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Early childhood education and care practitioners' perceptions of children's risky play; examining the influence of personality and gender

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While there is a growing interest in children's risk-taking behaviours and their safety when at play, there is also a focus on the need to balance the hazards of risks with the benefits of risk. This is also a growing concern among researchers of early childhood education and care (ECEC). The research conducted thus far on ECEC practitioners' perceptions of children's risky play has been qualitative. The aim of this study takes a quantitative approach to ECEC practitioners' perceptions of children's risky play with an aim to reveal how the perception is related to the practitioner's age, gender, and personality. Questionnaires, including a personality test, were administered to 116 Norwegian ECEC practitioners (20% male practitioners). The results indicate that male practitioners score higher on excitement-seeking scales than female practitioners, have a more liberal attitude towards children's risky play, and allow children to engage in greater risky play than women.

Keywords: early childhood; risky play; practitioners; personality; excitement-seeking; gender

1. Introduction

In general, risky play may be defined as play that provides opportunities to challenge and test limits, to explore boundaries, and to learn about risk (Ball, 2002; Little & Wyver, 2008). In a more detailed definition, Sandseter (2010, p. 22) suggests that risky play *involves thrilling and exciting forms of physical play that involve uncertainty and a risk of physical injury*. Recently, there has been a growing interest in the risks children face and the measures taken to protect children, particularly with respect to their play behaviours and play environments. This growing interest has led to increased research, which provides evidence regarding both children's desire for challenging play that involves a degree of risk-taking (Greenfield, 2004; Little, 2010; Sandseter, 2010; Stephenson, 2003; Waters & Begley, 2007) and the role that positive risk-taking has in fostering children's optimal health and development (Aldis, 1975; Ball, 2002; Boyesen, 1997; Fiskum, 2004; Fjørtoft, 2000; Grahn, Mårtensson, Lindblad, Nilsson, & Ekman, 1997; S. J. Smith, 1998; Stutz, 1995). Several researchers have, for instance, found that through risk-taking in play, children learn risk assessment and how to address risk in certain situations, thus promoting a sound sense and

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understanding of risk (Aldis, 1975; Ball, 2002; Boyesen, 1997). Aldis (1975) demonstrates how children progressively encounter risky play and seek out thrills in a gradual manner, thus allowing them to master the challenges. Through challenging play, especially play in natural outdoor settings, children show improved motor and spatial skills and also learn to assess the level of risk and how to master risk in various situations (Ball, 2002; Boyesen, 1997; Fiskum, 2004; Fjørtoft, 2000; Grahn et al., 1997; S. J. Smith, 1998; Stutz, 1995). Sandseter and Kennair (2011) further suggest that one of the most important aspects of engaging risky play is the anti-phobic effect of exposure to typical anxiety-eliciting stimuli and contexts, in combination with positive emotions (thrills, excitement, and fearful joy) in relatively safe situations. The children learn to cope with and to no longer fear potentially dangerous situations.

Nevertheless, the possibility of children being injured when engaging in risky play has resulted in a growing focus on children's safety and on safety regulations regarding children's play environments (Ball, 2002). Among others, this safety focus extends to childcare workers and early childhood education and care (ECEC) institutions. When examining the issue of risk-taking in play in ECEC institutions, one must also consider that the children are under the supervision of ECEC practitioners and that the practitioners' perceptions of risk are therefore crucial in providing children the opportunity to engage in challenging, risk-taking activities (Little, Sandseter, & Wyver, 2012; Sandseter, 2012; Sandseter, Wyver, & Little, 2012).

1.1. *Risky play*

Recent studies have identified the characteristics of risky play. Stephenson (2003) found, through observations and interviews of four-year-old children on the issue of risk-taking in play, that this included activities such as sliding, swinging, climbing, and bike riding and that it was associated with 'attempting something never done before, feeling on the borderline of "out of control" often because of height or speed, and overcoming fear' (p. 36). Studying children's general play in a Norwegian preschool set in a natural outdoor environment, Kaarby (2004) observed risk-taking behaviours among children engaged in various activities, such as climbing up steep hill-sides and sliding down, climbing up and jumping down from large rocks or small cliffs, climbing in trees, shooting with bows and arrows, rolling on the ground, balancing on stones and fallen trees, etc., and using a knife to whittle sticks. Allowing children to venture out on their own and away from the surveillance of caretakers is also considered to be risky behaviour (S. J. Smith, 1998), and both Kaarby (2004) and Davidsson (2006) found that children love to wander off into the woods and explore away from the oversight of adults. Research also shows that rough-and-tumble play includes a potential harm to the participants (Blurton Jones, 1976; Humphreys & Smith, 1984; P. K. Smith, 2005), as it involves the chance of children unintentionally hurting each other while wrestling, fighting, fencing, etc., and there is a fine balance between the activity maintaining play and a real fight.

These characteristics of risky play were further extended by Sandseter (2007, 2009a) in research conducted in Norwegian preschools. From observations of three- to five-year-old children, Sandseter identified six categories of risky play: (a) play with great HEIGHTS – danger of injury from falling, for instance climbing (in all forms), jumping from heights, hanging/dangling from heights, balancing from heights, (b) play with high SPEED – uncontrolled speed and pace that can lead to a collision with something (or someone), for instance bicycling at high speeds, sledging

(winter), sliding, running (uncontrollably), (c) play with dangerous TOOLS – that can lead to injuries, for instance axe, saw, knife, hammer, ropes, (d) play near dangerous ELEMENTS – where you can fall into or from something, for instance a lake/sea, fire pit, cliff, (e) ROUGH-AND-TUMBLE Play – where the children can harm each other, for instance wrestling, fighting, fencing with sticks etc., (f) play where the children can DISAPPEAR/GET LOST, for instance when the children are without supervision and where there are no fences, for example, in the woods, etc.

In the present study, these categories constitute the operationalisation of risky play used as a basis for the questionnaire and the mutual understanding of the definition of risky play between the respondents and the researcher.

1.2. ECEC practitioners' role in children's risky play

Play usually occurs when children are under the supervision of adults who constrain what children are allowed to do and where they are allowed to go (Kyttä, 2004). Accordingly, adults help to ensure children are safe when playing, but at the same time, these adults represent the most important constraints on children's opportunities to experience risks and challenges. Adams (2001) notes that the adults often make many of the risk-taking decisions that involve children because the children are generally under the surveillance of adults. Therefore, children's risk-taking decisions are also influenced by supervising adults' evaluations of the situation, their assessment of the risk involved, and their decision to allow the children to engage in the risky activity.

According to Smith (1998), the optimal way for caregivers and supervisors to handle children's risk-taking is to allow children to encounter risks and challenges within a relatively safe setting. The play providers in Greatorex's (2008) study argued that thorough risk assessment and guidance of each individual child, with consideration of his/her individual character and ability as well as the staff's individual abilities, were important considerations in supervising children during their risk-taking play. When this strategy succeeds, the children gain valuable experience from risky situations.

How to handle children's risky play can cause tension among ECEC practitioners. Bundy et al. (2009) found that Australian teachers who were concerned about the risks children encountered on playgrounds were, in reality, expressing their own anxieties rather than the risk the activity presented for the children. Tovey (2007) found that while some teachers encouraged children to engage in risky play, others expressed anxiety about the risk-taking of children because of the fear of litigation. Research indicates that risky behaviours are more accepted by practitioners who have an interest in physical play, who enjoy being outdoors, and who adopt an open-minded approach to supervision, thereby allowing children to experience challenges and risks during play (Stephenson, 2003). Research has also shown that practitioners in Forest schools (spending most of their day outdoors in natural environments) in the UK adopt a more liberal approach to risk than practitioners in traditional schools (Maynard, 2007; Waters & Begley, 2007).

There is most likely a cultural influence on how caregivers and adults supervise children (Guldberg, 2009; Little & Wyver, 2008; Little et al., 2012; Sandseter et al., 2012). For instance, according to Guldberg (2009, p. 60), 'the Norwegians have a special love for outdoor pursuits and are reluctant to restrict children's freedom to roam outdoors – without adults watching them – to the same extent that other nations do'. Similarly, New, Mardell, and Robinson (2005) notes that Norwegian,

Swedish, Danish and, to some extent, Italian preschool teachers have fewer concerns about children's risk-taking than do American preschool teachers. In fact, recent research indicates that Norwegian ECEC practitioners encourage children to engage in risky play as they recognise the importance of this type of play on children's overall development. Accordingly, they allow risk-taking among children when at play and have a relatively relaxed and permissive attitude towards children actively engaging in risky play (Sandseter, 2007, 2009b, 2010).

1.3. Practitioners' personality and risk-taking

Another factor that may influence an ECEC practitioner's views and practices regarding children's risk-taking behaviours is the personality of the practitioner. While risk-taking and exploration are natural aspects of human behaviour and exploration, there are individual differences in one's thrill-seeking and risk-taking behaviours among both children and adults.

Several theories of individual differences in personality and temperament suggest that the extraversion dimension includes excitement-seeking (ES)/risk-seeking/sensation-seeking traits that are characterised by the willingness to take risks and to seek excitement, thrills, and new adventures and experiences through behaviours and stimulation in different areas and in different ways. While this trait has different terminologies within the various personality theories, they all seem to address similar characteristics. For example, in Costa and McCrae's five-factor model, ES is a facet within the extraversion personality trait (Buss, 1997; Costa & McCrae, 1992; McCrae & Costa, 1997), while in Eysenck's three-factor model, sensation seeking is found within the extraversion trait (Eysenck & Eysenck, 1985; Matthews, Deary, & Whiteman, 2003). Additionally, Zuckerman's sensation-seeking theory (Zuckerman, 1979, 1983b, 1994) focuses only on sensation seeking. The description of a person who scores high on these similar traits is someone who is social, who seeks thrills and excitement, who take chances, who is active, optimistic, and enthusiastic, and who laughs easily and expresses feelings.

High sensation seekers volunteer for a variety of types of unusual experiments or activities including experiments in sensory deprivation, hypnosis, drug effects and activities, and activities such as encounter groups, alpha training, sensitivity groups, gambling instruction, and training in novel and risky sports like parachute jumping and scuba diving. (Zuckerman, 1983a, p. 44)

Research in several different cultures and countries has documented that men score higher on ES scales than women (Zuckerman, 1979, 1994). This is documented across cultures such as the USA, England, Scotland, Japan, Thailand, Canada, Australia, and Spain. Similarly, two large meta-analyses reported in Matthews et al. (2003), one conducted by Feingold in 1994 and one by Costa et al. in 2001, confirmed that men are more extroverted than women across hundreds of studies and cultures. Although the reviews show that the gender differences were stronger in individualistic versus collective cultures, the results demonstrated consistent results across cultures. One could, therefore, expect that because male ECEC practitioners are themselves greater risk-takers they may handle children's risk-taking behaviours in a different manner than do female ECEC practitioners. Several researchers have documented that there are gender differences in children's risk-taking behaviours and found that

boys are more willing to take risks than girls (Ginsburg & Miller, 1982; Morrongiello & Matheis, 2007; Morrongiello, Midgett, & Stanton, 2000; Morrongiello & Rennie, 1998). Additionally, Smith (1998) found that more boys than girls participate in playground risk-taking activities.

There is also a large body of research documenting that among those with a risk-taking personality, their risk-taking behaviours tend to decrease with age, peaking between 16 and 19 years of age and then steadily declining until it levels out at approximately 60–70 years of age (Haapasalo, 1990; Zuckerman, 1979, 1985, 1994). One could, therefore, also expect that younger ECEC practitioners are themselves more risk-taking, and may therefore address children's risk-taking behaviours in ways different from older ECEC practitioners.

Even though men are more risk-taking than women, women also have their peak of risk-taking behaviours in young age and according to Zuckerman's (1994) analysis 20–29-year-old women and 40–49-year-old men are approximately similar in risk-taking personality, and 30–39-year-old women and 50–59-year-old men are approximately similar. One could therefore expect that young women are more tolerant to risk than men who are more than 10 years older than them.

1.4. *Aim of the study*

There is growing debate regarding children's risk-taking behaviours and their overall safety during play (Brussoni, Olsen, Pike, & Sleet, 2012) and, accordingly, the research interest in this subject has expanded in recent years. Still, no study has combined the ECEC practitioner's attitudes towards children's risky play with the practitioner's personality, which is what this study aims to do. Furthermore, the large number of male ECEC practitioners in Norway (approximately 10,000 male practitioners, more than 10% of all practitioners) provides a unique opportunity to examine these issues from a gender perspective. No studies combining these interesting variables have been found in the extant literature.

The research questions of this study are:

- (1) What perceptions do Norwegian ECEC practitioners have regarding the risk-taking behaviours of children at play?
- (2) What practices do Norwegian ECEC practitioners have concerning children's risky play?

These research questions will be analysed according to the following variables:

- Age (of practitioners)
- Gender (of practitioners and children)
- Personality characteristics (of practitioners)
- Type of ECEC setting (ordinary/indoor or outdoor setting)

2. Method

A quantitative study was conducted using questionnaires that assessed the practitioners' personal risk-taking behaviours and their perceptions and attitudes regarding children's

risk-taking behaviours. In addition, the practitioners completed a personality inventory that measured the practitioner's ES characteristic.

2.1. Sample

The sample consists of practitioners working in 20 Norwegian kindergartens located in the municipality of Trondheim, a city in the middle of Norway. The 20 kindergartens employed 268 practitioners who were offered the opportunity to participate in the study. A total of 116 practitioners completed the questionnaire for a response rate of 43% (Table 1).

Among the practitioners who completed the questionnaire, there were 93 women and 23 men ($N=116$). Accordingly, 20% off the respondents in this study were male, which is slightly higher than the 10% mean of male ECEC practitioners in Norway. The higher amount of male practitioners in this study is random, and it is difficult to know why so many men participated. One could presume that men are particularly interested in this subject and therefore are willing to answer questions about this. Among the respondents, 82 of the practitioners worked in ordinary ECEC settings and 34 practitioners worked in outdoor settings. Since Norwegian official statistics keep no record of how many outdoor ECEC settings exist it is hard to know if this reflects the national amount of practitioners working in such settings. Within the sample, 69% of the practitioners were under 40 years of age. Of the practitioners, 46% held a university degree as a professional early-childhood teacher, 3% were special-needs teachers, 16% were trained childcare workers with a high-school level of education, and 35% were untrained assistants. These statistics indicate that, in this study, there is a higher rate of practitioners who have a university degree than that of the total mean of 36% in Norway.

The study complies with the Norwegian guidelines for ethics in research and was approved by the Norwegian Social Science Data Services. The ECEC practitioners gave informed consent to participate in the study by completing the questionnaire and returning it to the researcher. As the questionnaire was anonymous, there was no way for the researcher to track a single questionnaire back to any one individual respondent.

2.2. Instruments

The questionnaire consisted of two parts. The first part comprised questions regarding the practitioner's personal risk-taking behaviours and their perceptions and attitudes towards risk-taking behaviours of children (scale) and the second part consisted of a personality inventory that assessed, specifically, their ES characteristics.

Table 1. Demographic data of the respondents.

ECEC settings	Women	Men	Total
All settings	93	23	116
Ordinary settings	69	13	82
Outdoor settings	24	10	34

To ensure that all respondents shared the same understanding of what constitutes children's risky play, Sandseter's (2010) six categories were presented in the beginning of the questionnaire.

2.2.1. *Questionnaire, first part*

This part of the questionnaire included general questions about children's risky play and addressed the following research questions:

- How often, from your experience, do boys and girls engage in risky play?
- How often do you worry when boys and girls engage in risky play?
- How often do you allow the children to engage in risky play?

These questions were measured on a Likert scale that ranged from 1 (several times a day) to 5 (rarely or never).

This part of the questionnaire also included a scale developed to assess the practitioners' attitudes towards children's risky play. This scale consisted of 11 items, each with two statements, where the practitioner chose the statement that best fit his/her views and practices. Examples of the pairs of statements are as follows:

- A. When children play, one must expect minor injuries such as scrapes, bruises, and even mild concussions.
- B. When children incur injuries in play, such as scrapes, bruises, and even mild concussions, the play has gone too far.
- A. I am often worried when children engage in outdoor play that includes risk-taking behaviours.
- B. I am relaxed and not at all worried when the children engage in outdoor play that includes risk-taking behaviours.
- A. I think that children should engage in and explore risk-taking activities and play.
- B. Risky play is something that should be avoided in kindergarten, as it is unnecessary to expose children to risky activities.

The scale showed a medium degree of internal reliability (Cronbach's alpha = 0.653).

2.2.2. *Questionnaire, second part*

The questionnaire also included a translated Norwegian version (Martinsen, Nordvik, & Østbø, 2005) of the NEO-PI-R personality inventory (Costa & McCrae, 1985). The NEO-PI-R personality inventory is based on the five-factor personality model (Costa & McCrae, 1992) and includes five broad personality factors – neuroticism, extraversion, openness to experience, agreeableness, and conscientiousness. Each of the five factors is divided into six subordinate dimensions (facets). Relevant to this study, the extraversion factor includes a facet called ES. The full inventory, which takes between 30 and 40 minutes to complete, is a self-report that consists of 240 items (descriptions of behaviour), and the responses, answered on a five-point scale, range from 'strongly disagree' (1) to 'strongly agree' (5).

While the practitioners in this study completed the entire inventory, the focus of this study was only on the ES facet (subscale). This subscale, which incorporates eight items that assess ES behaviours, assesses the degree to which the respondent agrees with the behaviour. Examples of these items include the following:

I love the excitement of roller coasters.
 I like to be where the action is.
 I often feel the need to experience thrills.

Those who score high in the ES dimension are also those who thoroughly enjoy thrills and intense experiences. They thrive on strong and varied stimulation, and they become easily bored when they are not engaged in intense, exciting activities. However, people who score low on the ES scale do not thrive on the excitement and can, accordingly, feel comfortable in those very situations where excitement seekers experience extreme boredom. The norm data for Norwegian respondents on this scale show a Cronbach's alpha reliability score of =0.71 (Martinsen et al., 2005). In this study, the ES scale recorded a Cronbach's alpha reliability score of =0.653.

2.3. Analysis

All of the questionnaires were prepared in advance to fit a format that could be electronically scanned and generated into the Statistical Package for Social Sciences (SPSS) software. Thus, the statistical analyses were conducted in the IBM SPSS Statistics 20 programme. General descriptive analyses (percentages) were applied to find the distribution of answers and variables, and a bivariate correlation analysis was used to explore the correlations between variables. One-sample and independent sample *t*-tests were conducted to find possible differences between groups of respondents (gender, ES, type of kindergarten).

3. Results

As described in the Method section, the general part of the questionnaire included questions regarding the practitioners' experiences with children's risky play, the extent to which boys and girls engage in this play, if they worried about children taking risks during play, and if they allowed children to engage in risky play. In the questionnaire these questions were measured on a Likert scale that ranged from 1 (several times a day) to 5 (rarely or never). In the present analysis, the responses were revised to a three-point Likert-type scale: 1 (once a day or more), 2 (weekly/monthly), or 3 (rarely or never).

The practitioners were asked how frequently, based on their experiences and observations, boys and girls engaged in risky play during their time in kindergarten. The distribution (in per cent) is shown in Table 2.

The ECEC practitioners reported that boys engaged in risky play more often than girls (Table 2), and further analysis indicated that this was a statistically significant difference ($p < 0.001$). However, in most of the practitioners' opinions both girls and boys frequently engaged in risky play, and some of the practitioners reported that children engaged in this type of play rarely or never. Independent sample *t*-tests showed

Table 2. Distribution (per cent), from the practitioners' experiences, of how often boys and girls engaged in risky play.

	Once a day or more	Weekly/monthly	Rarely or never
Boys	55%	35%	10%
Girls	38%	46%	16%

Table 3. Distribution (per cent) of the frequency of concern among practitioners when boys and girls engaged in risky play.

	Once a day or more	Weekly/monthly	Rarely or never
Boys	9%	42%	49%
Girls	9%	39%	52%

that there was a significant difference between male and female practitioners in their observations of how often boys ($t=4.03$, p (two-tailed)=0.000) and girls ($t=2.18$, p (two-tailed)=0.03) engaged in risky play, with the male practitioners claiming that children more often engaged in risky play. There was no significant difference when evaluating the frequency of risky play among children between practitioners in ordinary/indoor versus outdoor ECEC settings.

The practitioners were also asked about their level of concern when children engage in risky play, with respect to both boys and girls. Table 3 indicates the distribution (in per cent) of the responses.

Table 3 shows that the practitioners were slightly more concerned about girls' risk-taking in play than they were with that of the boys, but the difference was very small and not statistically significant. These data also showed that very few of the practitioners often worried (once a day or more) about risky play, and approximately half of the practitioners reported that they rarely or never worried when children engaged in risky play (both for girls and boys). There was no statistically significant difference in the experience of worry between male and female ECEC practitioners. Furthermore, there was no significant difference with respect to concern between practitioners in ordinary and outdoor ECEC settings.

To obtain an impression of the practitioner's own practice with respect to allowing children to engage in risky play, they were asked how often they allowed children in their kindergarten to engage in such play. The distribution (in per cent) of their answers is shown in Table 4.

Table 4 indicates that nearly half of the practitioners reported that they allowed risky play once a day or more and only 18% reported that they rarely or never allowed risky play. When examining if there were differences in allowing risky play among boys or girls, the results showed no statistically significant difference, which means that the practitioners allowed for an equal amount of risky play for boys and girls.

To explore the factors that impact children's opportunity to engage in risky play during their time in kindergarten, a correlation analysis between practitioners' attitudes towards children's risky play, their allowance of risky play, and the practitioners' score on the ES personality scale and age was conducted.

Table 4. Distribution (per cent) of how often the practitioners' allowed children to engage in risky play in their kindergarten.

	Once a day or more	Weekly/monthly	Rarely or never
All	46%	36%	18%
Boys	47%	37%	16%
Girls	44%	39%	17%

Table 5. Correlations between practitioner age, gender, personality, attitude towards risky play, allowance of risky play, and type of ECEC setting.

	Age	Attitude	Allowance	ES personality
Age	–	$r = -0.18$ n.s.	$r = 0.22$ n.s.	$r = -0.51$ $p < 0.001$
Attitude towards risky play		–	$r = 0.42$ $p < 0.001$	$r = 0.26$ $p < 0.01$
Allowing risky play			–	$r = 0.26$ $p < 0.01$
Personality				–

Note: Critical value for r with $df > 100 = 0.19$.

The correlations shown in Table 5 reveal that a practitioners' ES personality correlated significantly negatively with age in that ES decreases with increasing age. However, age did not correlate with attitude towards risky play, indicating that age did not influence ECEC practitioners practice with respect to children's play. The ES personality also correlated positively with having a liberal approach to risky play and allowing risky play. Having a more liberal attitude towards risky play also correlated significantly with allowing more risky play.

Knowing that ES personality traits among practitioners is an important factor for having a liberal approach to risky play and allowing risky play, it was interesting to further explore the distribution of ES personality among the ECEC practitioners in this study. To explore this, a descriptive frequency analysis was performed. The scores on the ES scale range from 8 to 40 where higher score indicates a higher ES personality.

The results in this study showed that the range of ES scores among the Norwegian ECEC practitioners ranged between 8 and 28, with a mean score of 16. Among the practitioners 77% had an ES score between 8 and 19 and 23% had an ES score between 20 and 30. None had ES scores higher than 30. This indicates that the practitioners generally were quite low in excitement-seeking personality.

Table 6. Differences between men and women in their perceptions and practice with respect to risky play.

	Men ($N = 23$)		Women ($N = 93$)		Mean difference t -test	
	M	S.D.	M	S.D.	t	p
ES	19.38	4.05	15.31	4.06	-4.18	0.000***
Attitude towards risky play total score	18.4	1.6	17.4	2.2	-2.12	0.036*
Allowing risky play (all children)	3.73	1.03	2.87	1.2	-3.39	0.002**
Allowing risky play among boys	3.78	1.09	2.9	1.18	-3.42	0.002**
Allowing risky play among girls	3.61	1.03	2.87	1.19	-2.98	0.005**

*Difference in the means is significant at the 0.05 level.

**Difference in the means is significant at the 0.01 level.

***Difference in the means is significant at the 0.001 level.

Independent sample *t*-tests were conducted to further explore differences in practitioners' ES personality and attitudes towards children's risky play related to gender.

Table 6 shows that there was a significant gender difference in ES scores between female and male ECEC practitioners. The results also showed that there was a significant difference in the *attitude towards risky play total* scores between men and women, men having a more liberal attitude towards risky play than women. Men also reported that they allowed risky play among all children significantly more than women.

Independent sample *t*-tests showed that there is no significant difference in the *attitude towards risky play total* scores between practitioners in ordinary ECECs ($M = 17.8$, $SD = 2.2$) and outdoor ECECs ($M = 17.3$, $SD = 1.4$); $t = 1.04$, p (two-tailed) = 0.052, nor were there significant differences in allowing risky play among children between practitioners in ordinary ECEC settings ($M = 3.0$, $SD = 1.18$) and outdoor ECEC settings ($M = 2.69$, $SD = 1.16$); $t = 1.17$, p (two-tailed) = 0.25.

4. Discussion

The main aim of this study was to examine Norwegian ECEC practitioners' views, experiences, observations, and practices regarding children's risky play in the ECEC setting. A questionnaire that asked practitioners to respond to central issues about children's tendencies to engage in risk-taking behaviours during play and how they perceived and addressed such play was administered. The questionnaire also included a personality test that assessed the practitioner's personal ES traits.

The results of the study (Table 2) suggested that practitioners generally experienced that both boys and girls engaged in risky play relatively often in their ECEC setting, most of them once a day or more or weekly/monthly. The practitioners also reported that boys engaged somewhat more often in risky play than girls. This is consistent with earlier findings regarding children's risk-taking behaviours (Ginsburg & Miller, 1982; Morrongiello & Matheis, 2007; Morrongiello et al., 2000; Morrongiello & Rennie, 1998; S.J. Smith, 1998). The results further showed that male practitioners reported more often than female practitioners that children engaged in risky play. This finding indicates that male practitioners were more attentive to children's risky play, or they evaluated more of children's play as risky. One reason for this difference could be that the ECEC setting in which male practitioners work have a more liberal approach to risky play and thus provide the children more opportunities to engage in risk-taking play.

The results in Table 3 show that most of the practitioners rarely worried about children's risky play, and there was no difference when comparing the degree of worry about male or female children at play. Because of earlier findings that there is a consistent gender difference in ES personality (Zuckerman, 1979, 1994), one would assume that female practitioners would worry more than male practitioners when children engage in risky play. In this study, however, this was not the case. Even though we know that Norwegian children have more opportunities to engage in risk-taking activities than their Australian counterparts (Little et al., 2012; Wyver et al., 2010), there seems to be very little concern among Norwegian ECEC practitioners with respect to this issue. According to the literature stating that practitioners in English forest schools are more liberal to children's risk-taking than practitioners in ordinary schools (Maynard, 2007; Waters & Begley, 2007) one could assume that this would also be the case in Norway. The results of this study, however, did not reveal a significant difference, as there was no difference in the degree of worry among ECEC

practitioners in ordinary and outdoor settings. Approximately half of the practitioners reported that they allowed children to engage in risky play once a day or more, and more than a third reported that they allowed this behaviour on a weekly or monthly basis (Table 4). The practitioners allowed for an equal amount of risky play among boys and girls. The finding that Norwegian ECEC practitioners had few worries about children's risky play, that this was similar for practitioners both in ordinary and outdoor settings, and that many of them allowed for risky play could be explained by the more liberal approach to risk taken by most Norwegians (Guldberg, 2009; New et al., 2005; Sandseter, 2007, 2009b, 2010), though it contrasts with the results from, for example, both Australian and English studies (Bundy et al., 2009; Tovey, 2007).

The correlations in Table 5 show, consistent with previous research (Haapasalo, 1990; Zuckerman, 1979, 1985, 1994), that practitioners' ES behaviours decreased with increasing age, thus suggesting that younger practitioners were more ES than older practitioners. While age itself did not correlate with attitude towards risk-taking behaviours, ES personality correlated positively with both a liberal approach to risky play and risky play in practice.

According to the distribution of ES scores, the participating practitioners in this study, for the most part, scored quite low on this trait. This means that most of the ECEC practitioners did not hold personality characteristics related to high ES such as willingness to take risks, seek excitement, thrill, and new adventures and experiences through various behaviour and stimulation (Zuckerman, 1994). Looking into the distribution of ES personality between male and female practitioners, the results in Table 6 show that there was a significant gender difference consistent with previous research that have found men to be more ES than women (Haapasalo, 1990; Zuckerman, 1994). Although the general ES score among the ECEC practitioners were low, there is reason to believe that male practitioners would be more liberal to children's risky play because they personally take more pleasure of engaging in risk than the female. The results in Table 6 gives the answer to this question. There was a significant difference in the *attitude towards risky play total* scores for men and women, men having a more liberal attitude towards risky play than women. Men also report that they allowed risky play among children significantly more than women. This means that not only were the male practitioners more willing to take risks themselves because of their own ES personality in the way that previous research describes (Zuckerman, 1983b, 1994), but they were also more willing to accept risk-taking among the children over whom they have care-taking responsibilities.

The findings that there are no differences in the *attitude towards risky play total* and *allowing risky play* between practitioners in ordinary settings and outdoor settings were quite surprising due to the former research from the UK showing that practitioners in forest schools have a more liberal approach to risk than practitioners in traditional schools (Maynard, 2007; Waters & Begley, 2007). One reason for this might be that the overall attitude towards risky play and tolerance of risky play among children in Norway is so liberal that this is evident in both types of settings.

4.1. Conclusion

The results of this study showed that Norwegian children frequently engaged in risky play according to their ECEC practitioners and that boys more often engaged in risky play than girls. The practitioners generally allowed children, both boys and girls, opportunities to engage in positive risk-taking behaviours in kindergarten. The study also

showed that most Norwegian ECEC practitioners (both men and women) had few worries when children engaged in risky play. This is somewhat in contrast to several other countries where there is a strong risk aversion concerning children's play environments and particularly in early years. The results of this study thus support previous findings that Scandinavian, and in this case Norwegian, ECEC practitioners are positive towards children's risk-taking and that this might be a cultural difference when compared with several other countries such as the UK, America, and Australia (Guldberg, 2009; New et al., 2005; Wyver et al., 2010). Even though there is a liberal approach to children's risk-taking in play in Norwegian ECEC, a recent study has revealed that there are very few serious injuries happening in Norwegian ECEC (Sandseter, Sando, Pareliussen, & Egset, 2013).

When delving deeper into gender differences between male and female ECEC practitioners, however, the results found that male practitioners scored higher on ES than did female practitioners, and men had more liberal attitudes towards children's risky play and allowed children to engage in more risky play than did female ECEC practitioners. Although male practitioners, on average, scored higher on the ES scale than females, the results indicated that ES, for both genders, was related to a more liberal attitude towards children's risky play, thus resulting in a more permissive stance towards children engaging in risky play. Although ES behaviours declined with age, there was no correlation between the practitioner's age, his/her attitude toward risky play, or his/her tendency to permit risky play. Surprisingly, the practitioners' attitudes and practices regarding children's risky play were unrelated to the ECEC setting in which the practitioners' work – that is, an indoor or an outdoor environment.

This study has limitations due to the relatively low response rate (43%), and one cannot rule out the possibility that the practitioners most interested in the subject (and accordingly more liberal towards risky play) include a majority of the respondents. This could have led to the data revealing a more liberal approach to children's risk-taking than what is actually the case of Norwegian ECEC practitioners. The high number of men participating could also influence the risk-taking tolerance of the sample of the study positively. Using quantitative methods does not allow for a more in-depth study by exploring practitioners' supplementary ideas about the subject. Readers interested in this subject can find more detailed information elsewhere (Little et al., 2012; Sandseter, 2012)

The results of this study highlight men's attitudes towards and their allowance of risky play in ECEC institutions, and how their attitudes and provision, while complementary to, are somewhat different than women's attitudes and provision of risky play. Men seem to seek more personal risk and tend to allow for greater risk-taking in children's play. This does not mean that men are more irresponsible when working with children, but rather that they have other views and practices than female practitioners, and they most likely emphasise a rougher and more challenging style of play than do women.

The results from this study contribute to the discussion on the growing policy of child safety. While the child-safety policy focuses on making play environments more safe and restrict children from taking risks, the results of this study show that, despite the low injury rate in Norwegian ECEC settings, the practitioners appreciate and tolerate risk in children's play. This indicates that child-safety policy might want to focus more on the preventive effect of letting children learn how to assess and handle risks themselves as a means of injury prevention, rather than developing

more restrictions and regulations. This way of seeing and handling children's risky play could probably be something to learn from by practitioners in other countries more risk-averse than Norway and the other Scandinavian countries. Taking the approach that the best way to handle children's risk-taking is to let them encounter risks and challenges within a relatively safe setting would also be beneficial for ECEC practitioners, politicians, and children in counties where the risk-averse focus has become too strong.

Notes on contributor

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