

Gender matters: Male and female ECEC practitioners' perceptions and practices regarding children's rough-and-tumble play (R&T)

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Abstract: The aim of this study was to explore Norwegian early childhood education and care (ECEC) practitioners' perceptions and practices regarding children's indoor and outdoor rough-and-tumble play (R&T) from a gender perspective. A questionnaire and semi-structured interviews were used together in a mixed method design to provide quantitative data of patterns among a larger group of ECEC practitioners, as well as to gather greater in-depth insights on ECEC practitioners' attitudes, thoughts and actions concerning children's R&T. The results of the study showed that ECEC practitioners acknowledged both positive and negative sides of R&T; that they allowed this kind of play significantly more in outdoor environments than indoors, and that R&T often produced uncertainty and a need for control by the practitioners. The most surprising result from the questionnaire was the lack of gender differences in allowing children's R&T in ECEC. However, the interviews revealed that although a basic difference in attitudes between male and female practitioners originally existed, female practitioners changed their attitudes and practices towards R&T as a result of gaining more knowledge and experience of this play through their male colleagues. In addition, a high consciousness of trying to adopt common understandings, rules and practices regarding R&T also contributed to a change of attitudes.

Keywords: Rough-and-tumble play, ECEC practice, preschool practitioners, gender

Introduction

Play is often defined as activity performed for its own sake. Although playful behaviours resemble serious ones, participants are usually more concerned with the behaviours themselves rather than their functions (Smith and Pellegrini 2008). Dramatic play that involves cooperation among two or more children is considered sociodramatic play. Aggressive behaviour is a relatively common factor of sociodramatic play (Hart and Tannock 2013). Playful symbolic aggression differs from serious aggression in that the motivation is not to cause harm or injury to the participants and occurs in several play types, such as superhero play, pretend fighting, chase games, protect/rescue play and wild animal/monster play, all of which are themes within rough-and-tumble play (R&T) (Logue and Harvey 2009). Participants may sustain injuries, but only due to the nature of the play, and not as its purpose (Hart and Tannock 2013). As such, R&T is also one of the play categories within the concept of risky play (Sandseter 2007).

Whether gender role behaviour arises from nature or nurture is not a central issue in this study. However, the theoretical understanding of gender role behaviour is based on ecological psychology which focuses on understanding the relationship between humans and the environment as a complex interaction between psychological factors and the specific environment of a human (Gibson, 1979). From an ecological psychology point of view that means biological differences (nature) can account for part of gender role behaviour, but social and environmental factors (nurture) are also important (Clark and Uzzell, 2006).

While there is now a growing body of evidence pointing to the benefits of playful aggression in young children, it remains one of the most challenging kinds of play to support in early childhood education and care (ECEC) institutions (Hewes 2014, Flanders et al. 2009, Pellis, Pellis, and Reinhart 2010). R&T refers to vigorous behaviours, such as wrestling, grappling, kicking, and tumbling, that appear to be aggressive except for the playful context (Humphreys and Smith 1984, Pellegrini and Smith 2005), and it is commonly observed in children's free-play time from preschool to adolescence (Humphreys and Smith 1984). R&T has obvious dimensions of social play, but is also characterised by gross locomotor dimensions and sometimes elements of object play (e.g., sticks and toy guns) (Tannock 2011). According to Pellis, Pellis and Reinhart (2010) R&T has two important dimensions: competition and cooperation. As such, the characteristics of R&T extend over a wide range of social interactions among the players from purely physical intimate contact or tumbling

(Reed and Brown 2000, Storli 2013, Tannock 2011) to goal-directed play-fighting or wrestling in which the purpose is clearly to win (Aldis 1975).

There are some specific areas where R&T is considered to play an essential role in children's development and learning. One such function is that R&T enhances social competence (Pellis, Pellis, and Reinhart 2010). Flinn and Ward (2005) argue that to enhance survival and reproduction, the necessary competencies to gain control over other people and the resources in the local ecology by manipulation and superiority over others are favoured by natural selection and require a lifetime of learning and experience starting in infancy. Social physical play, like R&T, enhances children's social competencies, such as affiliation with peers, social signaling, and useful managing and dominance skills within the peer group (Humphreys and Smith 1987, Pellegrini and Smith 1998). It also provides for practice of complex social skills, such as bargaining, manipulating and redefining situations (Smith 1982). Researchers also state that R&T serves the benefits of gaining competence in aggression, fighting, social competition and experience in dominant and subordinate roles, all social competencies that are useful in adult life, while still remaining within a play context (Bjorklund and Pellegrini 2000, Jarvis 2006). For preschool-aged children, the aim is not to hurt the other, and both parties partake in this as a playful activity (Humphreys and Smith 1987). Still, research suggests that R&T among preschool- and primary-school aged children provides practice in regulating aggressive behaviour (Dodge et al. 1990). Based on the above-mentioned studies, R&T thus seem to have important functions, both immediate and deferred, for motor practice, social skills practice, aggression regulation and physical health.

While there is perceived value in R&T related to the development of young children, educators are uncertain of how to manage this form of play (Tannock 2008). Despite the fact that fighting acts are simulated, exaggerated and normally executed between friends, R&T is often inhibited or prohibited in preschool practice (Logue and Harvey 2009). Research shows that gender differences exist in how play is perceived and handled among parents and also early childhood educators. Brussoni and Olsen (2011) found that fathers generally were positive towards their children's risk-taking in play, and believed that a central part of their role as a parent was to actively engage in physical and play-based activities with their child, even though it meant exposing them to some level of risk and the possibility for minor injuries. On the other hand, Little (2015) found that mothers, while certainly acknowledging the benefits of risky play, had a difficult time accepting that they actually did take risks in play. They expressed a wish to provide their children opportunities for exploration and

challenge, but at the same time were deeply concerned about their children's safety. This gender difference among parents is also shown in research on R&T. Fathers engage in more vigorous physical play than mothers, much of which is R&T or roughhousing (MacDonald and Parke 1984). Fletcher et al. (2011) suggest that father-child R&T is a key aspect of male parenting that it is important for children's physical, social and cognitive development. Although some mothers also participate in R&T with their children, fathers more frequently engage in R&T and are likely to recognise and defend its benefits when mothers point to negative consequences (Fletcher, StGeorge, and Freeman 2013).

ECEC practitioners are uncertain of how to interpret and manage R&T, even though they usually perceive that this play has value to young children's development (Tannock 2008). Often, ECEC practitioners misinterpret R&T and incorrectly perceive the play as aggression that results in intervening and stopping the play (DiCarlo et al. 2015, Jarvis 2007). This is especially seen in play characterised by competition and fighting spirit where the practitioners argue that it could foster violence (DiCarlo et al. 2015, Reed, Brown, and Roth 2000). According to this discrepancy, Bosacki, Woods, and Coplan (2015) suggest that gender may influence female and male early childhood educators' perceptions of childhood aggression and R&T. Koustourakis, Rompolá, and Asimaki (2015) found in their study of perception of female kindergarten teachers in Greece, that the teachers seemed to be influenced by their own gender-based dispositions and experiences, and accepted more calm sorts of R&T (chasing, tickling, spinning etc.) while banning wilder types of play (fighting/wrestling, pile on, poke and grappling). Women's lack of experiences of R&T is also suggested as a reason for the restrictive attitudes towards this kind of play in ECEC (Storli and Sandseter 2015), and in a field with a dominating share of female practitioners, this would be of utmost importance for the children's opportunities for such play. In their analysis of outdoor play in ECEC settings, Little & Wyver (2008) identified several factors that may lead to ECEC professionals' minimisation of risk-taking play e.g., inadequate understanding of the benefits risk-taking, high child-staff ratios, external regulation, poorly designed facilities and the fear of litigation.

Even though ECEC practitioners sometimes misinterpret play as involving more aggression and risk than it actually does, there are studies that indicate that a change of perception of these kinds of play is possible (Niehues et al. 2013, Cevher-Kalburan 2015). DiCarlo et al. (2015) also showed that the level of education and length of experience working in ECEC were factors influencing ECEC practitioners' perception of R&T. In their

study they found that practitioners without a college degree in early childhood education were three times more likely to perceive R&T as less aggressive than their colleagues with a degree, and that more experienced practitioners perceived the play as less aggressive than novice practitioners.

Aim of study

The overall aim of this study is to explore Norwegian ECEC practitioners' perceptions and practices regarding children's indoor and outdoor R&T. Using a gender approach, we also explore the factors influencing the (male and female) practitioners' perception and practices.

Method

In this study both a questionnaire and semi-structured interviews were used together in a mixed method design. This was done to provide quantitative data of patterns among a larger group of ECEC practitioners, as well as to gather greater in-depth insights on ECEC practitioners' attitudes, thoughts and actions concerning children's R&T play.

Participants

Questionnaire

A total of 423 participants were recruited, 381 women (90.1%) and 42 men (9.9%). The majority, 48.6% of the women and 81% of the men, were under 40 years old. The average length of practice was 14.0 years for women and 7.8 years for men. The practitioner's educational level indicated that 71.1% of the women and 73.8% of the men held bachelor's or master's degrees. In Norway, where this study was conducted, trained preschool teachers with a bachelor degree working with this age group are usually responsible for 18 children together with three or four other practitioners without formal education.

A slight majority (52.2%) of the participants reported that they worked in municipal institutions and 44.9% in private institutions (2.8% missing). Ninety-two percent of the participants reported the children spent six or more hours in the institution daily. Analysis showed there were no significant differences ($p = .01$) between municipal and private institutions according to how much time the children spent in the program.

Interviews

In addition to gathering data with the questionnaire, we conducted semi-structured interviews with employees from three strategically selected ECEC institutions in the central part of Norway. These three institutions were selected using the main criteria that they were ordinary ECEC institutions with one or more male practitioners. In each of the institutions two employees, one male and one female, were selected to participate in the interview. The interviewees were also selected to represent both ECEC teachers and assistants since the questionnaire has respondents from both of these positions, and because both these groups work with the children in practice and would influence the ECEC institutions' practice concerning R&T play. A description of the interviewees and their code in the further analysis is presented below.

ECEC Institution 1:

54Female-teacher-inst1: In Institution 1 we interviewed a female preschool teacher who is 54 years old and has been working as a preschool teacher for 30 years. During her career she has worked in four different ECEC institutions.

27Male-assistant-inst1: The other interviewee in Institution 1 is a male assistant of 27 years. He has been working in the ECEC institution for five years.

ECEC Institution 2:

34Female-teacher-inst2: This is a 34-year-old female preschool teacher, who has worked in ECEC institutions for nine years. During her career she has worked in two different institutions.

24Male-assistant-inst2: The other interviewee in Institution 1 has been a male assistant for 24 years. He has been working in the ECEC institution for 1½ years.

ECEC Institution 3:

39Female-teacher-inst3: She is a 39-year-old female preschool teacher who has worked in smaller part-time positions in ECEC institutions for several years and in a full-time position for the last six years.

42Male-teacher-inst3: The second interviewee in ECEC Institution 3 is a 42-year-old male teacher. He was originally a school teacher, but has worked approximately three years in early childhood education.

Ethics and Procedure

The project was approved by and later reported to the Norwegian Social Science Data Services. Strict confidentiality and anonymity were maintained in this study including full anonymity of the participants during data collection, analysis and publication. In the semi-structured interviews the interviewees also gave their informed consent to participate, and they were allowed to withdraw from the project at any time. None of the interviewees withdrew.

The questionnaire in this study was based on “Preschool Teacher Beliefs and Practices Questionnaire”, an instrument designed by and reliability- and validity-tested by Logue and Harvey (2009). In addition to a demographics section, the questionnaire included three main factors: (1) prevalence of dramatic play themes (Cronbach's $\alpha = .77$), (2) play interventions and rules (Cronbach's $\alpha = .80$), and (3) attitudes towards rough-and-tumble play (Cronbach's $\alpha = .74$). New in this study is that participants were asked to report their practices not only in regard to children's indoor play, but also to outdoor play.

The first author of this study first translated the questionnaire to Norwegian, before it was evaluated and controlled by an independent colleague researcher. On the basis of comments from this evaluation, a small revision was made and a final questionnaire was developed and implemented electronically by using the QuestBack system.¹ This system is based on e-mail distribution of a link to the actual survey and replies via a web browser on the Internet. Participants were recruited through indirect invitation on the Internet,² a national website for employees in ECEC institutions in Norway.

The interviews were conducted in the ECEC institution in a quiet and undisturbed room with each of the interviewees separately. The interview was semi-structured and based on an interview guide with the main themes for conversation: children's rough-and-tumble play in their ECEC institution and how the employees handle this kind of play. The interviews were recorded electronically as a “.wav-file” and later transcribed verbatim into text material by the same person who conducted the interview.

¹ www.questback.com

² <http://www.barnehageforum.no/showarticle.aspx?ArticleID=2070>

Analysis

In this paper, quantitative analyses of data from the questionnaire have been conducted on items with pre-coded Likert scale categories of answers, e.g., 1 = less than monthly, 2 = monthly, 3 = 2 - 4 times a week, 4 = daily. The data were analysed using IBM Statistical Package for Social Sciences (SPSS 22). General descriptive analyses (percentages) were applied to find the distribution of answers and variables, and one-sample *t*-tests were conducted to examine differences between boys and girls on the prevalence of dramatic play themes and play interventions and rules related to dramatic play themes in indoor and outdoor play.

The interviews were analysed using a thematic analysis process in six steps (Boyatzis 1998, Braun and Clarke 2006). The first phase was to make ourselves familiar with the data material, reading the transcribed interviews several times to get an overview of its content. The transcription of the recorded interviews was also an important part of this process. During this phase, for this article particularly, the research question in focus helped reduce the data material into a more manageable quantity for analysis. In the second phase initial codes in the text were generated as a basis for the next phase where we looked for the central themes within the codes by sorting them into potential themes and collating the data extracts within each of the central identified themes (Braun and Clarke 2006). The next phase was to review and reconsider the identified themes and to refine them where necessary before phase five where we found useful and descriptive names for the themes and the sub-themes. In the last phase the identified themes were analysed in light of the research question (in this article) and a structure of themes and sub-themes was identified to inform the further interpretation and presentation of the results.

Results

The questionnaire

The first question to be analysed from the questionnaire was: "Looking at your day as a whole, how much time do children spend in free play (including dramatic play) indoors and outdoors?" In this question the preschool teachers were asked to give their answers based on a normal day spent on the ECEC premises. Over half of the participants (51.4%) reported that

children spent two hours or more in free outdoor play every day, compared to 36.1% indoors. In sum, 84% of participants stated that children play freely more than one hour each day indoors, while 92.1% reported that more than one hour was spent outdoors in free play every day

The second question to be analysed concerned the prevalence of non-tolerance policies for play fighting and chase games indoors. The participants were asked to report “yes” (no tolerance), “no” (tolerance) or “other”. In sum, 31.2% (n=132) reported non-tolerance policies for such play indoors, while 27.9% (n= 118) reported unconditional tolerance for play fighting and chase games indoors, and 39% (n= 165) reported tolerance under certain circumstances. The most common reasons to permit indoor R&T were that the ECEC institution had access to special rooms for physical active play, that the group size of children was not too large or that the practitioners were participating in the activity. Many reported they would allow play fighting indoors, but not chase games. This would suggest that some decisions about R&T are made of practitioners alone and others are institutionalized.

The next question to be analysed was how strongly the practitioners agreed or disagreed with allowing different types of dramatic play in indoor and outdoor play environments. This was also seen in relation to gender.

Table 1. How strongly do you agree or disagree with allowing each type of dramatic play either in indoor and outdoor play environments?

R&T Play Themes:		Indoor play				Outdoor play			
		M	SD	t	p	M	SD	t	p
Superhero Play	Women (n= 381)	1.93	.97	1.190	.235	1.44	.83	-.640	.523
	Men (n = 42)	2.12	.80			1.52	.67		
Pretend Fighting	Women (n= 381)	2.68	1.15	.200	.842	1.88	1.02	-.318	.751
	Men (n = 42)	2.71	1.04			1.93	.80		
Chase Games	Women (n= 381)	2.72	1.18	-.942	.347	1.58	.90	-.747	.455
	Men (n = 42)	2.90	1.12			1.69	.95		
Protect/ Rescue	Women (n= 381)	1.82	.98	-.816	.415	1.40	.90	-.773	.440
	Men (n = 42)	1.95	.82			1.50	.95		
Wild animal/ Monster	Women (n= 381)	2.18	1.007	-.478	.633	1.49	.87	-.747	.455
	Men (n = 42)	2.26	.989			1.62	.82		

1= Always allow, 2= 2, 3= 3, 4= 4, 5= Always prohibit

An independent-samples *t*-test was conducted to compare how strongly practitioners agreed or disagreed with allowing types of R&T dramatic play themes in indoor and outdoor play. Table 1 shows that there are no significant differences in women's and men's practice related to any of children's R&T play themes, either in indoor or outdoor play. These results suggest that there is a common practice of how to relate to R&T in different play environments in Norwegian ECEC institutions independent of gender. Analyses of the mean scores in Table 1 related to the Likert scale (midpoint = 3) also indicate there is a more liberal than restrictive attitude towards R&T in general among the participants; however this is more so in outdoor play than indoor play.

A paired-samples *t*-test was also conducted to compare how practitioners practice in allowing types of R&T dramatic play themes (as described in Figure 2) would possibly differ between indoor and outdoor play conditions. These results suggest that both women and men allow significantly more R&T dramatic play themes outdoors than indoors.

The practitioners were asked to report the major influences on their attitudes towards children's play. Six categories were presented: a) my own childhood experiences, b) my parent's/ family beliefs, c) my coursework and training in ECEC, d) my co-workers beliefs and attitudes, e) my political convictions, and f) my religious convictions. Figure 1 presents the three most influential factors on practitioner's attitudes towards play.

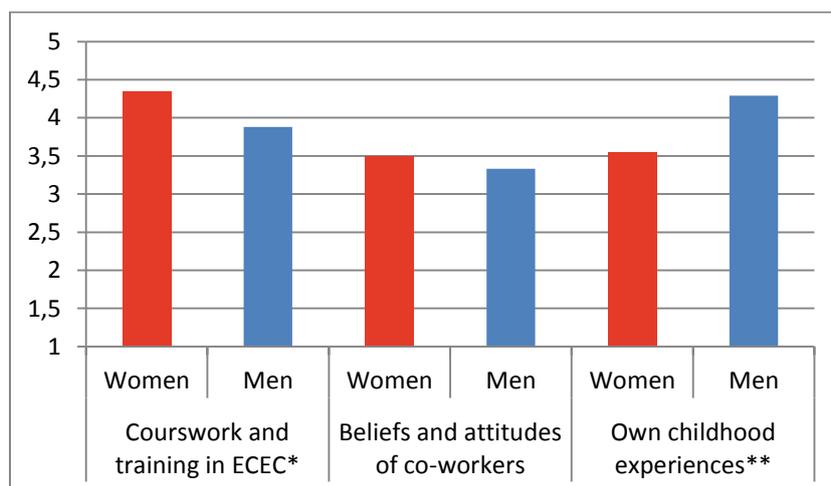


Figure 1. Distribution of the three most influential factors on practitioner's attitudes towards play.

* = significant difference between gender at the .05 level

** = significant difference between gender at the .01 level

The results in Figure 1 indicate that while women report coursework and training in ECEC as the most influential factor ($M= 4.34$), men report their own childhood experiences ($M= 4.29$) as the most influential factor.

An independent-samples *t*-test revealed significant differences between women ($M= 4.34$, $SD= 1.15$) and men ($M= 3.88$, $SD= 1.19$) in explaining their attitudes by *coursework and training in ECEC* ($t(421)= 2.45$, $p= .015$). There was also significant differences between women ($M= 3.54$, $SD= 1.38$) and men ($M= 4.29$, $SD= 1.02$) in explaining their attitudes in their *own childhood experiences* ($t(421) -3.41$, $p= .001$).

These results suggest that although women and men agree about the three major influences on their attitudes towards children's play, they express different comprehensions of what influences their attitudes most towards play. While men report their *own childhood experiences* as the most influential factor, women state *coursework and training in ECEC* as the most influential. Both groups emphasise *beliefs and attitudes of co-workers* as being of great importance to their attitudes.

The interviews

The analysis of data from the interviews showed that ECEC practitioners have strong opinions about children's R&T and how they as practitioners handle this kind of play. The main categories emerging from the data to describe how ECEC practitioner look at and work with R&T in their institutions were *attitudes, frames* and *practice* that would facilitate or restrict this kind of play (see Figure 2). In addition, a category called *changing attitudes and practice* also emerged as a description of how the practitioners had moved from one point to another regarding this play, and the reasons for changing. In the following, each of these categories will be described in more detail.

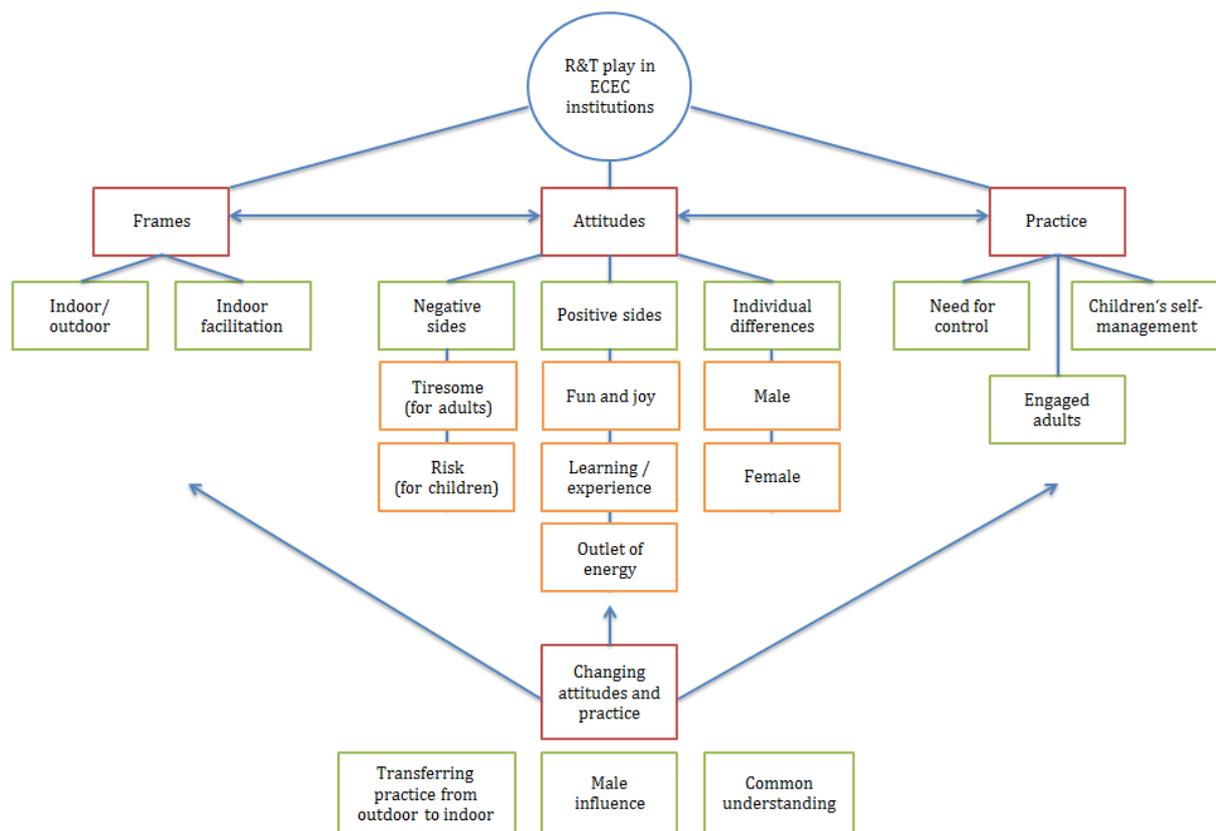


Figure 2. Conceptual map of categories and subcategories influencing ECEC practitioners' perceptions and practices regarding children's R&T

Attitudes

The practitioners all mentioned their colleagues' and their own attitudes towards R&T as a very important influence on how they handled this kind of play in the ECEC daily life. Within the category of attitudes the analysis revealed three subcategories: *negative side*, *positive side* and *individual differences*. All of the cons against letting children engage in R&T appeared on the negative side category. The arguments on the negative side were subdivided into two types: one that focused on the negative side for the adults/practitioners in ECEC, and one that focused on the negative side for the children. The negative side for the adults included arguments against R&T because it included a lot of noise and chaos and resulted in frustration and exhaustion among the practitioners. The children's negatives were more focused on the fact that this kind of play could get out of control and they could accidentally be harmed or injured.

On the other side, the practitioners also mentioned many positive sides of R&T, and argued for the pros of this kind of play. The positive arguments were divided into three types, all focusing on the positive aspects for the children: fun and joy, learning/experiences and outlet of energy. The argument that this was positive as a source for fun and enjoyment for children was based on the practitioners' opinions that this was an important part of play and that it involved a lot of positive experiences. The practitioners also acknowledged that R&T was a source for children's learning and experience, where arguments such as socialization, the opportunity for testing boundaries and on power, and the enhancement of physical skills were emphasised. In addition the argument that R&T was important for children as an outlet of energy was also mentioned by most of the practitioners, emphasising that burning off some energy in R&T could make them calmer during subsequent activities.

The third and most emphasised subcategory of attitudes mentioned by the practitioners was individual differences. In this category two subcategories emerged: male attitudes and female attitudes. Here the practitioners' focus was on gender differences in attitudes towards R&T. The male attitudes were described as much more allowing of such play than the female attitudes, and the most common arguments were that women do not understand this kind of play; they have little experience of this play themselves, and they basically interpret it in a more negative way than their male colleagues. On the other hand, male practitioners, the interviewees argued, understand this kind of play better because they have a lot of experience, having engaged in it themselves. They view this as positive and have good memories about this type of play from their own childhoods. They are naturally more rough and physical than their female colleagues, and as adults, they still think it is fun to engage in R&T. The exception, according to some male practitioners, was that so called "outdoor women" who liked outdoor life themselves, could sometimes be more accepting towards R&T than their female colleagues.

Frames

Another category that influenced how the practitioners handle R&T was frames in the ECEC environment that would restrict or facilitate how the practitioners allowed this kind of play. The most striking subcategory within the frames was the difference between *indoor and outdoor* environments. The practitioners expressed a very restrictive attitude towards R&T indoors, while being very supportive of it when it was done outdoors. They were very particular on the opinion that "we don't want it indoors" and "we want them to go outdoors

and do this kind of play". This was argued based on the negative sides they mentioned earlier such as R&T being exhausting and frustrating for the adults in ECEC, and their experience that it felt less negative for them when children engaged in it outdoors. On the other hand, in the frames category a subcategory called *indoor facilitation* emerged. This was the practitioners' reflections and acknowledgement around the view that R&T was an important part of children's activities, and that they should also facilitate this indoors in ECEC. When arguing for this, they stated that children should also be able to do R&T indoors (not just outdoors), and that sometimes they facilitated it by furnishing rooms indoors with, e.g., pillows, mattresses and soft materials so that they would be appropriate for this kind of play.

Practice

In this category the practitioners described their practice of handling children's R&T, and how they thought about their own considerations. Three subcategories emerged in this category: *need for control*, *children's self-management*, and *engaged adults*. The need for control subcategory included the practitioners' expressions for how they felt they needed to monitor this kind of play to make sure it did not get out of control. This was based in the approach from the practitioners that one should have some rules and limits for children's play and that the practitioners should keep close to the children and define the rules to avoid the activities getting out of hand. On the rather opposite side, some practitioners also expressed that children were capable of managing this play by themselves. As a basis for this approach they believed that talking to the children about the possible consequences of R&T and suggesting limits for their play would make the children more able to handle the activities among themselves. The practitioners would then take a more distanced role. Yet another approach to handling R&T was practitioners who expressed a high interest in engaging in R&T with the children. Both the male and female interviewees stated that the male practitioners engaged more in R&T with the children than female practitioners. Practitioners who engaged in R&T with the children also indicated that since they participated, they were increasingly invited into R&T by the children. In this way they could both be close to the play and in position to modify it in case it got out of control, as well as gain a greater experience of the play and learn how to acknowledge it. The male practitioners expressed that they wished that more of the female practitioners did engage in this play with the children instead of just making rules while watching from a distance. This was especially linked to the aforementioned subcategory of individual differences of attitudes, where practitioners' own

experiences with R&T would help them understand the play better and to better know how to handle it.

Changing attitudes and practice

The last category was descriptions of how practitioners' attitudes and practice could change in a dynamic ECEC environment. These changes would also affect how practitioners look upon and adapt frames for R&T in ECEC, so there is also a link between these two categories. The changing attitudes and practice category included three subcategories: *male influence*, *transferring practice from outdoors to indoors* and *common understanding*. The female practitioners describe that having male colleagues and collaborating with them results in a changed attitude and practice among the female practitioners. The female practitioners related that they talk with the men about R&T and tried to learn more about it and to better understand the play. In this way they become more secure and untroubled when supervising children's R&T, and they also learn to appreciate the benefits of this play. On the other hand, some of the male practitioners expressed that they consciously tried to influence the women practitioners to become more "on their side" concerning R&T, meaning they would allow more of it. In line with this change the practitioners expressed that they had started to acknowledge that this kind of play should also be allowed indoors in ECEC, and that they tried to transfer their attitudes and practice towards R&T outdoors (which was more accepting) to indoors (which traditionally was more restrictive). This would ultimately lead to changes of frames when it comes to indoor play environments. Finally, some of the practitioners described that they had worked on developing a common understanding for R&T by discussing its benefits, costs and how to handle it. Some of them described agreeing on certain rules and limits; and others described a more tacit understanding where they had more unwritten rules and limits; still others described that through discussions they had agreed that they disagree about R&T but still work out a way to deal with the activity.

Discussion

In light of other studies showing distinct gender differences in the way men and women perceive and relate to R&T in society in general (Brussoni and Olsen 2011, Fletcher, StGeorge, and Freeman 2013), it is surprising that the quantitative data in this study does not reveal significant gender differences in allowing R&T, neither in indoor nor outdoor play

environments. Still, when looking at the qualitative interview data (see *attitudes*) the picture is more complex than what is shown from the quantitative data. In the interviews the practitioners do express that there are gender differences in attitudes, where men were considered much more positive and allowing towards R&T than their female colleagues. It seems like they experience an underlying basic gender difference, which the interviewees (both men and women) explain primarily by the fact that men through more experience with this kind of play understand R&T and its benefits better than women. This is also shown in the quantitative data where male practitioners report their *own childhood experiences* as the most influential factor on their beliefs and attitudes towards children's play, while women state *coursework and training in ECEC* as the most influential. According to Koustourakis et al. (2015), gender-based dispositions and experiences seem to be an important influence. Little & Wyver (2008) suggest this indicates that inadequate experience, knowledge and understanding of the benefits could lead to a more restrictive and negative attitude.

When exploring ECEC practitioners' attitudes towards R&T in the interview data, both male and female interviewees emphasised several negative and positive sides of this play (see *attitudes*). It seems as if the practitioners are very conscious about the benefits of R&T and primarily argue for benefits in terms of children's positive experiences (fun and joy) and that this is a kind of play where children learn important lessons for life. This is in line with what research has shown on social and physical benefits of R&T (Humphreys and Smith 1984, 1987, Bjorklund and Pellegrini 2000, Jarvis 2006). On the more negative side, in contrast, the arguments are more related to the practitioners' own perspectives and experiences of children engaging in R&T, such as it being stressful and tiresome for the staff and the worry of children being harmed or injured. Furthermore, practitioners are concerned with an uncertainty of how to manage the activities (Tannock 2008) and perceive it as problematic and aggressive (DiCarlo et al. 2015, Jarvis 2007, Reed, Brown, and Roth 2000). They are further concerned about litigation and children's safety (Little and Wyver 2008, Little 2015).

Little and Wyver (2008) identified in their analysis of outdoor play in early childhood education, poorly designed facilities as one of the factors influencing restrictions of children's risk-taking in play, including R&T. In the present study, the quantitative data showed that free play in general and free outdoor play in particular makes up an essential part of the everyday pedagogical content in Norwegian ECEC institutions. In addition, Table 1 shows that Norwegian ECEC practitioners allow significantly more R&T themes outdoors than indoors.

First, this might be interpreted as an expression of the practitioners' understanding and acceptance of R&T as a natural part of children's free play. Second, since the practitioners allow various R&T themes more outdoor than indoors, they probably consider the outdoor environment as an appropriate frame for R&T. This was confirmed in the interview data (see *frames*) where the practitioners expressed a supportive attitude towards R&T as long as it was outdoors, while being very restrictive towards R&T in the indoor environments. On occasions where they allowed R&T indoors it was a result of an intentional facilitation of the environment. Traces of this are also seen in the quantitative data where one of the most common reasons to permit R&T indoors was having access to rooms especially facilitated for physically active play. Other important reasons for allowing R&T indoors reported in the questionnaire stipulated that the group of children not be too large and that practitioners participate with the children in this play. This can be seen in relation to the interview data showing that R&T generated a need for the practitioners to ensure control over this kind of play (see *Practice*). Reducing the number of children involved in R&T would increase control over the situation, as would having practitioners engage in the play themselves; in this way they would be closer to the situation and able to monitor and manage the play. This shows, similar to the findings of Little and Wyver (2008), that child-staff ratios and accessible play environments are important in how R&T is handled (restricted or allowed) by the staff in ECEC.

The relationship between frames, attitudes and practice in Figure 2 is indeed dynamic. Changes in one of these factors would affect the circumstances in the other two. Hypothetically, more knowledge and focus on the benefits of R&T (see *attitudes*) in ECEC institutions may lead to a more liberal practice, which subsequently would be followed by increased consciousness of the frames that facilitate or restrict children's play opportunities. Changing ECEC practitioner's attitudes and practices towards R&T in general may also be a result of change in practice. As MacDonald and Parke (1984) noted, fathers engage in more vigorous physical play than mothers, and much of this constitutes R&T or roughhousing. Similarly, the qualitative data in this study (see *practice*) revealed gender differences in how practitioners engage in R&T, where both men and women report that male practitioners engage more in R&T than female, and that they, therefore, to a larger extent are invited into such play by the children.

As seen in Figure 1, both women and men emphasise *beliefs and attitudes of co-workers* as an important factor influencing their attitudes towards children's play. This might explain why

the quantitative data in Table 1 did not indicate significant gender differences in allowing indoor and outdoor R&T. Male practitioners' participation and engagement in R&T, might influence the way their co-workers are perceived, valued, allowed and ultimately facilitate R&T in ECEC institutions. This interpretation is supported in the qualitative data (see *changing attitudes and practice*) where female practitioners stated that the reason for changing to a more positive attitude towards R&T was learning more about it from their male colleagues. On the other hand, the male practitioners stated that they consciously tried to change their female colleagues' attitudes by "teaching" them more about it. In this way the female practitioners acquired more knowledge and an adequate understanding (Little and Wyver 2008) of this kind of play, which leads them to a greater awareness and experience of R&T. This could potentially result in positive experiences with R&T, at first instance outdoors, which would inspire the practitioners to transfer their practice of allowing R&T to the indoor environment with a focus on facilitating appropriate indoor environments. In this study the results from both the questionnaire and the interviews showed that male practitioners themselves emphasized own experience as the crucial factor influencing their attitudes. Nevertheless, many of the male practitioners also responded that coursework and training was an important factor (Figure 1), and the level of reflection demonstrated by the male interviewees on the issue indicates that they too have a high professional reflection about R&T play. The quantitative data indicated that practitioners made some decisions about R&T alone while others were institutionalized rules. The qualitative data from the interviews indicated that changes in attitude and practice also emerged as a result of trying to reach a common understanding about R&T. Still, it seems that some rules and limits could be agreed upon and institutionalized, while on other issues they agreed that they disagree and carried on with different individual practices. All in all, the representation of men in the ECEC staff and a high consciousness of a common understanding of R&T (including a focus on its benefits) could presumably explain the lack of gender differences in allowing R&T among the respondents of the questionnaire.

The results in this study are based on preschool teachers' perceptions of children's R&T collected through a questionnaire and in-depth interviews of ECEC practitioners. No direct observation of children's actual play and how ECEC staff responded to this play were conducted. There is also a possible bias, as in all other anonymous surveys, that the respondents are not giving exact information. The results must, therefore, be interpreted with caution. In addition, self-recruitment of the survey may have resulted in less

representativeness and thus less generalizability of the results since the preschool teachers answering the questionnaire might be more interested in the theme under study than the broader population. Finally, the sample size of the qualitative interviews is small, and even though they are supplementing the quantitative data in a mixed-method design, the mere results from the interviews is not generalizable.

Conclusion

The aim of this study was, through combining questionnaire and interview data, to explore Norwegian ECEC practitioners' perceptions and practices regarding children's indoor and outdoor R&T from a gender perspective. The results of the study showed that ECEC practitioners acknowledged both positive and negative sides of R&T, that they allowed this kind of play significantly more in outdoor environments than indoors, and that R&T often produced uncertainty and a need for control by the practitioners. The most surprising result from the questionnaire was the lack of gender differences in allowing children's R&T in ECEC. Valuable insight into the reasons for the lack of gender differences was attained through the interviews where the practitioners revealed that the female practitioners had changed their attitudes and practices towards R&T as a result of gaining more knowledge and experience of this play through their male colleagues, and a high consciousness of trying to adopt common understandings, rules and practices regarding R&T. The results in this study indicate the importance of gender diversity in developing a supportive environment for children's R&T opportunities in ECEC institutions. Male and female practitioners' attitudes and practices seem to be influenced by their own gender-based dispositions and experiences, as well as the beliefs and attitudes of co-workers. In that sense, male practitioners may function as catalysts in a dynamic, female-dominated working environment.

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