and emotional punishment factor. In addition, we also examined multigroup models to test invariance by gender (daughter and son). The values of the configural invariance model data were found to be at acceptable levels [$\chi^2(936) = 1538.223$, $p < .001$, $\chi^2/df = 1.643$, SRMR = .089, CFI = .853, TLI = .834, IFI = .857 and RMSEA = .051]. Metric invariance was only partially met due to the need to unconstraint all but one item in verbal-emotional rewards factor, one item in activity-based rewards factor, one item in permission factor, two items in corporal punishment factor, and one item in response cost factor. The model fit values were recalculated after these items were removed: $\Delta \chi^2(27) = 39.217$, $p = .061$, $\chi^2(963) = 1577.440$, $p < .001$, $\chi^2/df = 1.638$, SRMR = .097, CFI = .850, TLI = .836, IFI = .854 and RMSEA = .051. Model fit worsen when we added constraints associated with scalar invariance, $\Delta \chi^2(59) = 153.112$, $p = .000$.

Values obtained as a result of the CFA analysis on the PRPS-P form [$\chi^2(470) = 763.046, p < .001, \chi^2/df = 1.624, SRMR = .0675, CFI = .920, TLI = .910, IFI = .921, \text{ and } RMSEA = .047$] revealed favorable good fit statistics for the seven-factor model (Hu & Bentler, 1999). All factor loadings were significant ($p < .001$). Path coefficients ranged between .95 and .57 for verbal and emotional rewards factor, between .84 and .58 for activity-based rewards factor, between .83 and .37 for material rewards factor, between .63 and .48 for permission factor, between .80 and .59 for corporal punishment factor, between .67 and .43 for response cost factor, between .83 and .33 for verbal and emotional punishment factor. In addition, we also examined multigroup models to test invariance by gender (mother and father). The values of the configural invariance model data were found to be at acceptable levels: $\chi^2(940) = 1385.247, p < .001, \chi^2/df = 1.474, SRMR = .077, CFI = .884, TLI = .869, IFI = .887$ and $RMSEA = .041$. Metric invariance was only partially met due to the need to unconstraint all but only one item measurement weights for verbal and emotional rewards factor. The model fit values were recalculated after these items were removed: $\Delta \chi^2(32) = 40.551, p = .143, \chi^2(972) = 1425.798, p < .001, \chi^2/df = 1.467, SRMR = .077, CFI = .881, TLI = .871, IFI = .884$ and $RMSEA = .041$. Scalar invariance was only partially met due to the need to unconstraint all but four of the items' intercepts for verbal and emotional rewards factor, two items in response cost factor, two items in material rewards factor and one item in verbal and emotional punishment factor. The data obtained after intercept of these items are removed: $\Delta \chi^2(57) = 75.026, p = .055, \chi^2(997) = 1460.273, p < .001, \chi^2/df = 1.465, SRMR = .077, CFI = .879, TLI = .872, IFI = .881$ and $RMSEA = .041$.

Result of Convergent and Divergent Validity of PRPS-C

To test the convergent and divergent validity of PRPS-C, the correlations between its factors and PAS were presented as evidence. While parents with democratic attitudes towards their children are characterized with a warm relationship with their children, open to their demands and opinions, and explaining the reasons for the rules they set (Baldwin, 1948), authoritarian parents are those who use pressure, fear, corporal punishment, threat, and force to get them behave as they wish (Baumrind, 1966). It is known that parents who have authoritarian attitudes use harder disciplinary methods (Runions & Keating, 2007), and that there is a positive relationship between authoritarian parental attitudes and punishment (Mah & Johnston, 2012). Considering the literature, the hypotheses (1a, 1b, 2a 2b) formulated regarding the correlations between rewards and punishments given by parents to their children and parental attitudes are listed below and the results of the analysis are given in table 2:

Hypothesis 1: The factors of PRPS-C form about parental reward methods have a significant and positive correlation with democratic parental attitude (1a) and a significant negative correlation with authoritarian parental attitude (1b). Hypothesis 2: The factors of PRPS-C form about parental punishment methods have a significant and negative correlation with democratic parental attitude (2a) and a significant positive correlation with authoritarian parental attitude (2b).

Table 2. Summary Data and Bivariate Correlations

Variable	M	SD	α	1	2	3	4	5	6	7	8
1.Activity-based Reward	3.23	1.04	.83	-							
2.Verbal-emotional Reward	3.47	1.07	.88	.61**	-						
3.Material reward	4.05	0.90	.77	.58**	.43**	-					
4.Permission reward	3.96	0.80	.66	.40**	.30**	.40**	-				

5. Corporal punishment	1.36	0.63	.79	-.20**	-.25**	-.22**	-.27**	-		
6. Verbal-emotional punishment	2.20	0.85	.75	-.30**	-.43**	-.30**	-.20**	.56**	-	
7. Response cost	1.92	0.71	.65	-.17**	-.15**	-.16**	.48**	.44**	.35**	-
8. Democratic attitude	3.80	0.87	.92	.59**	.68**	.46**	.34**	-.34**	.46**	.26**
9. Authoritarian attitude	2.68	0.70	.80	-.13**	-.15**	-.11**	-.19**	.32**	.34**	.39**

Note. N = 765. *p < .05, **p < .01

The findings in the table suggest that hypotheses regarding significant positive correlations between the reward factors of the PRPS-C and the democratic parental attitudes (.34 ≤ r ≤ .49) (hypothesis 1a), and between the punishment factors of PRPS-C and authoritarian parental attitudes (.32 ≤ r ≤ .39) (hypothesis 2b) have been confirmed. Moreover, significant negative correlations were observed between reward factors of the PRPS-C and authoritarian parental attitudes (-.11 ≤ r ≤ -.19) (hypothesis 1b), and between punishment factors of PRPS-C and democratic parental attitudes (-.26 ≤ r ≤ -.46) (hypothesis 2a) significant and negative correlations were accepted. These findings prove the divergent validity of the subscales of PRPS-C.

Result of Convergent and Divergent Validity of PRPS-P

To test the convergent and divergent validity of PRPS-P, the correlations between its factors and PSS were presented as evidence. Parents who experience emotional problems (stress, anger, depression, anxiety) for various reasons communicate less with their children and use more harsh punishment methods, such as corporal punishment to solve their problems with their children (Conger et al., 1995; Dix et al., 1990; Peterson et al., 1994; Webster-Stratton, 1990). On the contrary, it can be thought that parents with less emotional problems and low stress will reward their children more. The hypotheses (3a, 3b) formulated within this framework were tested and the results were presented in table 3.

Hypothesis 3: Parents' level of stress has a significant and negative correlation with the factors of PRPS-P about parental reward methods (3a) and a significant positive correlation with the factors of PRPS-P about parental punishment methods (3b).

Table 3. Summary Data and Bivariate Correlations

Variable	M	SD	α	1	2	3	4	5	6	7
1. Activity-based reward	3.19	0.80	.80	-						
2. Verbal-emotional reward	3.73	0.74	.82	.45**	-					
3. Material reward	3.59	0.71	.69	.47**	.32**	-				
4. Permission reward	3.45	0.74	.70	.15*	.19*	.39**	-			
5. Corporal punishment	1.36	0.43	.64	-.17*	-.20**	-.22**	-.21**	-		
6. Verbal-emotional punishment	2.10	0.62	.62	-.11	-.09	-.09	.01	.56**	-	
7. Response cost	2.27	0.67	.66	.04	-.05	-.23**	-.41**	.24**	.27**	-
8. Parental stress	29.55	8.39	.90	-.19*	-.26**	-.19*	-.29**	.37**	.27**	.14

Note. N = 173. *p < .05, **p < .01

As it is seen in Table 3, the hypothesis regarding the significant and negative correlations ($-.19 \leq r \leq -.26$) between parental stress and the factors of PRPS-P about parental reward methods was accepted (hypothesis 3a). Also, the hypothesis regarding the significant and positive correlations ($.14 \leq r \leq .37$) between parental stress and the factors of PRPS-P about parental punishment methods was accepted, except for the response cost factor (hypothesis 3b).

Conclusion

Although parents want to shape their child's behavior (Miller, 2002), changes in the roles of the child in recent years have increased the debate over whether the traditional methods they use still work (Broderick & Blewitt, 2005; Vittrup & Holden, 2010). Failure to get clear results from the researches about the impact of reward and punishment methods used by parents to shape their children's behavior causes the need for more research on this subject (Holden et al., 2011). In this study, we have developed two measurement tools (PRPS-P and PRPS-C) using the exploratory mixed method research design based on the views of the parents and the children.

At the qualitative stage of the research, a total of seven major themes were identified based on the qualitative interviews with parents and their children, four of them were about parental reward methods (material rewards, activity-based rewards, permission, and verbal and emotional rewards) and three were about parental punishment methods (response cost, and verbal and emotional punishment, corporal punishment). Next, prospective scale items were developed by considering the participant statements in the content of these themes.

As a result of the exploratory and confirmatory factor analysis on the developed draft forms, construct validity of the PRPS-C and PRPS-P forms of the Parental Reward and Punishment Scale were tested, which proved favorable results. Resulting forms included 33 identical items under seven common factors. In addition, convergent and divergent validity of PRPS-C and PRPS-P scales were tested using different samples. Correlations between the democratic and authoritative factors of Parental Attitude Scale (Kuzgun & Eldeleklioglu, 1999) and the factors of PRPS-C were presented as the evidence of convergent and divergent validity. The relevant literature suggested that parents with democratic attitudes mostly use reward methods (Baldwin, 1948), while authoritarian parents prefer punishment methods (Baumrind, 1966; Mah & Johnston, 2012; Runions & Keating, 2007). It was seen that the hypotheses (1a, 1b, 2a, 2b) formulated in this direction were proved. To test the convergent and divergent validity of the PRPS-P, on the other hand, the correlations between the PSS and factors of PRPS-P were examined. Parents suffering stress can use harsh discipline methods in solving their problems with their children (Conger et al., 1995; Dix et al., 1990; Peterson et al., 1994; Webster-Stratton, 1990). It was seen that the hypotheses formulated in this direction (3a, 3b) were confirmed. Overall, these results show that both PRPS-C and PRPS-P are valid and reliable measurement tools.

We think that the findings obtained from this research contribute to the field in conceptual, methodological and practical terms. The first contribution of the research is to determine a well-defined spectrum of rewards and punishments used by parents. The second is a methodological contribution regarding the use of the exploratory mixed methods design, i.e. we used the strengths of qualitative and quantitative research methods as a whole to understand and test the psychometric properties of such a complex construct of reward and punishment methods used by parents. In this regard, we have listened to the voices of parents and children in the context of Turkey about their experiences of reward and punishment methods used by parents and we have transformed their voices into a measurable variable. Rewarding and punishment methods used by parents represent a complex construct that affects both parents and children. In this study, we listened to the voices of both parents and their children to develop two valid and reliable instruments, consisting of similar items and factors. This twin nature of the scales will enable future

researchers examine the issue in a comparative way. We can say that this is one of the strengths and contributions of the research to the field. The third contribution, the practical one, is the development of a valid and reliable instrument, which can be used by professionals working with parents and their children in different geographies and cultures.

Limitations and future research

As with any research, there are some limitations in this research. Considering all phases of our research, a total of 2353 participants living in a province (population = 797 036 thousand) located in the Eastern region of Turkey were involved in different phases of the research. Although this research was conducted with a large sample, the research should be tested in different samples in order to make the findings more generalizable. Reward and punishment methods used by parents depend on cultural factors. Thus, the findings should be tested in samples with different cultural characteristics. Past research focuses more on corporal punishment and material rewards. However, since the use of internet and especially the social media is getting more and more widespread nowadays, rewarding or punishing their children through allowing or banning the technological tools (mobile phones, tablets, computers) has become popular methods used by parents. In the future, we propose to conduct research on the use of technology and the Internet as a reward and punishment. Children aged between 10 and 18 years were included in the study. It is well known that parents frequently use methods of rewarding and punishment in the formation of their children' behaviours aged between 2-6, who are not included in the study. Considering this limitation of our study, we recommend that more up-to-date measurement methods be developed for this age group. As another limitation of the study, we could not apply the test-retest method to test the temporal reliability of the measurement tools, because personal information should not be obtained from the participants due to the potentially disturbing contents regarding the punishment in the scale items. In cases where the participating parents have more than one child, it was assumed that the parents have a general approach to rewarding and punishing, although there are various differences for each child. We think that testing whether the factors of PRPS developed in the present study work in different sampling and how they are associated with other relevant variables, especially the psychological ones, will make a sound contribution to the literature. The factors of the scales obtained as a result of this research can be used to determine the content of the parent training programs and to test the effect of these programs.

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Parental Reward & Punishment Scale (Parent Form-PRPS-P)

Please indicate how often you give your children the REWARDS listed below when they exhibit behaviors that you expect, want or think are positive.						
When my child displays a <u>favorable</u> behavior I approve of, as a reward...		Never	Rarely	Sometimes	Generally	Always
1	I allow him/her to use computer, tablet, smartphone etc. Bilgisayar, tablet, akıllı telefon vb. kullanmasına izin veririm	0	1	2	3	4
2	I allow him/her to watch TV Televizyon izlemesine izin veririm	0	1	2	3	4
3	I allow him/her to listen to music Müzik dinlemesine izin veririm	0	1	2	3	4
4	I allow him/her to spend time outside with his/her friends Arkadaşlarıyla dışarda zaman geçirmesine izin veririm	0	1	2	3	4
5	I increase his/her pocket Money Harçlığını arttırırım	0	1	2	3	4
6	I give him/her Money Para veririm	0	1	2	3	4
7	I buy him/her stationery products (pens, bags, pen holders, etc.) Kırtasiye ürünleri (kalem, çanta, kalemlik vb.) alırım	0	1	2	3	4
8	I buy him/her clothes-shoes Kıyafet-ayakkabı alırım	0	1	2	3	4
9	I take him/her to any sporting events (match, fishing etc.) he/she wants İstedığı sportif etkinliklere (maç, balık tutma vb.) götürürüm	0	1	2	3	4
10	I take him/her to any social-cultural events (cinema, theater, etc.) he/she wants İstedığı sosyal-kültürel etkinliklere (sinema, tiyatro vb.) götürürüm	0	1	2	3	4
11	I'll take him/her outside to eat Dışarda yemek yemeye götürürüm	0	1	2	3	4
12	I'll take him/her to a picnic Pikniğe götürürüm	0	1	2	3	4
13	I take him/her to the shopping center Alış-veriş merkezine (AVM) götürürüm	0	1	2	3	4
14	I use praise expressions like "Well done !, Bravo!" "Aferin!, Bravo!" gibi övgü ifadeleri kullanırım	0	1	2	3	4
15	I tell him/her that I'm proud of him/her Onunla gurur duyduğumu söylerim	0	1	2	3	4
16	I kiss him/her Öperim	0	1	2	3	4
17	I hug him/her Sarılırım	0	1	2	3	4
18	I say I love him/her Sevdiğimi söylerim	0	1	2	3	4
19	I appreciate him/her in the presence of others Başkalarının önünde takdir ederim	0	1	2	3	4

Parental Reward and Punishment Scales (Both Children and Parent forms) can be used for non-commercial research and educational purposes without seeking written permission.

	Now please indicate how often you give your children the PUNISHMENT listed below when they misbehave or make you angry.					
	When my child displays an <u>unfavorable</u> behavior I disapprove, as a punishment ...	Never	Rarely	Sometimes	Generally	Always
20	I forbid him/her to use computers, tablets, smartphones etc. Bilgisayar, tablet, akıllı telefon vb. kullanmasını yasaklarım	0	1	2	3	4
21	I forbid him/her to go cycling Bisiklet sürmesini yasaklarım	0	1	2	3	4
22	I forbid him/her to go out with friends Arkadaşlarıyla dışarı çıkmasını yasaklarım	0	1	2	3	4
23	I forbid him/her from the Internet İnternete girmesini yasaklarım	0	1	2	3	4
24	I forbid him/her to watch TV Televizyon izlemesini yasaklarım	0	1	2	3	4
25	I'll spank him/her Tokat atarım	0	1	2	3	4
26	I pull his/her hair Saçını çekerim	0	1	2	3	4
27	I hit him/her with an object (stick, slipper, etc.) Herhangi bir nesne (sopa, terlik, vb) ile vururum	0	1	2	3	4
28	I hold his/her body and shake it violently Bedenini tutarak şiddetli bir şekilde sarsarım	0	1	2	3	4
29	I tighten his/her body to hurt him/her Vücudunu, canını acıtacak şekilde sıkardım	0	1	2	3	4
30	I insult him/her Hakaret ederim	0	1	2	3	4
31	I shout at him/her Bağırırım	0	1	2	3	4
32	I scold him/her Kızarım	0	1	2	3	4
33	I stop communicating with him/her Küserim	0	1	2	3	4

Scoring: PRPS-P comprises 33 self-report items answered by parents. Factor scores, i.e. scores representing how often parents use reward and punishment methods, is calculated by summing the individual items under each factor. Items in each factors are listed below:

Permission Reward: Item 1, Item 2, Item 3, Item 4;

Material Reward: Item 5, Item 6, Item 7, Item 8;

Activity-based Reward: Item 9, Item 10, Item 11, Item 12, Item 13;

Verbal-Emotional Reward: Item 14, Item 15, Item 16, Item 17, Item 18, Item 19,

Response cost: Item 21, Item 22, Item 23, Item 24;

Corporal Punishment: Item 25, Item 26, Item 27, Item 28, Item 29;

Verbal-Emotional Punishment: Item 30, Item 31, Item 32, Item 33.

Parental Reward and Punishment Scales (Both Children and Parent forms) can be used for non-commercial research and educational purposes without seeking written permission.

Parental Reward & Punishment Scale (Children Form-PRPS-C)

Please indicate how often your parents give you the REWARDS listed below when you exhibit behaviors that your parents expect, want or think are positive.						
When I display a <u>favorable</u> behavior my parents approve of, as a reward...		Never	Rarely	Sometimes	Generally	Always
1	They allow me to use computer, tablet, smartphone etc. <i>Bilgisayar, tablet, akıllı telefona vb. kullanmama izin verir</i>	0	1	2	3	4
2	They allow me to watch TV <i>Televizyon izlememe izin verir</i>	0	1	2	3	4
3	They allow me to listen to music <i>Müzik dinlememe izin verir</i>	0	1	2	3	4
4	They allow me to spend time outside with his/her friends <i>Arkadaşlarımla dışarda zaman geçirmeme izin verir</i>	0	1	2	3	4
5	They increase my pocket money <i>Harçlığımı artırır</i>	0	1	2	3	4
6	They give me Money <i>Para verir</i>	0	1	2	3	4
7	They buy me stationery products (pens, bags, pen holders, etc.) <i>Kırtasiye ürünleri (kalem, çanta, kalemlik vb.) alır</i>	0	1	2	3	4
8	They buy me clothes-shoes <i>Kıyafet-ayakkabı alır</i>	0	1	2	3	4
9	They take me to the sporting events (match, fishing etc.) I want <i>İstediğim sportif etkinliklere (maç, balık tutma vb.) götürür</i>	0	1	2	3	4
10	They take me to any social-cultural events (cinema, theater, etc.) <i>İstediğim sosyal-kültürel etkinliklere (sinema, tiyatro vb.)</i>	0	1	2	3	4
11	They'll take me outside to eat <i>Dışarda yemek yemeye götürür</i>	0	1	2	3	4
12	They'll take me to a picnic <i>Pikniğe götürür</i>	0	1	2	3	4
13	They take me to the shopping center <i>Alış-veriş merkezine (AVM) götürür</i>	0	1	2	3	4
14	They use praise expressions like "Well done! Bravo!" <i>"Aferin!, Bravo!" gibi övgü ifadeleri kullanır</i>	0	1	2	3	4
15	They tell me that I'm proud of me <i>Benimle gurur duyduğumu söyler</i>	0	1	2	3	4
16	They kiss me <i>Beni öper</i>	0	1	2	3	4
17	They hug me <i>Bana sarılır</i>	0	1	2	3	4
18	They say I love me <i>Beni sevdiğini söyler</i>	0	1	2	3	4
19	They appreciate me in the presence of others <i>Başkalarının önünde beni takdir eder</i>	0	1	2	3	4

Parental Reward and Punishment Scales (Both Children and Parent forms) can be used for non-commercial research and educational purposes without seeking written permission.

	Now please indicate how often your parents give you the PUNISHMENT listed below when you misbehave or make your parents angry. When I display an <u>unfavorable</u> behavior my parents disapprove, as a punishment they...	Never	Rarely	Sometimes	Generally	Always
20	They forbid me to use computers, tablets, smartphones etc. Bilgisayar, tablet, akıllı telefon vb. kullanmamı yasaklar	0	1	2	3	4
21	They forbid me to go cycling Bisiklet sürmemi yasaklar	0	1	2	3	4
22	They forbid me to go out with friends Arkadaşlarımla dışarı çıkmamı yasaklar	0	1	2	3	4
23	They forbid me from the Internet İnternete girmemi yasaklar	0	1	2	3	4
24	They forbid me to watch TV Televizyon izlememi yasaklar	0	1	2	3	4
25	They'll spank me Tokat atar	0	1	2	3	4
26	They pull my hair Saçımı çeker	0	1	2	3	4
27	They hit me with an object (stick, slipper, etc.) Herhangi bir nesne (sopa, terlik, vb) ile vurur	0	1	2	3	4
28	They hold my body and shake it violently Bedenimi tutarak şiddetli bir şekilde sarsar	0	1	2	3	4
29	They tighten my body to hurt me Vücudumu canımı acıtacak şekilde sıkar	0	1	2	3	4
30	They insult me Hakaret eder	0	1	2	3	4
31	They shout at me Bana bağırır	0	1	2	3	4
32	They scold me Bana kızar	0	1	2	3	4
33	They stop communicating with me Benimle küser	0	1	2	3	4

Scoring: PRPS-C comprises 33 self-report items answered by children. Factor scores, i.e. scores representing how often parents use reward and punishment methods, is calculated by summing the individual items under each factor. Items in each factor are listed below:

Permission Reward: Item 1, Item 2, Item 3, Item 4;

Material Reward: Item 5, Item 6, Item 7, Item 8;

Activity-based Reward: Item 9, Item 10, Item 11, Item 12, Item 13;

Verbal-Emotional Reward: Item 14, Item 15, Item 16, Item 17, Item 18, Item 19,

Response cost: Item 21, Item 22, Item 23, Item 24;

Corporal Punishment: Item 25, Item 26, Item 27, Item 28, Item 29;

Verbal-Emotional Punishment: Item 30, Item 31, Item 32, Item 33.

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