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RISKY-PLAY, TEACHERS' AND EDUCATORS' PERSPECTIVES, AND ACCEPTABILITY LEVEL AT SCHOOL: AN EXPLORATORY STUDY

RISKY-PLAY, PROSPETTIVE DI EDUCATORI E INSEGNANTI E LIVELLI DI AMMISSIBILITÀ NEI SERVIZI 0-6 E A SCUOLA: UNO STUDIO ESPLORATIVO

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Abstract

Recently, there has been a lot of attention on risky-play, with an agreement, common to the international scientific community, on the role of risky-play in children development and learning processes and the ability to take risks and cope with risky situations. Deep attention was given to the observation of risky play conducted by children, while an extremely small number of studies focused on teachers' and parents' perception. The study aims to investigate teachers' perspectives regarding risky-play, focusing on categories of play allowed in children's free play at school and the perceived level of risk for each of them. Below we present the first results collected from a self-compiled questionnaire administered to a voluntary sample of 155 educators and teachers from the Tuscany region employed from kindergarten to primary school.

La letteratura internazionale risulta ormai concorde in merito al ruolo che il risky-play riveste per lo sviluppo e i processi di apprendimento di bambini e bambini con particolare riferimento alla capacità di assumersi rischi e di far fronte a situazioni rischiose. Profonda attenzione è stata accordata all'osservazione dei giochi potenzialmente rischiosi condotti dai bambini, mentre un numero estremamente ridotto di studi indaga la percezione di educatori e quella dei genitori a riguardo. Lo studio ha l'obiettivo di indagare le prospettive degli insegnanti riguardo al risky-play, rilevando in particolare le tipologie di gioco ammesse nel gioco libero dei bambini a scuola e il livello di rischio percepito per ciascuna di esse. Vengono qui presentati i primi risultati raccolti dalla somministrazione di un questionario auto-compilato a un campione, di tipo volontario, di 155 educatori e insegnanti della regione Toscana impiegati dal nido d'infanzia fino alla scuola primaria.

Keywords

Risky-play, safety, free play, outdoor education Risky-play, sicurezza, gioco libero, outdoor education

¹ For attribution reasons, it is specified that: Daniela Frison coordinated the study and developed the paragraphs Introduction, Risky-play: definitions and state of the art, Research questions; Marta Pellegrini coordinated the analysis process and elaborated the Methods and Results paragraphs. The paragraphs Instrument and procedure and Conclusions were elaborated jointly by the authors.

Introduction

Risk and risk-taking are commonly recognized as key dimensions of play and increasingly explored by studies and empirical research that investigate risky-play and its benefit on children's growth and learning processes. Risky-play generally refers to free and outdoor play (Sandseter, 2007, 2009) and is recognized by the scientifica community as crucial in order to encourage the ability to take risks and deal with risky situations (Brussoni, Olsen, Pike, & Sleet, 2012). Indeed, it is now evident how the deprivation of risky and age-appropriate play is associated with the development of states of fear and discomfort towards the environment (Lavrysen, et al., 2017; Sandseter & Kennair, 2011). Despite the centrality of this playful category in both pedagogical and psychological literature, the empirical contributions are still few and related to specific countries and geographical areas, with particular reference to Northern Europe, Canada, and Australia. Furthermore, considerable attention has been focused on the observation of risky-play by children, while an extremely small number of studies investigate the perception of educators and teachers toward risky-play (Little, 2010 Little, Sandseter, & Wyver, 2012; van Rooijen, & Jacobs, 2019) and that of the parents (Beetham, et al., 2019; Brussoni, et al., 2018). The study therefore intends to focus precisely on this less explored side and aims to investigate teachers' perspectives regarding risky-play, with a specific focus on forms of free play allowed at school and the perceived level of risk for each of them.

Risky-play: definitions and state of the art

Risky-play and the possibility of taking risks, of getting hurt: these are expressions that commonly bring to mind free play, outdoors, mostly not guided by the adult, but rather directed by the children's initiative and desire for exploration. Risky-play is commonly intended as child-guided play, which can lead to unwelcome effects, such as damage to things or to oneself, and even accidents and major injuries. Consistent with the most widespread beliefs about the risks potentially related to the children's playing choices (Morrongiello et al., 2006, 2008), the definitions of risky-play that can be found in the literature refer primarily to free play, outdoors. Indeed, the outdoors are recognized as a challenging, stimulating learning environment, intrinsically endowed with boundless opportunities for sensory stimulation and situated, problem-and discovery-based learning. Everything that the design of learning environments addresses with meticulous intentionality, with attention to the preparation of stimuli and provocations, is naturally part of the outdoor play settings that can offer a multiplicity of opportunities for risky-play and risk "as a child's maturing experience" since "the child learns to assess risk by testing it" (Farné, 2018, p. 41).

A first definition of risky-play can be attributed to Stephenson (2003), who led an ethnographic research with 4-year-old children, carried out at a New Zealand educational service. Stephenson identified key elements that characterize risky-play such as facing a new situation never encountered before, feeling in a borderline situation bordering on "out of control", and which, for this reason, requires dealing with and overcoming a state of fear. Subsequently, Sandseter (2007) investigates the various kinds of risky play through interviews and observations of children and staff in a Norwegian preschool. The author revealed six categories of risky-play: (a) play in great heights (risk: falling); (b) play with high speed (risk: losing speed control and colliding with something / someone); (c) play with dangerous tools (risk; getting injured); (d) play near dangerous elements (risk: falling into or out of something); (e) agitated play (risk: hurting each other); and (f) play where children can hide/disappear (risk: getting away from adult supervision, getting lost) (Sandseter, 2007, 2009). The author comes to define risky-play as thrilling and exciting forms of play that involve a risk of physical injury (Sandseter, 2009). It is precisely the combination of two dimensions that determines the risk potential of play: on the one hand the makeup of the environment (some examples might be a slope or the proximity to a road) and on the other, the way in which the play is carried out, namely the level of control by the child on the activity (subjective dimension connected to the child's level of ability, especially from the motor point of view, and his level of attention to what may represent a hazard) (Sandseter, 2009).

The analysis and identification of play tipologies that refer to risky-play are increasing with the development, at an international level, of studies and research aimed at identifying strategies and methods to train early childhood educators and teachers toward a "risk culture" (Frison & Menichetti, 2020) in order to encourage offering "controlled risk" situations. The aim is to make educators and teachers aware of the distinction between activities that present an element of acceptable risk and others that present a real danger (Stephenson, 2003). This emphasis on promoting beneficial risk situations (Cooke, Wong, & Press, 2019) seeks to counteract a state of surplus safety (Wyver, et al., 2010) and the risk that the absence of risk brings with it (Bundy, et al., 2009), with particular reference to children's health and well-being - increased incidence of obesity, sedentary lifestyle, isolation, disconnection from nature as the literature shows (Brussoni, et al., 2012) - and to the development of social skills (Pellis & Pellis, 2011).

Research questions

This contribution is therefore situated within the theoretical framework outlined here. The questionnaire was designed on the basis of a previous analysis of the international literature (Frison, 2020), with the aim of investigating teachers' perspectives regarding risky-play, noting in particular the types allowed in children's free play at school and the level of risk perceived by teachers for each type of play being considered.

The following research questions guided the survey:

- Q1. Which types of risky-play are allowed by teachers?
- Q2. What is the teachers' perception of risk for each type of risky-play?
- Q3. Is the perception of risk different on the basis of some demographic variables (age of teachers, school level, territorial context of the school)?

Method

Participants

The survey involved educators, in-service teachers and prospective trainee teachers in the 0-11 age group, including Early Childood Education and Care service, kindergartens and primary schools². The voluntary sample is made up of 155 educators and teachers from the Tuscany region (provinces of Arezzo, Florence, Livorno, Pisa, Pistoia, Prato, Siena), mainly female (96.8%), with an average age of 40.2 years. (SD = 12.9). Most teachers belong to kindergartens (48.4%), followed by primary schools (47.1%), while a lower number is made up of 0-3 educational services' educators. 35.5% of the respondents obtained a degree while 64.5% have a qualifying diploma for the profession. In addition to information on teachers, some data on the school were collected - such as the geographical location, the size of the school and the municipality in which it is located - for a more accurate data interpretation. The teachers work mainly in lowland (54.8%) or hill areas (32.3%) located mostly in small or medium-sized municipalities with no more than 59,000 inhabitants. The size of schools is also relatively small with an average of 171.6 children per plexus and a high variability (SD = 128.6).

Proceedings and Tools

The questionnaire was built starting from the risky-play categories identified by Sandseter (2007, 2009) and subsequently expanded starting from an analysis of the most recent literature on risky-play which intended to broaden the perspective by welcoming challenging experiences that could be admitted and / or encouraged in educational and school contexts, outdoors as well as indoors (Frison, 2020). The analysis led to seven categories of risky-play, detailed in following specific behaviours: 1. play in great heights; 2. play with high speed; 3. play with dangerous tools; 4. play near dangerous elements; 5. agitated play; 6. exploration play; and 7. pretend/simulation play (Frison, 2020).

We would like to thank Ms Cecilia Ricoveri, a primary school teacher, for her support in the process of constructing and refining the instrument and in the administration process.

The tool consists of three sections: personal data, acceptability for potentially risky-play at school, perception of the level of risk.

In section 1, dedicated to the personal data, useful information is requested to describe the sample that voluntarily took part in the survey, therefore data relating to individual teachers, such as gender, age, educational qualification, and data relating to the school were collected.

Sections 2 and 3 present the types of risky-play grouped into seven categories. It is possible to consult the complete tool and the various types of play in the Appendix.

Specifically, section two asks teachers to express, starting from their direct experience, how much each potentially risky-play behaviour is allowed or not allowed in their school during free play. The scale used includes four points from "Not allowed" to "Encouraged", to which "Not relevant" is added, which can be indicated when a certain type of play is not possible in the school (for example "Climbing trees" is not possible because of no trees in the school).

Section 3 assesses the level of risk perceived by teachers for each type of risky-play. A four-point scale from "Not at all risky" to "Very risky" is used.

The survey was conducted in the 2020-2021 school year using the Google Forms application. It took about 20 minutes to complete, however participants were free to spend more time if needed. The data was collected anonymously and analyzed in aggregate form.

Data analysis

To answer the first two questions, tables of frequencies have been drawn up to assess which types of risky-play are most allowed by teachers and which are considered more risky. The items relating to acceptability for potentially risky-play at school were treated as category variables since the scale used included the point "Not relevant" as well as the four points relating to the extent at which they were allowed. The items relating to the perceived risk level for each type of play were treated as continuous variables, using a scale from "Not at all risky" to "Very risky".

To answer question Q3, a comparison between groups was carried out for the category variables (territorial context, school level); alternatively, the correlation (Pearson's r) was used for continuous demographic variables (age).

As a preliminary analysis, the internal consistency between the items of each play category was assessed using the Cronbach alpha. The results show a high internal consistency for all categories, with values between 0.80 and 0.95.

Results

The results for each research question of the survey are presented below. To answer question Q1 on the level of admissibility of play at school, the frequencies for each level of response relating to the types of play were calculated, and were then ordered based on those mostly not allowed, allowed, and encouraged. Tables 1 and 2 show the play with the highest percentages of "not allowed", "allowed" and "encouraged". As shown by the data, the play not allowed reach very high percentages (up to 92%), while the play allowed or even encouraged are few and with lower percentages. It should also be noted that the forms of play included in the "agitated play" category are those most frequently not allowed at school, while the forms of play most encouraged and/or allowed are part of the "pretend/simulation play" category.

³ The treatment of Likert scales as equivalent intervals is controversial in the literature; some researchers argue that the intervals separating the alternatives in a Likert scale are not equivalent therefore it is more appropriate to consider these variables as ordinal. Other researchers argue that the distortion given by the use of statistical techniques is minimal and acceptable due to the advantages that this type of analysis brings. However, based on the literature this is recommended with Likert scales of at least five points (Barbaranelli & Natali, 2011).

Table 1. Play not allowed at school.

Play not allowed %	
Agitated play – Fighting with natural objects	92
Agitated play – Fighting with outdoor school items	92
Agitated play – Fighting with school items indoors	92
Agitated play – Colliding indoors	92
Agitated play – Pushing/pulling each other indoors	91
Agitated play – Rough-and-tumble play indoors	91
Pretend/Simulation – Taking on roles that simulate violent adult behaviours	82
Agitated play – Pushing/pulling each other outdoors	80
Agitated play – Colliding outdoors	79
Play with high speed – Running in the corridors	76
Play in great heights – Climbing trees	75

Table 2. Play allowed and/or encouraged

Allowed play %	
Pretend/Simulation – Roles that simulate general adult be	haviours 58
Pretend/Simulation – Masquerading	55
Play with high speed- Slalom	44
Pretend/Simulation – Challenging each other in pairs or to	eams 43
Pretend/Simulation – Challenging each other one by one	41
Encouraged play %	
Exploration – Drawing a path to orient yourself	25
Sensory perceptual - Experiencing surfaces	18
Pretend/Simulation – Masquerading	16
Sensory perceptual – Rolling on the ground	13
Play with high speed – Slalom	12
Play with dangerous tools – Using stones or other natural	materials 12

To answer question Q2 on risk perception, the means and standard deviations of the level of risk expressed by teachers were calculated. The table in the Appendix presents the means and standard deviations of all the play being considered, while below we only report the play perceived as less risky – with an average tending toward 1 – and as very risky – with an average tending toward 4. As shown in Table 3, there is an agreement between play perceived as less risky and play admitted or encouraged by teachers. Similarly, forms of play that are considered very risky, mainly part of the "Agitated play" category, are not allowed by teachers.

Table 3. Level of risk percevied by teachers.

Less risky-play	M (SD)	
Pretend/Simulation – Masquerading	1.41 (.65)	
Exploration – Drawing a path to orient yourself	1.53 (.67)	
Sensory perceptual – Getting dirty with mud	1.62 (.71)	

Sensory perceptual – Jumping in puddles		1.68 (.79)
Exploration – Building a shelter or den		1.75 (.77)
Very risky-play	M (SD)	
Agitated play – Fighting with school items indoors		3.50 (.63)
Play with dangerous tools – Using DIY tools		3.46 (.68)
Agitated play – Fighting with outdoor school items		3.46 (.65)
Agitated play – Rough-and-tumble play indoors		3.43 (.64)
Agitated play – pushing/pulling each other indoors		3.41 (.68)

To answer question Q3, the types of play considered very and not very risky in Table 3 were examined to assess whether the level of risk varied based on the territorial setting, the school level and the age of the teachers.

For the category variables (territorial setting, school level), a comparison was made between the means of the groups using variance analysis. The school level has two groups: preschool and primary school; the territorial setting has three groups: hill, coast, valley⁴.

Table 4. Comparison of the level of risk between preschool and primary school. * p < 0.05

Type of play	Preschool M (SD)	Primary M (SD)
Play perceived as very risky		
Agitated play - Fighting with school items inside	3.50 (.61)	3.49 (.66)
Play with dangerous tools – Using DIY tools	3.49 (.98)	3.43 (.66)
Agitated play - Fighting with outdoor school items	3.48 (.63)	3.45 (.68)
Agitated play – Rough-and-tumble play indoors	3.38 (.65)	3.49 (.64)
Agitated play – Pushing/pulling each other indoors*	3.31 (.68)	3.54 (.69)
Play perceived as less risky		
Pretend/Simulation - Masquerading*	1.27 (.58)	1.41 (.65)
Exploration – Draw a path to orient yourself*	1.42 (.62)	1.67 (.71)
Sensory perceptual – Jumping in puddles	1.59 (.78)	1.65 (.79)
Exploration – Building a shelter or den*	1.60 (.78)	1.75 (.78)

The results show a statistically significant difference between preschool and primary school in four types of play. It is not surprising that in general there are no substantial differences between the two school levels, having considered the play in which there was the greatest agreement on the perception of risk (Table 4). In other play where the agreement is lower, the differences between preschool and primary are more marked. In particular, it is interesting to note that the perception of risk is higher for primary school teachers than for preschool teachers for all the play considered. Both for play of categories such as "agitated play" or "high speed"

⁴ The 0-3 educational services and city groups were omitted from the analysis because they presented five and two cases respectively.

and for "sensory perceptual" and "pretend/simulation" play, the level of risk perceived in primary school is higher than that perceived in preschool (Table 5). This could be due to greater freedom of play and movement typical of preschool rather than primary school.

Table 5. Risk level comparison between preschool and primary school for play with significant difference (p < .05).

Type of play	Preschool M (SD)	Primary M (SD)
Play in great heights – Climbing a slide	2.15 (.95)	2.54 (.97)
Play in great heights – Jumping from / to a low wall or the like	2.66 (.84)	3.01 (.84)
Play with high speed – Challenge each other in the garden race	2.11 (.75)	2.37 (.87)
Play with high speed – Slalom	1.83 (.78)	2.24 (.96)
Play with dangerous tools – Using stones or other natural objects	2.14 (.89)	2.49 (1.00)
Sensory perceptual – Walking with your eyes closed	2.40 (.78)	2.73 (.81)
Agitated play – Pushing/pulling each other outdoors	3.06 (.79)	3.33 (.75)
Agitated play – Colliding outdoors	3.09 (.77)	3.36 (.75)
Exploration – Playing hide and seek indoors	2.03 (.84)	2.43 (.84)
Pretend/Simulation – Taking on roles that simulate general adult behaviours	1.64 (.81)	2.01 (.90)

The same data analysis was conducted by territorial setting. However, no statistically significant differences between the different territorial settings emerged. The territorial setting does not seem to influence teachers' perception of risk.

Pearson's r index was used to evaluate the association between the age of teachers and the perception of risk. The results show that age is associated with the level of risk perceived by teachers for all types of play and this association is low (between 0.17 and 0.31) and statistically significant. However, it should be noted that among the participants the minimum age is 27 and the maximum age 53, an age range that, although quite wide, does not include very young teachers with limited experience or teachers at the end of their career.

Conclusions

The exploratory study presented here aimed to investigate the perspectives of educators and teachers regarding risky-play, the levels of admissibility in the services investigated and the connected levels of risk attributed to multiple types of play to be carried out mostly outdoors and self-directed by children. Despite the limited sample reached to date, the initial data collected offers a snapshot that is consistent with what the international literature reports: risky-play is only limitedly allowed in the 0-6 service and primary school spaces, and in particular, forms of play that fall into the "agitated play" category are not accepted. Only play belonging to the categories "sensory perceptual play" and "pretend/simulation" are perceived as less risky and are sometimes encouraged in particular in preschool, which undoubtedly attributes greater importance to these playful dimensions than in primary school, also in line with the centrality recognized to experimentation, manipulation, play and to design by fields of experience (MIUR, 2012). These results will be further developed in a broader project that aims to submit the questionnaire to a larger sample of teachers and educators and, at the same time, a further investigation of parents' perspectives regarding risky-play.

The results achieved allow, albeit with the limitations highlighted above, to focus on some key issues that deserve in-depth study and which at the same time allow us to glimpse some research development paths. Firstly, they constitute a precious starting point for resuming a reflection with educators and teachers on the factors that determine a broader or otherwise limited openness to risky-play or at least some of the play categories that it includes. Given compliance with current legislation to guarantee the safety of girls and boys, it is known as factors of a cultural matrix (the countries of Northern Europe, to which we owe the genesis of the Forest Schools, are more open and favorable to risky-play), organizational factors (linked for example to the culture of the institution in which one operates and the tacit assumptions that guide the behaviour of its operators) and personal attitudes (previous experiences in nature, level of comfort with the outside world, etc.) can facilitate or on the contrary hinder the risky-play offerings. The shared reading of the results that emerged can support legitimizing situations of controlled risk, as highlighted at the beginning of this contribution, and accompany a rethinking of the role that educators and teachers – and at the same time parents and reference adults – can have during the play, from observers attentive to protecting the safety of girls and boys, to facilitators of challenging play opportunities.

References

- Barbaranelli, C., & Natali, E. (2011). I test psicologici: teorie e modelli psicometrici. Roma: Carocci.
- Beetham, K. S., Sterman, J., Bundy, A. C., Wyver, S., ... & Naughton, G. (2019). Lower parent tolerance of risk in play for children with disability than typically developing children. *International Journal of Play*, 8(2), 174–185.
- Brussoni, M., Ishikawa, T., Han, C., Pike, I., Bundy, A., Faulkner, G., & Mâsse, L. C. (2018). Go play outside! Effects of a risk-reframing tool on mothers' tolerance for, and parenting practices associated with, children's risky play: study protocol for a randomized controlled trial. *Trials*, 19(1), 1–9.
- Brussoni, M., Olsen, L. L., Pike, I., & Sleet, D. A. (2012). Risky play and children's safety: Balancing priorities for optimal child development. *International Journal of Environmental Research and Public Health*. doi:10.3390/ijerph9093134
- Bundy, A.C., Luckett, T., Tranter, P. J., et al. (2009). The risk is that there is 'no risk': A simple innovative intervention to increase children's activity levels. *International Journal of Food Science and Technology*, 17(1), 33–45.
- Cooke, M., Wong, S., & Press, F. (2019). Towards a re-conceptualisation of risk in early child-hood education. Contemporary Issues in Early Childhood, 2019, 1–15.
- Farné, R. (2018). Outdoor Education come orientamento per una pedagogia sostenibile. In R. Farné, A. Bortolotti, & M. Terrusi, *Outdoor education: prospettive teoriche e buone pratiche* (pp. 25-44). Roma: Carocci.
- Frison, D. (2020). Risky-play per incoraggiare iniziativa e risk-taking. In D. Frison & L. Menichetti, *Metodi ludici. Tendenze e didattiche innovative 0-11* (pp. 179-223). Lecce: Pensa Multimedia.
- Frison, D., & Menichetti, L. (2020). Risk-literacy nei servizi educativi 0-6 e nella scuola primaria. Riflessioni per la formazione di educatori ed insegnanti. *Nuova Secondaria Ricerca*, *3*, 79–94.
- Lavrysen, A., Bertrands, E., Leyssen, L., Smets, L., Vanderspikken, A. et al. (2017). Risky-play at school. Facilitating risk perception and competence in young children. *European Early Childhood Education Research Journal*, 25(1), 89–105.
- Little, H. (2010). Finding the balance: early childhood practitioners' views on risk, challenge and safety in outdoor play settings. In S. Howard (Ed.). *Proceedings of the AARE International Education Research Conference*. http://www.aare.edu.au/10pap/abs10.htm (ver. 12.08.2020).

- Little, H., Sandseter, E. B. H., & Wyver, S. (2012). Early childhood teachers' beliefs about children's risky play in Australia and Norway. *Contemporary issues in early childhood*, 13(4), 300–316.
- Ministero dell'Istruzione, dell'Università e della Ricerca, MIUR (2012). Indicazioni nazionali per il curricolo della scuola dell'infanzia e del primo ciclo d'istruzione. *Annali della Pubblica istruzione*, 88. http://www.indicazioninazionali.it/wp-content/uploads/2018/08/Indicazioni Annali Definitivo.pdf (ver. 30.09.2021).
- Pellis, S. M., & Pellis, V. C. (2011). Rough-and-tumble play: Training and using the social brain. In A. D. Pellegrini (Ed.), *Oxford library of psychology. The Oxford handbook of the development of play* (pp. 245-259). Oxford University Press.
- Sandseter, E.B.H. (2007). Categorising risky play-how can we identify risk taking in children's play? *European Early Childhood Education Research Journal*, XV(2), 237-252.
- Sandseter, E.B.H. (2009). Characteristics of risky play. *Journal of Adventure Education and Outdoor Learning, IX*, 3–21.
- Stephenson, A. (2003). Physical risk-taking: dangerous or endangered?, *Early Years, XXIII*(1), 35-43.
- van Rooijen, M., & Jacobs, G. (2019). A professionalisation programme towards children's risk-taking in play in childcare contexts: moral friction on developing attitudes and collegial expectations. *European Early Childhood Education Research Journal*, 27(6), 741–756.
- Wyver, S., Tranter, P., Naughton, G., et al. (2010) Ten ways to restrict children's freedom to play: The problem of surplus safety. *Contemporary Issues in Early Childhood*, 11(3), 263–277.

Appendix – Items of the questionnaire by play category and level of risk perceived by teachers.

Type of play	M	DS
GIOCO DI FINZIONE/SIMULAZIONE. Travestirsi [Pretend/simulation play. Masquerading]	1.41	.653
GIOCO DI ESPLORAZIONE. Tracciare un percorso nel quale orientarsi [Exploration play. Drawing a path to orient yourself]	1.53	.668
GIOCO SENSO - PERCETTIVO. Sporcarsi con il fango [Sensory perceptual. Get dirty with mud]	1.62	.714
GIOCO SENSO - PERCETTIVO. Saltare nelle pozzanghere d'acqua [Sensory perceptual. Jumping in puddles]	1.65	.786
GIOCO SENSO - PERCETTIVO. Rotolarsi per terra [Sensory perceptual. Rolling on the ground]	1.68	.702
GIOCO DI ESPLORAZIONE. Costruire un rifugio o una tana [Exploration play. Building a shelter or den]	1.75	.778
GIOCO DI FINZIONE/SIMULAZIONE. Assumere ruoli che imitano comportamenti adulti in genere [Pretend/simulation play. Roles that simulate general adult behaviours]	1.80	.863

GIOCO SENSO - PERCETTIVO. Sperimentare superfici di varia		
natura	1.90	.828
[Sensory perceptual. Experimenting with various surfaces		
GIOCO AD ALTA VELOCITÀ. Fare lo slalom	2.01	.879
[Play with high speed. Slalom]	2.01	.077
GIOCO SENSO - PERCETTIVO. Camminare a piedi nudi	2.08	.875
[Sensory perceptual. Walking barefoot]	2.08	.873
GIOCO DI FINZIONE/SIMULAZIONE. Sfidarsi a coppie o		
squadre	2.12	.756
[Pretend/simulation play. Challenging each other in pairs or teams]		
GIOCO CON STRUMENTI POTENZIALMENTE PERICOLO-		
SI. Utilizzare oggetti magnetici (es. tessere magnetiche - calamite		
- costruzioni magnetiche - bastoncini e sfere magnetiche)	• 10	
[Play with dangerous tools. Using magnetic objects (e.g. magnetic	2.19	.954
cards - magnets - magnetic constructions - magnetic sticks and		
balls)]		
GIOCO DI ESPLORAZIONE. Giocare a nascondino all'interno		
[Exploration play. Playing hide and seek indoors]	2.21	.858
GIOCO DI ESPLORAZIONE. Cacciare insetti		
[Exploration play. Hunting insects]	2.21	.917
GIOCO AD ALTA VELOCITÀ. Sfidarsi nella corsa in giardino	2.23	.810
[Play with high speed. Challenging each other in a garden race]		<u> </u>
GIOCO AD ALTA VELOCITÀ. Correre in coppia	2.26	.755
[Play with high speed. Running in pairs]		
GIOCO CON STRUMENTI POTENZIALMENTE PERICOLO-		
SI. Utilizzare sassi o altri materiali naturali	2.29	.953
[Play with dangerous tools. Using stones or other natural materi-		
als]		
GIOCO DA/A GRANDI ALTEZZE. Scalare lo scivolo	2.32	.979
[Play in great heights. Climbing a slide]		.,,,
GIOCO DI FINZIONE/SIMULAZIONE. Sfidarsi uno a uno	2.36	.813
[Pretend/simulation play. Challenging each other one by one]	2.30	.013
GIOCO DI ESPLORAZIONE. Nascondersi in zone poco accessi-		
bili all'aperto (es. sotto i cespugli)	2.40	000
[Exploration play. Hiding in inaccessible outdoor areas (e.g. under	2.48	.989
bushes)]		
GIOCO CON STRUMENTI POTENZIALMENTE PERICOLO-		
SI. Utilizzare stoviglie in vetro o ceramica	2.50	1.009
[Play with dangerous tools. Using glass or ceramic dishes]		
GIOCO SENSO - PERCETTIVO. Camminare ad occhi chiusi	2.54	000
[Sensory perceptual play. Walking with your eyes closed]	2.54	.808
GIOCO CON STRUMENTI POTENZIALMENTE PERICOLO-		
SI. Utilizzare strumenti in materiali fragili in genere		
[Play with dangerous tools. Using tools made of fragile materials	2.57	.953
in general]		
244]		<u> </u>

GIOCO CON STRUMENTI POTENZIALMENTE PERICOLO- SI. Utilizzare posate in metallo (es. coltello) [Play with dangerous tools. Using metal cutlery (e.g. knife)]	2.61	.983
GIOCO DA/A GRANDI ALTEZZE. Arrampicarsi [Play in great heights. Climbing]	2.62	.870
GIOCO DI FINZIONE/SIMULAZIONE. Assumere ruoli da dominatore/dominato [Pretend/simulation play. Taking on dominator / dominated roles]	2.65	.916
GIOCO CON STRUMENTI POTENZIALMENTE PERICOLO- SI. Utilizzare giocattoli con parti di piccole dimensioni [Play with dangerous tools. Using toys with small parts]	2.75	.848
GIOCO SENSO - PERCETTIVO. Lasciarsi cadere [Sensory perceptual play. Letting yourself fall]	2.75	.809
GIOCO CON STRUMENTI POTENZIALMENTE PERICOLO- SI. Utilizzare strumenti per scavare in ferro (es. pala) [Play with dangerous tools. Using iron digging tools (e.g. shovel)]	2.77	.957
GIOCO DA/A GRANDI ALTEZZE. Saltare da/su un muretto o simili [Play in great heights. Jumping from / to a low wall or the like]	2.81	.859
GIOCO AD ALTA VELOCITÀ. Correre in discesa [Play with high speed. Running downhill]	2.85	.771
GIOCO AD ALTA VELOCITÀ. Correre nei corridoi [Play with high speed. Running in the hallways]	2.88	.797
GIOCO AD ALTA VELOCITÀ. Dondolarsi velocemente in altalena [Play with high speed. Swinging fast on the swing]	2.91	.885
GIOCO CON STRUMENTI POTENZIALMENTE PERICOLO- SI. Utilizzare utensili da giardino in ferro (es. trapiantoio - estirpa- toio - rastrello - zappa) [Play with dangerous tools. Using iron garden tools (e.g. trans- plant - grubber - rake - hoe)	2.91	.949
GIOCO DA/A GRANDI ALTEZZE. Salire in piedi sull'altalena [Play in great heights. Standing up on the swing]	3.04	.874
GIOCO AGITATO. Spingersi/tirarsi all'aperto [Agitated play. Pushing/pulling each other outdoors]	3.17	.783
GIOCO DA/A GRANDI ALTEZZE. Salire sui tetti delle case-gio- co [Play in great heights. Climbing on the roofs of playhouses]	3.19	.812
GIOCO AGITATO. Lotta fisica all'aperto [Agitated play. Rough-and-tumble play outdoors]	3.19	.722
GIOCO DA/A GRANDI ALTEZZE. Oscillare appesi ad un ramo [Play in great heights. Swinging hanging from a branch]	3.20	.793
GIOCO AGITATO. Scontrarsi all'aperto [Agitated play. Colliding outdoors]	3.21	.770

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GIOCO DA/A GRANDI ALTEZZE. Arrampicarsi sugli alberi [Play in great heights. Climbing trees]	3.21	.745
GIOCO AD ALTA VELOCITÀ. Salire e scendere di corsa le scale [Play with high speed. Running up and down the stairs]	3.26	.782
GIOCO SENSO - PERCETTIVO. Sostare intorno al fuoco [Sensory perceptual play. Staying around a fire]	3.27	.832
GIOCO DI ESPLORAZIONE. Sostare intorno a zone pericolose all'aperto (bosco - fossato - ruscello - rocce - superfici scivolose) [Exploration play. Staying around dangerous open areas (forest - ditch - stream - rocks - slippery surfaces)]	3.28	.804
GIOCO AGITATO. Combattere con oggetti naturali all'aperto (es. legnetti - pigne - sassolini - canne) [Agitated play. Fighting with natural outdoor objects (e.g. sticks - pine cones - pebbles - reeds)]	3.30	.724
GIOCO DI ESPLORAZIONE. Sostare intorno a zone pericolose all'interno (rampe delle scale - ringhiera - davanzale - superfici scivolose) [Exploration play. Standing around dangerous areas indoors (stair flights - railings - windowsill - slippery surfaces)]	3.34	.751
GIOCO DI FINZIONE/SIMULAZIONE. Assumere ruoli che imitano comportamenti adulti violenti [Pretend/simulation play. Taking on roles that simulate violent adult behaviours]	3.39	.833
GIOCO AGITATO. Combattere con oggetti naturali all'interno (es. legnetti - pigne - sassolini - canne) [Agitated play. Fighting with natural objects indoors (e.g. sticks - pine cones - pebbles - reeds)]	3.39	.658
GIOCO DA/A GRANDI ALTEZZE. Appendersi a testa in giù [Play in great heights. Hanging upside down]	3.40	.680
GIOCO AGITATO. Scontrarsi all'interno [Agitated play. Colliding indoors]	3.40	.661
GIOCO AGITATO. Spingersi/tirarsi all'interno [Agitated play. Pushing/pulling each other indoors]	3.41	.681
GIOCO AGITATO. Lotta fisica all'interno [Agitated play. Rough-and-tumble play indoors]	3.43	.644
GIOCO AGITATO. Combattere con oggetti scolastici all'aperto (penne - matite - righelli - forbici - colla) [Agitated play. Fighting with outdoor school items (pens - pencils - rulers - scissors - glue)]	3.46	.647
GIOCO CON STRUMENTI POTENZIALMENTE PERICOLO- SI. Utilizzare strumenti fai da te (es. chiodi - martello - puntine - coltellini) [Play with dangerous tools. Using DIY tools (e.g. nails - hammer - tacks - pocket knives)]	3.46	.677

GIOCO CON STRUMENTI POTENZIALMENTE PERICOLO- SI. Combattere con oggetti scolastici all'interno (es. penne - mati- te - righelli - forbici - colla) 3.50 .628
[Play with dangerous tools. Fighting with school objects indoors]