

Parents' views of father-child rough-and-tumble play

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JStG: collaborated in the design of the study, lead the data analyses, and wrote the paper. JG: analyzed the data and wrote part of the results. RF: collaborated in the design and analysis of the study.

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Abstract

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3 Parent-child play directly influences child development. One aspect of parent-child play that is gaining interest
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5 is a form of physical play, 'rough-and-tumble play' (RTP), or roughhousing. RTP is most often played by
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7 fathers and has been shown to have positive benefits for children. However, little is known about parents'
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9 perceptions of this type of play, although beliefs and values about learning through play shape parents'
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11 interactions with their children. In this study, we investigated parents' beliefs and knowledge about father-child
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13 RTP. A qualitative design was used to create a conceptual description of parents' views, and 52 (31% male)
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15 Australian parents participated in semi-structured interviews supported by a video stimulus of father-child RTP.
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17 Three conceptual themes characterized parents' perspectives on RTP: Strength Challenge describes the
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19 physicality and inter-personal challenge of the game; Dynamic Bonding describes how parents view RTP as
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21 fostering close father-child relationships, confidence and a playful state of mind; the final theme, Context and
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23 Caveats, integrates the contended and contingent aspects of RTP perceived to influence the short- and long-term
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25 effects of this play. The study provides insight into how parents perceive the broad function of parent-child RTP
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27 and fathers' role within this play.

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30 **Keywords:** rough-and-tumble play; father-child play; parents' beliefs; fathers.
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Introduction

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3 Parent-child play is recognized as directly influencing children’s development. From early peekaboo through
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5 toy and pretend play, the cognitive and social benefits of parent-child (or joint) play are well documented
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7 (Ginsburg & American Academy of Pediatrics, 2007). Notably, joint play contributes to the forming and
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9 maintaining of parent-child relationships (Martin, 1981). However, the type of play that parents facilitate,
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11 participate in or allow is strongly influenced by their understandings of their parenting roles and functions
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13 (Darling & Steinberg, 1993), as well as their beliefs about play (Fisher, Hirsh-Pasek, Golinkoff, & Gryfe, 2008).
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15 Parents appear to favor pretend play, toy play and craft as joint activities with their young children (Lehrer &
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17 Petrakos, 2011; Rothlein & Brett, 1987). However, even though parents, and especially fathers, also engage in
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19 sensory or motoric physical play with their children, little is known of parents’ views of this type of play. This
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21 may be because many studies on parent-child play use a ‘maternal template’ (Adamsons & Buehler, 2007),
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23 where physical play is not assessed, since it is more typical of fathers than mothers (Craig, 2006; Crawley &
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25 Sherrod, 1984), and particularly in regard to roughhousing or ‘rough-and-tumble play’ (RTP) (Carson, Burks, &
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27 Parke, 1993). However, given the benefits to children of joint play, parents’ increasing interest in fostering the
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29 father-child bond, and their growing awareness of children’s physical activity (e.g., Bentley et al., 2012), it is
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31 important to understand how parents perceive this play. Therefore, in this study, we investigate parent
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33 perceptions of parent-child physical play, with a focus on father-child RTP.
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Parents’ views on play

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39 Theoretical models of parenting suggest that parent beliefs and cognitions powerfully influence their parenting
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41 practices or behaviors, which then contribute to developmental outcomes across the lifespan (Bornstein,
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43 Putnick, & Suwalsky, 2017; Cabrera, Fitzgerald, Bradley, & Roggman, 2014). In support of this model, research
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45 on parents’ beliefs about children’s play demonstrates that these beliefs influence parents’ level of involvement
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47 in play with their toddlers (Manz & Bracaliello, 2016), how often their children engage in play (Fisher et al.,
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49 2008), as well as the types of games they play (Lehrer & Petrakos, 2011). The nature of parents’ beliefs vary:
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51 play is a tool for school readiness and academic learning, play has its own merits and or developmental
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53 significance, or, it is of little use (Colliver, 2016; Parmar, Harkness, & Super, 2004). Some parents also believe
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55 that being a playmate is part of the parental role (Fogle & Mendez, 2006), and some mothers and fathers do see
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57 fathers as a playmate to the young child (Bretherton, Lambert, & Golby, 2005; Kazura, 2000). This playmate
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59 role was discussed by Bowlby (1988): “In most families with young children the father’s role is a different one.
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1 He is more likely to engage in physically active and novel play than the mother and especially for boys, to
2 become his child's preferred play companion" (p.11). Decades of research since have shown that indeed, fathers
3 are generally more involved in play than in caretaking (for a review, see Lewis & Lamb, 2003). Like mothers'
4 play, fathers' interactions include toy, language and social play, but a frequently observed difference is that
5 fathers are more playful and stimulating (Paquette, Bolte, Turcotte, Dubeau, & Bouchard, 2000), and often in a
6 sensory or physical manner, and especially as RTP. Yogman (1981), for example, found that RTP made up 70%
7 of all fathers' games, and only 4% of mothers'. Fathers' play, challenge and stimulation are now recognized as
8 an interactional style and site through which the child-father attachment relationship develops, which in turn is
9 associated with positive developmental outcomes (Grossmann, Grossmann, Kindler & Zimmerman, 2008).

19 **Rough and tumble play**

22 Studies of father-child RTP indicate that it occurs in low levels before 1 year, peaks during the preschool years,
23 and declines to low levels after 10 years (MacDonald & Parke, 1986). During infancy, RTP is often labelled as
24 'rough play', being a boisterous physical play style where fathers move their children by bouncing, lifting,
25 manipulating their limbs and moving their body through space (Lamb & Stevenson, 1978). As the child gains
26 locomotor skills, spirited body contact characterizes RTP, including chasing, fleeing, and catching, and playful
27 swinging, spinning, hugging, and tickling (MacDonald & Parke, 1986). From toddlerhood to elementary school,
28 RTP involves increasing amounts of wrestling, tumbling, and rolling, and is clearly characterized by children's
29 high positive affect, reciprocal participation and fathers' self-handicapping and control (Smith, 2010).

39 Enjoyable RTP between father and child has been linked to fewer concerns and better health (Barth & Parke,
40 1993), fewer emotional and social difficulties (StGeorge & Freeman, 2017), and positive social interaction by
41 boys and self-assertiveness and courage in girls (MacDonald & Parke, 1984). Children who engage in regular
42 bouts of RTP with their father are also children who are more popular (Burks, Carson, & Parke, 1987).

47 Aggressive behavior is consistently a negative or non-significant correlate of fathers' rough-play interaction
48 (StGeorge & Freeman, 2017). Two theoretical perspectives link these benefits to father-child RTP. From a
49 psychosocial perspective, RTP with fathers can offer a structured yet encouraging setting for children to learn
50 how to decode emotional cues, express their emotions in appropriate ways and have positive social interactions
51 with peers (Carson, Burke & Parkes, 1993). From an evolutionary perspective, fathers' physical and
52 psychological differences from mothers are biologically based, although culturally influenced, and fathers' role
53 is one of "opening the child to the outside world" (Paquette, 2004, p. 199). In this perspective, father-child RTP
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1 is theorized to support exploration and courage; fathers who engage in RTP support the development of these
2 social and affective competencies to enable children to compete with others without aggression (Paquette,
3 Carbonneau, Dubeau, Bigras, & Tremblay, 2003).
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6 **Parents' views on rough and tumble play**

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10 Parents' view on RTP are not well known, however there are at least two studies that describe their perceptions.
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12 In Haight, Parke & Black (1997), mothers and fathers believed that joint RTP fosters children's social
13 development, and fathers believed that their joint RTP fostered a positive father-child relationship. Additionally,
14 fathers saw their own participation in RTP and pretend play as equally important, while mothers viewed their
15 participation in pretend play as more important than in RTP. In Fletcher, May, StGeorge, Morgan, & Lubans
16 (2011), fathers involved in the weight-loss program *Healthy Dads, Healthy Kids* (which included an explicit
17 component of RTP), stated that they recognized RTP as important to their children's development. They
18 reported actively supporting their child's sense of competence through handicapping their own efforts in such a
19 way that the child derived pleasure and a sense of achievement in winning. The fathers in the study also reported
20 ensuring that the child was sufficiently challenged - losing some competitive struggles, and facing some risks -
21 with a view to maximizing their long-term social and physical competence. There was also a strong view that
22 RTP was enjoyable and beneficial for child and parent. However, this study did not include mothers' views on
23 the nature or benefits of the play. A further study that investigated fathers' views on their children's play
24 included physical play, but the relevant scale did not include an item about RTP (Ivrendi & Iikoglou, 2010).
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39 In contrast, in early childhood settings, there has been considerable discussion of educators' beliefs about RTP,
40 although the focus has been on peer-to-peer play. The main concern for educators appears to be the similarity
41 between RTP and aggression. It can be difficult to monitor this play in large groups of children, and therefore
42 preschool teachers are found to hold cautious views on physical play among peers for fear of injury, bullying or
43 aggression (Koustourakis, Rompoli, & Asimaki, 2015; Storli & Sandseter, 2015).
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50 In summary, there is little documentation of parents' views of RTP, and it is hard to know to what extent parents
51 facilitate or prohibit the play. When sensitively managed by the father (Flanders et al., 2010), RTP may
52 contribute to the child's development at the same time as enhance the father-child relationship (Paquette, 2004).
53 Prevalence data suggest that about 80% of fathers play some RTP with their children (Paquette et al., 2003), and
54 it is well documented in many others, which suggests that father-child RTP is acceptable in many homes. On the
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other hand, beliefs about father-child RTP may, by an extension of educators' perspectives on peer RTP and parents' views of risky play (Cevher-Kalburan & Ivrendi, 2016), be negative, which may result in discouragement of the play. Furthermore, differences between parents about the value of RTP, for example, maternal disapproval, may blunt the ways in which fathers are involved (McBride, et al. 2005).

Therefore, in this study, we investigated parent perceptions related to father-child RTP. We had three research goals. First, we aimed to determine what behaviors and feelings characterize father-child RTP, according to parents. Second, we sought to uncover parents' perceptions of the outcomes of father-child RTP. In doing so, we wanted to identify the perceived benefits and risks associated with RTP, and also the perceived links between RTP and the father-child relationship. Finally, we wanted to gain an understanding of parents' perspectives on how gender influences the nature of parent-child RTP.

Method

Participants

Based on the assumptions of consensus theory (Guest, Bunce & Johnson, 2006), where participants share common experiences that are 'real', and are asked to respond to a coherent phenomenon, that is, RTP, we used a nonprobabilistic sampling frame in order to invite participants who were parents with children in a similar age group to the video stimulus used in data collection, and thus likely to be interested in and have views about father-child physical play. We anticipated variation between mothers and fathers (Gleason, 2005) and aimed for 50% male participation. Single and partnered parents (N=52) participated in the study (31% fathers). Parents were between 31 and 50 years, about half were earning more than the Australian average wage, and there were approximately equal number of sons and daughters across the sample. See Table 1 for details.

Insert Table 1 about here

Procedure

Single and partnered parents were recruited through child care centers and preschools in a regional area of New South Wales, Australia. Invitations were sent to parents through their center's administration; mothers and fathers were not required to enroll as couples, but were required to be parents of a child attending the center. It is often difficult to recruit fathers, and therefore in order to encourage fathers to participate, we spent time with Center staff, first providing evidence to clarify the importance of fathers to children's development, then discussing engagement strategies to attract fathers. We also supplied publicity and information which had

1 previously been found to be acceptable in similar populations. After giving informed consent, parents were
2 interviewed within the child-care center grounds or in their home. The parents were shown the video (see
3 below) and then answered the interviewer’s questions. The interviews took between 15 and 30 minutes and were
4 recorded and transcribed. Participant details were de-identified.
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7 8 9 **Measures**

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11 Given the exploratory nature of the study and the uniqueness of the topic, we used a qualitative design for the
12 purpose of creating a conceptual description of parents’ views (Sandelowski & Barroso, 2003), using semi-
13 structured interviews supported by a video stimulus of RTP between a father and son. A video stimulus was
14 used for several reasons. First, although the phrase ‘rough-and-tumble’ is common, research shows that adults
15 may find it hard to distinguish from actual fighting (Koustourakis, et al., 2015). Thus, RTP can be a difficult
16 behavioral concept to explain, and we considered image-based stimulus material an appropriate tool to provide
17 an exemplar of RTP for the participants (Gong et al., 2012). Second, we wished for participants to focus on the
18 child and father behavior separately, and to recall memories and emotions from their own experiences. Photo-
19 interviewing methods have been used successfully in health and community studies (Gong, et al., 2012;
20 Hurworth, 2004), and although there appear to be few examples of *video*-interviewing methods, sharing and
21 communicating through video clips is now an established cultural habit (Meikle, 2016). The interview schedule
22 was created by the researchers based on a review of the research and practice literature concerning parent-child
23 interaction and child development. The first section of the interview collected the characteristics of the parents,
24 including social demographics, and information about family structure. In the second section, parents were
25 shown a 50-second stimulus video depicting a father and four-year-old boy engaged in a bout of affectionate,
26 energetic wrestling. The parents were then asked to discuss the visual material as well as their own experiences.
27 They were also asked for their perspectives on the effects of this play on children; that is, to indicate potential
28 benefits or risks from this activity.
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52 **Data Analyses**

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55 A pragmatic approach to the analysis of the transcribed interviews was taken. With this approach, we expect that
56 there is a simple relationship between what adults say about RTP, and their experiences and understandings of
57 RTP (Patomaki & Wight, 2000). We used qualitative thematic analysis (Braun & Clarke, 2006) to analyze the
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1 attitudes and knowledge of the parents. First, in order to facilitate coder agreement, the texts were unitized such
2 that the selected code was applied to the complete question and response (Campbell, Quincy, Osserman, &
3
4 Pedersen, 2013).

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6 The first author then devised a first set of coding categories based on theory, previous research, and the research
7 design. Each code had a definition and was written into a code book. The first set included top-level categories
8 of, for example, the physical, temporal, and relational aspects of RTP. The authors then read and coded ten
9 transcripts in order to generate sub-codes reflecting dimensions of the top-level codes. Discussion was then held
10 in order to agree on the content and definition of each sub-code, and its relationship to the top-level code. This
11 included merging or separating the emergent sub-codes. Following this code development, the authors
12 separately applied the new coding schema to three fresh transcripts, and discussed coding disagreements in
13 order to better define the codes, and discuss the emergence of new sub-codes. This coding structure was applied
14 to the remaining texts by the second author, with discussion held after each set of 10 transcripts in order to
15 maintain negotiated intercoder agreement on existing sub-codes and discuss new codes emerging from the prior
16 cycle. This negotiated agreement process is appropriate when the research is exploratory, when the researchers
17 need to be sensitive to nuances of perspectives represented in the texts, and to generate new concepts (Campbell
18 et al., 2013). The resultant ‘themes’ in the findings represent both prevalence (number of parents articulating
19 this concept) and impact (the articulated importance of this concept). The analysis process was facilitated by the
20 use of software NVivo 10.

37 38 **Results**

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40 Parents were invited to reflect on the motivations, thoughts and feelings of the father and son in the video, and
41 to consider their own experiences. Three themes characterized parents’ perspectives (see Table 2). The first two
42 themes represent broadly the physical and emotional aspects of RTP, but emerged as inductive categories
43 representing parents’ views that RTP was primarily a relational interaction that promoted confidence and
44 emotional expression. The third theme provided a qualification to the benefits or acceptability of RTP,
45 highlighting caveats that shaped how and where RTP should take place. Quotes are used to exemplify the
46 themes. Table 2 sets out a summary of our findings.

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Insert Table 2 about here.

Strength Challenge: “I’m big and strong”

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Across the group of parents, there was general agreement on what physical actions are part of father-child RTP, and on the value of the physicality of RTP. Based on viewing the video and recollections of their own play, parents described RTP as consisting of aspects including (but not limited to) tickling, pushing, pulling, cuddling, wrestling, jumping, chasing, grabbing, pummeling, spinning, climbing, playing with the other's face, and rolling on the ground together. Some coined it as "rough play" and "mucking around". Parents noted that although parent and child are "just playing, for the sake of playing", RTP gives the child a sense of their own strength, "showing his father how strong he can be", thus learning about strength and physicality without getting hurt. RTP also gives the child a sensory awareness, such as control and knowledge of where their body is in space. Some parents expressed that children who engage in RTP become physical and active people because it builds strength and stability, "they're doing stuff like pushing and pulling activities which is all about strength and core stability and things like that".

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However, the demonstration of strength as used **against** another person added a layer of meaning to this play. Parents observed the exchange of positions and power throughout the game, by describing how the father would allow the boy to win at times, and then again use his greater strength to oppose the child. They saw in the video that the child was rough, and some interpreted this as the boy trying to show his father that he is strong enough to beat him, with the father playing along; the concept of dominance was sometimes used by parents to explain this interplay between father and child; for some parents this was positive, for others it was inappropriate (discussed below in *Contexts & Caveats*).

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It looked like the father was the submissive one and was copping a bit of a beating from the child. The child was being quite rough as I've experienced children to be. Yeah, and it seemed like the father was sort of playing along with the sort of kid's dominant behavior at the time (father).

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Dad's actually allowing the little boy to, he's empowering the little boy to take charge, and sometimes Dad's fighting back so that there's that resistance but the child is feeling like he's strong, he can actually overpower Dad. But Dad's not getting angry, it's in a non-threatening way, so it's all beautifully constructed so that the child is learning that it is okay to do rough tumble play, I'm learning how to push against Dad, Dad's pushing against me. (mother)

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This exchange of strength could also be seen as responsiveness: father's own self-handicapped defeat facilitated a positive to and fro interaction that helped the child experience his own strength:

1 The boy's having fun, that he'll let the boy seem like he's winning the situation for a little
2 while before he actually tries to pull back up, giving the child some control over the situation
3 as well, so waiting for him to come back and jump on him rather than him initiating how the
4 game's going to go. (mother)
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9 In this way, RTP was seen to give the child awareness of his own physical capacity, with appropriate
10 constraints, at the same time as experiencing the strength of the father, not as coercion, but as assertion.
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13 **Dynamic Bonding through RTP**

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15 There was a collective judgement that RTP was a place for affectionate, emotional relations between parent and
16 child. It was viewed as both a process for building a strong relationship, and as representative of an already
17 existing bond. Parents suggested the one-on-one time, the high affect and the physical contact were important
18 means for "bonding" and building a strong, trusting relationship:
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24 You can hear the boy, you know, that sort of laughter doesn't come easy and you can tell that
25 he's having a great time. And that's what you want as a relationship between children and
26 parents. You want to have a nice, positive and happy relationship and I think they're
27 building it well there. (mother)
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34 In watching the video, parents identified that parent and child seemed to understand each other, that the quality
35 of play was indicative of an already positive relationship where the child feels secure, loved, and protected, and
36 that both seemed keen on spending time with each other. There was an assumption that this child and the father
37 spent a lot of time together, and many parents generalized this to suggest that such play is a special but "normal"
38 part of father-child play. However, one father wondered aloud if they would still play this way if they saw each
39 other every day, and one mother believed that although father and child interacted well in the video, it did not
40 represent the entirety of their relationship.
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49 An important outcome of RTP perceived by parents was children's growing self-confidence, positive self-
50 image, and psychological strength: it was a "character building effort" (father). The safety provided by the
51 father - his warmth, self-handicapping, and limit-setting - allowed children's exploration of their intention to
52 win, underpinned by a mutual trust and lack of fear. The physical play was perceived to help the child push
53 his/her limits, by trying new things or taking risks, and feeling a sense of achievement, thus learning that they
54 can overcome difficult situations.
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1 Because they're building up that inner, that inner, oh how would you say it, that resilience, that strength
2 in feeling that they're confident, they're secure, they're learning how to express themselves. (mother)
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4 Feeling safe and secure in the RTP was felt to translate into improved social interactions with peers and other
5 adults. "I think children who interact in different ways with their parents in a safe environment feel safer to
6 interact with other adults on different levels outside of home" (mother). Because they have learned to express
7 themselves and identify others' feelings, children are able to let people know when to stop, and respect others
8 telling them the same. An alternative view held by some was that such confidence could be a negative thing, that
9 the child may have an over-inflated view of themselves, especially if they are always allowed to win. "It may
10 inflate the child's opinion of themselves and their physical capabilities."(father)
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20 The majority of parents identified the father-son interaction in the video as "assertive" and non-aggressive, even
21 if "a bit aggressive...in a playful way". However, aggression in this setting was seen more as a playful
22 announcement of strength, rather than connected to anger or violence. There was no perceived threat from child
23 or father, and most suggested that in this play, the child learns to interact without aggression or violence, to
24 control their anger or frustration, and discover the difference: "They probably start to learn a lot about control
25 and aggression and that kind of thing" (father).
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32 As with the physicality of RTP, some parents linked the potential for aggression to male gender, discussing that
33 men are "more aggressive in nature" and engage in this type of play more easily. One father suggested that RTP
34 play was particularly beneficial for boys, believing that discipline becomes an issue when they are not
35 encouraged to play this way. In contrast, another father commented that the video play was "a bit disrespectful"
36 and some mothers felt that allowing this kind of play would blur the lines for boys' understanding of
37 dominance, particularly with women.
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46 RTP was viewed as spontaneous, organic play. Fathers and mothers suggested that although the child learns
47 from RTP, in the moment of play, parent and child are absorbed in each other's energy and happiness, it is not
48 "conscious play", particularly for the child. There is no agenda, and the child feels invincible. Some described it
49 as almost 'animalistic'. Both fathers and mothers described RTP play as being moments of pure joy and fun
50 between parent and child. However, there was also a view, mainly articulated by fathers, that child and father
51 are strategizing about how to play and win the game. The father is planning to challenge the child while still
52 giving them the opportunity of winning, and the child is thinking about how they can beat their father. Without
53 this strategizing and motivation to win, some felt the play would not be fun.
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Context and Caveats

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2 A strongly articulated concern of both women and men, was that RTP required caveats or limits. This was the
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4 case when parents were discussing RTP between father and child, as well as between siblings or peers, where
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6 such play could have different features and outcomes.
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9 There were strong views that the parent must set rules or limits. Rough-and-tumble play brings about a lot of
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11 excitement, which can make the play spiral out of control. Parents felt that tears, trouble and antisocial behavior
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13 were potential outcomes if fathers did not regulate the play in some way. It was clear that participants expected
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15 that parents would set boundaries, and they talked about this in such terms as “settling”, “enough attitude”,
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17 “acceptable play”, and “temper the excitement”.
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20 That's why it needs to be so controlled. Like parents need to be so careful that they make
21
22 sure that the children know the boundaries and the acceptable ways to be involved with RTP
23
24 because yeah otherwise they'll be going to preschool and unless they know the boundaries
25
26 and what's acceptable they'll try and use it in situations where it's not okay. (mother)
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29 You can call it off when it gets too rough or you can sort of say, you know, ‘that's enough,
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31 calm down’ or ‘don't poke me in the eye’ or ‘don't hit me there’. (father)
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34 Parents felt that when boundaries such as the above were in place during play, children would understand how
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36 to control themselves and learn to manage their excitement: “it teaches them boundaries, I think it teaches them
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38 what's acceptable and what's not”.
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41 On the other hand, some parents noted that that even though the play could end with injury or upset, this was not
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43 problematic and it could be considered a healthy part of growing up. Further, some parents highlighted that
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45 although there is a risk of tears and injury (which is more likely in sibling or peer play), these outcomes usually
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47 do not eventuate in father-child play.
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50 The greatest concern about RTP was the transfer of its antagonistic aspects to school settings. It was felt by
51
52 some that RTP at home can reinforce that it is acceptable to fight physically at school, or even bully. Some
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54 parents were clear that peer-to-peer RTP, without oversight from an adult, could end in crying, fighting, and
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56 aggression when children do not know their own strength or want to dominate. Parents seemed unsure if
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58 children could regulate their emotions and reactions when they engage in this way in peer settings. One mother
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referred to this potential outcome as “World War III”. There was lack of certainty too, of the long-term effects of this style of play on children’s schoolyard activities, although some assumed the worst:

[I’m not sure] whether those sort of kids turn out to be the rough ones at school or the ones that try and ride rough shod over everybody else and maybe aren’t taught respect. (father)

Parents’ perceptions of gender differences in play style and desire to play varied. Importantly, parents felt that RTP was just as valuable and enjoyable for girls as for boys.

I don't think it's any different. I think it's absolutely important for kids to do it whether they're male, girl or boys, I think it's great for them. Girls shouldn't be excused from doing it because it's rough or whatever. You know I think it's great for kids. My girls love it, both of them. (father)

Parents gave many positive examples of physical play with their own daughters (or as daughters in their own family of origin). In comparison to father-son physical play, many parents indicated that RTP with girls was less intense, less physical, less rough, less competitive, and occurring less often than with boys. Most parents agreed that ideally RTP should occur just as often with girls, but realistically it does not. Other views were that girls are “more fragile” than boys and should “act like ladies”. It was suggested that boys enjoy RTP because it is their way of expressing themselves or gaining the physical touch they need, while RTP with females is more about cuddling, tickling, and intimacy. Several did not see differences in RTP between boys and girls, and others were unsure to what extent girls may be different to boys. Resolution for some parents lay in acknowledging how the personality of father or child can affect play: for example, a “girly” girl may not want to play roughly, whereas a “tomboy” girl might: “the whole stereotype of the girls being more petite and not as rough...it would probably depend on the person who was doing it.” These expectations extended to perceived differences in maternal and paternal RTP, with maternal play being gentler, less intense, shorter, less frequent, and more like cuddling and chasing, “the same sort of thing but less rambunctious”.

Discussion

The purpose of this study was to describe parents’ perceptions of parent-child RTP in order to better understand the beliefs and knowledge underpinning parenting interactions in this domain. We found three themes that described 1) the meaning of strength, 2) the social and emotional experience of rough and tumble play, and 3) the context and caveats of RTP. The three themes together articulated that the competitive physical interaction

1 was perceived to contribute to children's self-esteem, emotional regulation and social skills, and their
2 relationship with their father.
3

4 A key feature of RTP identified by parents was the warm physical connection between child and their father;
5 this 'big body' contact was felt to contribute not just to the progress of the game, but was an embodiment of
6 warmth and affection (Carlson, 2005). At the same time, this physical contact was a place where children could
7 confidently demonstrate and learn about their own physical strength, a capability that may contribute to later
8 self-esteem and mental wellbeing (Vedul-Kjelsås, Sigmundsson, Stensdotter, & Haga, 2012). Parents also
9 identified that in RTP, children may learn to control their physical strength and refrain from antagonistic
10 interactions; regulation of social behaviors may lead to a decreased likelihood of conduct and antisocial
11 disorders (White, Jarrett, & Ollendick, 2013).
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22 Throughout discussion of the physical aspects of RTP, participants emphasized the importance of parental
23 boundaries and limit setting. Specific boundaries depended on the individual parent: some felt that wrestling
24 itself was too rough, whereas others recommended only that it not degenerate into boxing or fighting per se.
25 Limit setting is characteristic of authoritative parenting, and has been identified in previous studies of RTP as a
26 mediating factor in children's social behavior - Flanders, Leo, Paquette, Pihl, and Seguin (2009) found that
27 when fathers' lead of the physical play was low, children's aggression was higher when RTP was frequent. In
28 fact, fathers' limit setting and the alternation of the play lead, of 'who's on top', can be seen as positive power
29 assertion, an essential component of authoritative parenting as argued by Baumrind (2013), and parents in the
30 study recognized this parental skill as central to the safety and appropriateness of the play.
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41 Parents were also careful to distinguish father-child RTP from peer-peer play that occurs between siblings or at
42 school, and some disapproved of parent-child RTP specifically due to its parallel to peer play. Thus two views
43 prevailed: one where father-child RTP facilitates a child's prosocial behavior and parents' confidence in
44 children's social competence; the other, where father-child RTP models inappropriate behavior that leads to
45 anti-social behavior with peers. The research literature supports the first view: in general, children's social
46 competence is positively associated with father-child RTP - teachers' ratings in several studies show that some
47 aspects of children's peer relationships, popularity or sociability is positively related to father-child play (Kerns
48 & Barth, 1995; Lindsey & Mize, 2000). However, it is important to note here that positive outcomes are
49 contingent on the frequency, duration and or quality of the play; as studies of the association between aggression
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2 and RTP show, when fathers' play lacks limit setting, or is less playful, then the influence on children is no
3 longer positive (Flanders et al., 2010).

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5 Parents' attitudes to girls' participation in RTP was reasonably open, and reflects broader social views on
6
7 females' capacities and opportunities. Many parents expressed the 'normalcy' of their physical play with girls,
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9 and while not unanimous, this gender balance is also reflected in the literature. For example, Paquette et al.
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11 (2003) found no differences in the frequency of father-child RTP with boys or girls, and Fletcher, StGeorge, and
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13 Freeman (2013) found no differences in the qualities of RTP between father-son and father-daughter. If
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15 expression of aggression and violence is influenced by epigenetic forces (Staniloiu & Markowitsch, 2012), then
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17 providing opportunities for safe, challenging and parent-regulated physical interaction may be one strategy to
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19 optimize both girls' and particularly boys', development (Friedman & Downey, 2014).

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21
22 There was broad consensus that RTP was associated with a strong, warm connection with the father, parents
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24 considering that it either helped build this relationship, or was an outcome of it. Parents' noted high parent and
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26 child affect in the video scenario, and recalled the joy of their own RTP encounters. Positive affect in parent-
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28 child relations is a fundamental component of sensitivity, responsivity, and synchrony constructs (e.g., Early
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30 Head Start Parenting Scales [Brady-Smith, O'Brien, Berlin, Ware, & Brooks-Gunn, 1999]) and these constructs
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32 relate directly to the quality of the parent-child relationship. Thus, the expression and co-regulation of shared
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34 positive affect are important contributors to children's attachment (Braungart-Rieker, Garwood, Powers, &
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36 Wang, 2001), their learning (Kochanska & Kim, 2014), and behavior (Lunkenheimer, Olson, Hollenstein,
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38 Sameroff, & Winter, 2011). RTP served as a positive interactional strategy that likely complemented other
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40 parenting behaviors, so contributing to children's attachment to their father. Although there are now diverse
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42 explanations of father-child attachment (Bretherton, 2010; Fagan, Day, Lamb, & Cabrera, 2014), it is clear here
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44 that parents saw fathers in the attachment role, successfully acting as a 'secure base' from which children could
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46 explore.

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49 Relatedly, parents perceived a holistic or global sense of confidence or resilience to be an outcome of this
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51 explorative, challenging play. These benefits are similar to those from a secure attachment: trust, competence,
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53 self-esteem (Pinto, Verissimo, Gatinho, Santos, & Vaughn, 2015; Verschueren, Buyck, & Marcoen, 2001).
54
55 Likewise, resilience is acknowledged as a predictable outcome of positive parent-child relationships (Flouri,
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57 Midouhas, Joshi, & Tzavidis, 2015). It may be that the role play of 'adversity' in RTP buffers the impact of real
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59 adversity on children in some micro-developmental way.
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When parents were doubtful about rough and tumble play, this was related to a view of RTP as a model of aggression and anti-social behavior, or at the least, a demonstration of disrespect. Some early childhood educators also may equate RTP with fighting and aggression (Pellegrini, 2012). However, father-child play is much less likely than peer-to-peer RTP to degenerate into fighting, and aggression has been found to have negative or null associations with father-child rough play (StGeorge & Freeman, 2017). The differences between RTP and fighting are measureable, and most children are able to distinguish the two (Smith, 2010). Nevertheless, the ability to self-regulate such that fighting does *not* occur could be more difficult for children where family structure or family processes are problematic (Provençal, Booi, & Tremblay, 2015).

Most parents tried but found it difficult to describe the ‘in the moment’ feel of the play – “he’s not really thinking anything”; however, this phenomenon is articulated by scholars of play as *absorption* or *flow*, and as such, central to happiness and motivation (Nakamura & Csikszentmihalyi, 2014). Key to experiencing this flow - peak enjoyment, energetic focus, and creative concentration - is the player’s perception of the match between the challenge and their skills. Exercise of this capacity underpins most philosophies of play, and it is just this balance that fathers help orchestrate in RTP.

Limitations

Limitations to this study concern its exploratory nature. The video scenario as stimulus material may have been ‘leading’ as a result of its emotive content of laughter and dyadic action. The clip was selected as an ideal bout, where the father-child play was animated and harmonious, and did not include strong limit-setting. Another potential limitation of the video was that it depicted RTP between males. Parents’ views in relation to gender differences may have been affected by this. Future research could incorporate videos of RTP with daughters and mothers as well as sons and fathers. Further, while the semi-structured interview format ensured that all questions were systematically included with equal chance for variation within each main concept of enquiry, it is possible that respondents did not have the opportunity to think about or express complex or contextual factors within the brief nature of the interview format. In addition, the non-probabilistic sampling procedure and self-selection upon invitation infers that these findings may be limited to parents in this location who were interested in father-child play. The findings thus set the foundation for future studies that sample with maximum variation and triangulates with researcher home observations and or parent diary records.

Compliance with Ethical Standards:

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Ethical Approval: All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards. Approval No- H-2012-0327, University of Newcastle, Australia.

Informed Consent: Informed consent was obtained from all individual participants included in the study.

Author Contributions: JMStG: collaborated with the design and execution of the study, analyzed the data, and wrote the paper. JMG: assisted with the data analyses and writing of the study. RJF: collaborated with the design and execution of the study and editing of the final manuscript.

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Table 1: Participant characteristics

Variable	n (%)
Parents	
Female	36 (69.2%)
Male	16 (30.8%)
Total	52 (100.0%)
Parent's Age	
21-30	5 (9.6%)
31-40	29 (55.8%)
41-50	12 (23.1%)
51-60	6 (11.5%)
Parent's Income	
\$0-\$25,000	2 (3.8%)
\$25,001-\$50,000	3 (5.8%)
\$50,001-\$110,000	26 (50.0%)
\$110,001 and over	19 (36.5%)
Not sure	2 (3.8%)
Children in family	
Female	56 (47.1%)
Male	63 (52.9%)
Total	119 (100.0%)
Children per family (<i>M, SD</i>)	2.29 (0.78)
Children's average age (<i>M, SD</i>)	8.40 (8.73)

M: Mean, *SD*: Standard Deviation

Table 2: Summary of findings

Themes	Subthemes	Research Questions
Strength Challenge: “I’m big and strong”	Physical actions that are part of father-child RTP	According to parents, what behaviors and feelings characterize father-child RTP?
	The value of the physicality of RTP	
Dynamic Bonding through RTP	Close relationships	According to parents, what are the outcomes of father-child RTP, including father-child relationship?
	Confidence and aggression	
	State of mind	
Context and Caveats	Parent in control	According to parents, what are the risks of father-child RTP?
	In the school yard	
	Differences between boys and girls	According to parents, how does gender influence the nature of RTP?

Response to the Editor for Manuscript #JCFS-D-16-00576R1

Jeffrey A. Anderson, Ph.D.

Associate Editor

Journal of Child and Family Studies

Dear Dr Anderson and Dr Singh,

Thank you for this opportunity to revise this manuscript. Please find below a table that details our responses to the requests and suggestions of yourself and the reviewers. I have made every effort to comply with the regulations of the Journal as well as respond to the scholarly arguments put by the reviewing panel and Editor.

Sincerely,

Jennifer StGeorge

From the Editor	
1. Closely review and respond to the comments of the reviewers. Specifically, I ask that you fully consider the suggestions of Reviewer 6, who makes some very important points.	Completed
2. Per Reviewer 3, consider revising the title of the manuscript.	Completed.
3. Also, as noted in the reviews, please consider the necessity of the Tables. I agree with the reviews that Table 3 is not needed and Tables 1 and 2 could be more efficiently constructed and presented.	<p>Would it be acceptable to delete the table that maps Research Question to Interview question (perhaps including the Interview Questions as an appendix if the Editor decided this was useful)?</p> <p>Could we then re-instate Table 3, and edit it, as Reviewer #3 suggests, such that there is clarification for the readers how the Research questions and the findings are linked?</p> <p>Therefore, I have presented the revision R2 with only two tables, Table 1 Participants, Table 2, Findings with Research Questions.</p>
4. I also ask that you add a bit more detail to both the "Analysis" and "Participants" sections. In the former, the goal is to provide the reader with sufficient detail to conduct a similar analysis. For participants, it needs to be clear how (and why) this set of participants was recruited as opposed to some other set of participants.	<p>Done</p> <p>In Participants, we have identified the locality and the sampling strategy.</p> <p>In Analysis, we have carefully detailed the precise coding steps.</p>
5. For the benefit of the readership, please closely reread the entire manuscript specifically for clarity, flow, typos, and similar errors.	Done
6. In addition, please make the following mandatory copy-editing revisions as required by this journal:	

a. Reformat the Method section with these Level 2 headings and in this sequence: Participants, Procedure, Measures, and Data Analyses. Everything currently in the Method section must fit under these four sections.	Done
b. On page 8, change Findings to Results.	Done
c. This journal does not encourage its authors to justify the relevance of their studies in terms of, "This is the first study to show . . .". On page 16, rephrase "This is one of the first studies to explore . . ."	Done
d. On page 17, in the Ethical Approval statement, add the name of the university that provided the IRB approval for this study.	Done
e. On page 17, insert a statement regarding each author's specific contribution, with the header, Author Contributions. This should be inserted below the Informed Consent statement, and formatted as shown in the example below. Note that the initials are individual author initials, presented in the same order as in the authorship list on the Title Page. NZS: designed and executed the study, assisted with the data analyses, and wrote the paper. GEL: collaborated with the design and writing of the study. BK: analyzed the data and wrote part of the results. JC and BVG: collaborated with the design and writing of the study. AW: collaborated in the writing and editing of the final manuscript.	Done
Final acceptance is contingent on acceptable response to the reviewers comments and close adherence to the mandatory copy-editing requirements listed above.	OK. Every attempt to adhere to the mandatory copy-editing requirements has been made.
If you choose to make revisions and submit a revised manuscript, we appreciate your keeping the manuscript under 30 double-spaced pages inclusive of text, references, tables, and figures.	The document is 26 pages.
COMMENTS FOR THE AUTHOR:	
Reviewer #3:	
a) The title, according with the research developed, seems to be better if clearly point the father-child play; thus, I suggest change the title "Parents' Views of Rough-and-Tumble Play" to "Parents' Views of Father-Child Rough-and-Tumble Play";	Agree, done.
b) Despite I accept that the qualitative analysis could be reported by several forms in different papers, in my opinion the current work will be improved if words like "the majority of the parents..." (p.10), or "some parents..." (p.12) will be associated with numerical reference, even understanding that the authors chose not to perform a quantitative analysis. Because when reading the article, what these expressions could mean? For example, "the majority of the parents" means what? Half of the sample? Almost all the participants in the sample?	This is an important point and a point of debate in the field. Maxwell (2010) identifies several reasons why researchers would and would not use numbers in qualitative research. We use his argument, that our results are the consequence of an interpretive process, albeit with established and objective strategies such as intercoder discussions, codebooks etc, thus numbers do not represent a stable given. Second, ours is a descriptive study that elaborates on the phenomenon of RTP <u>from a parent's perspective</u> , and so the <i>amount</i> of evidence is less important than the concepts or processes identified in the

	findings. We also take Maxwell's point that numbers help researchers "correctly characterize the diversity of actions, perceptions, or beliefs" (P. 478), and this will be considered in future analyses.
c) To consider to replace "questions" for "goals" (see p.5), according with the formulation adopted by the authors in the following sentences	Edited. We had three research goals...
Some references need to be corrected, according to APA (2010).	Done
Reviewer #6:	
The authors of this manuscript were interested in better understanding parental views on rough and tumble play between parent and child, with a particular focus on fathers. The current draft of the manuscript is a revision and overall, the authors seem to adequately address most of the reviewers' comments.	
However, the manuscript could still benefit from addressing the following:	
* The Introduction was still somewhat difficult to follow and continued to lack focus. Seems to go back and forth between importance of play and RTP and does not seem to make a strong argument for why RTP is critical for development when compared to other types of play between parent and child...is this type of play more important than overall interactions, nurturing, engagement, etc?	Done The introduction has been revised, with the first paragraph containing the core argument, and subsequent paragraphs with their headings have had minor editing to ensure they speak to the named concept, and are linked to the argument. The importance of RTP to development has been argued, although the authors do not have a position that it is 'critical' to development.
* The authors also seem to go back and forth between discussing parent-child play and father-son play. These two seemed woven together so a particular focus was not fully clear. In addition, the current study was not really set up to assess an understanding of parents' perspectives of how gender influences the nature of parent-to-child RTP given that there was only one video of father and son playing. The authors acknowledge this in their limitations section, but they may want to consider dropping this question from their focus as they were not really able to fully assess.	Done We have refocused the paper on father-child play, by including it in the title, as well as revising the research goals. However, we have retained the enquiry on how gender may influence the play as data is tightly embedded in the findings, and the differences are important to share with scholars.
* Please define "joint" play and "joint" RTP.	Done "Joint" play is an alternative adjective to "parent-child" play, and this is now articulated in the first sentence.
* How is RTP different from risky play? Need to elaborate.	Done This section has been deleted
* If the focus of the article is on parental perceptions of parent-child RTP, I'm not sure that the discussion on educators' beliefs around child-child RTP is as relevant and detracts a bit from the focus.	Done This paragraph has been shortened to reduce the emphasis; we elected to retain the paragraph essence as it provides information about a group with similar characteristics (adults who have care/responsibility for children), and many teachers are also parents, and thus

	provides some additional rationale for investigating it in another group.
* When describing sample selection, have introduced theory and discussion that seem better placed in the intro or discussion.	Done Some of the theoretical material has been deleted, and some remains, as the theory pertains to participant selection and method of data collection.
* It's not clear how the analysis and findings really address the three main questions of interest laid out at the end of the introduction...seem to be mainly results on parents' perspectives on the motivations, thoughts and feelings of the father and son in the video and the themes that emerge from this. Again, I felt a bit lost in how all of this is tied together and in the focus of the paper. Some interesting positive aspects of RTP for father-son relationships were identified as were important caveats and contextual factors perceived as important to have in place. However, these results may have a stronger impact if focused a bit more and tied together with an overall theory or framework.	Done The parents' direct responses to the video and their reflections on their own experiences are tightly woven, both in the raw data and in the thematic findings. I believe now that we have tightened the focus of the paper to father-child RTP, the emergent themes are clearly related to the questions. I have checked, to my satisfaction, that the content and or summary of the themes corresponds to the research questions.
* Finally, I did not find Table 3, Summary of Findings very helpful as is...perhaps add a brief description to each of the themes and sub-themes and also organize by how they address the main question(s) of the study.	Done As per my note to the Editor, we have prepared a revised Table 3, (now Table 2), that incorporates some of the Reviewer's suggestions. I did not add theme descriptors, as I believe that the RQ text helps to elaborate meaning, and the description tends to be a little repetitive of the theme title.