

Article

Analysis of the Company of Adults and the Interactions during School Recess: The COVID-19 Effect at Primary Schools

Isabel del Arco ^{*} , Anabel Ramos-Pla  and Òscar Flores 

Department of Pedagogy, Faculty of Education, Psychology and Social Work, University of Lleida, 25001 Lleida, Spain; anabel.ramos@udl.cat (A.R.-P.); oscar.flores@udl.cat (Ò.F.)

* Correspondence: isabel.delarco@udl.cat

Abstract: The main objective of the study was to evaluate the interactions between students and schoolteachers during recess before and after the COVID-19 pandemic in primary schools in Catalonia (Spain). In a first phase, using an observational methodology, the behaviors of adults and students were diagnosed according to the type of school. The sample consisted of 23 schools, with 69 observations at different times of the school day. The COVID-19 outbreak made it necessary to extend the present study to identify changes in school recess forced by the pandemic. In this second phase, 34 school schoolteachers were interviewed. The results show little or no adult involvement during recess, beyond mere supervision, and the need for training to improve school recess management. Regarding the changes made during the pandemic, it is concluded that there was a good implementation of protocols, an increase in organization and a reduction in conflicts. The design of school recesses with the participation of schoolteachers and students is important, although during the pandemic, this idea has taken a back seat, with schoolteachers assuming the role of dividing groups and spaces, and supervising transitions. We emphasize the importance of training students to be more proactive in conflict resolution, to ensure self-care and individual and collective responsibility.



Citation: del Arco, I.; Ramos-Pla, A.; Flores, Ò. Analysis of the Company of Adults and the Interactions during School Recess: The COVID-19 Effect at Primary Schools. *Sustainability* **2021**, *13*, 10166. <https://doi.org/10.3390/su131810166>

Academic Editor: Jordi Colomer Feliu

Received: 10 August 2021

Accepted: 8 September 2021

Published: 10 September 2021

Publisher's Note: MDPI stays neutral with regard to jurisdictional claims in published maps and institutional affiliations.



Copyright: © 2021 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

Keywords: recess; health education; school; supervision

1. Introduction

School recesses, also called breaks, are part of the school day, and are described as moments of rest from academic activities, where the students participate in spontaneous games, practice free movements, establish relationships with their peers, and where they learn and practice social skills which will help them construct their social identity and personal autonomy [1–3].

In the last decade, focus has been placed on school recess, and thus, many studies have shown that these spaces of rest offer students multiple cognitive, academic, physical, social, and emotional benefits, especially in primary school [2–5]. Due to this, we must take in to account all the aspects mentioned for the promotion of healthy lifestyles against the progressively sedentary behaviors of the child population in the 21st century [4–7].

However, these benefits are closely associated with the quality of the students' experience at recess. Matters such as the safety of the physical spaces, access to adequate equipment, the possible co-habiting problems and how conflict resolution takes place, or the commitment and quality of the interactions among equals and the adults present, are variables to have in mind, which have an effect on the adequate development during recess.

A special mention should be made about the studies conducted by [6–10], focused on analyzing the quality of the recess experience, beyond focusing exclusively on the physical activity of the students, as in most of the studies, or in the aspect of safety and the architectural design of the physical spaces, as found in other studies.

These authors utilized a holistic vision when analyzing the school recess, having in mind multiple factors that have an effect on the quality of these periods and in the manner

in which an individual experiences recess, an aspect which will determine the possible associated benefits previously mentioned.

In the last decade, in schools in Catalonia there has been an interest in the pedagogical dimension of school recess [11,12]. Basically, this topic has been studied from the point of view of the improvement and safety of spaces, quality of materials and resources available to students, development of inclusive activities, gender equality perspective in school breaks and also the reinforcement of physical activity. However, in most cases, the holistic vision mentioned above has not been taken as a starting point.

With the health crisis, school breaks, transitions and even adult intervention and peer interactions are being reconfigured [13,14]. Faced with this new reality, it is worth asking what is the role of the adult in school breaks before and during the pandemic? Is it important to consider breaks as learning moments and therefore they should be planned, or should there be no intervention? Should adults perform supervisory functions or also accompanying and energizing functions? Do these functions change taking into account different types of centers?

The health crisis has generated alterations in educational centers. How has this situation affected school breaks and what activities and interactions are developed?

2. Quality Educational Recesses

The interest in studying school breaks is evidenced by the proliferation of research in recent years [6–10,15]. All of them underline the benefits that recesses generate in students, such as an increase in the level of physical activity, thus reversing the general tendency to sedentary lifestyles. They point to an improvement in memory, attention and concentration and, as a consequence, an increase in motivation for the classroom area and a reduction in disruptive behavior in the classroom. There is also an improvement in the social and emotional development of students, as they learn to share, negotiate and mediate during breaks.

Documents such as [16] list numerous strategies for planning recess at schools.

The strategies presented for the education center aim to create a healthy and high-quality recess, characterized by:

- Satisfactory and safe spaces and time,
- Development of positive behaviors of and between students,
- Participation of capacitated adults,
- Promoting healthy physical activity helps with the disconnection and the relaxation needed from academic activity.

Six key strategies are essentially proposed:

- Make leadership decisions that promote recess plans which have in mind the spaces, the transition guidelines, the climate conditions, and the proper training of the adults who supervise them.
- Communicate, share, and make students comply with the behavior and safety guidelines at schools. Conflict resolution and behavior management strategies must be taught.
- Create favorable environments for the performance of physical activity, with adequate spaces and equipment. The replacement of physical education classes with recess, using it to adjust the school hours of this subject should be forbidden. Likewise, no student should be excluded from recess as a disciplinary element or utilize physical activity during recess as a punishment. Recess is essential for all students, and none of them should be denied from the benefits it provides, as previously mentioned.
- Involving the education community in the planning and development of recess. It would be interesting to involve the students in the planning of the recesses and to mobilize the parents or other members of the school community to provide support during recess.
- Collect data on the effect of recess on the students: their emotional well-being, academic performance, reduction of conflicts, etc.

- Recesses should be designed within the framework of the pedagogic project at the education center, having in mind the development needs of the students. The development of the curriculum has a place in recess, and it could become an opportunity to face the challenges of the 21st century.

It is about expanding the educational space beyond the classroom. Recess means increasing pedagogical possibilities while obtaining health and sustainability benefits [16,17].

In short, a quality recess is one that, from a holistic point of view, seeks to obtain pedagogical, social, environmental, ecological and health implications. In this line, more and more educational administrations are betting on a review of school spaces, renaturalizing this environment [17,18]. All this together with educational projects to be developed during recess, empowering students to generate social transformation and care for the environment.

3. The Figure of the Adult at School Recesses: The Need for Training

In most educational systems, it is established, according to the guidelines, that approximately 10% of the school day may be destined towards recess.

To this standardized recess, which is included in the school schedule, we must add the recess included in the split school schedule, between the morning and afternoon halves. As this is an significant period of time, when activities take place which affect the comprehensive development of the student, there is no doubt that the teacher can only think and act imagining that his or her tasks are solely associated to the work in the classroom [19,20].

We must take into account that recess is the moment during the school day in which the students can freely associate with their equals, and the observations by the adults about their social, pro-social, disruptive, and leadership behaviors, among others, can help with their intervention in situations of conflict or social isolation that could occur, improving, among others, the processes of inclusions and individual and collective well-being.

Schoolteachers are asked, then, to supervise the education process of the students in the classroom, the playgrounds at school, the lunch room, and the rest of the school spaces, because it is only then that they will discover and improve the comprehensive development of their students.

To perform this task, on most occasions, adults rely on the collaboration from other adults (supervisors), who mainly participate during parts of the schedule outside the academic hours, during noon recess, or afternoon recess with after-school activities.

Some studies have shown that the supervision from the adults should go beyond the function of supervision and observation, to become a process where the teacher and student interact dynamically and continuously [19–24]. This interaction would be centered on encouraging the students, not only providing them with adequate equipment and materials, but also organizing games or participating in them [21,22].

Scholars such as [22–24], were the first to point out that planning of the recess periods by the schoolteachers was an adequate strategy. Thus, for example, programming organized games predicted higher values for the development of cooperation, interculturality, and therefore, the social learning of the students.

This manner of understanding the supervision of the adults in school recess implies that the schoolteachers and supervisors have the training necessary or even external advice, to adequately invigorate the recess periods [20–23]. The coordination of the actions between the adults who participate are also necessary: schoolteachers and supervisors.

4. The Effect of COVID-19 on School Recess

The pandemic barged into education centers of the Spanish state and in particular in the schools of Catalonia, which ceased their in-person activities from 12 March 2020 to 14 September 2020, the day in which academic year 2020–2021 began.

Faced with a situation of a very high social pressure, and the need to open them to guarantee the equity and equality of opportunities, the Catalan government, the Generalitat of Catalonia [13,14] established the safety guidelines and instructions to re-open

schools in September 2020 after the confinement. In general, the instructions basically focused on the mandatory use of masks in the classroom for all students over six years old. Staggered entrances were also imposed, in 10 min slots, and temperature control for children before entering the center and the prohibition for families to enter the school. In terms of the organization of class-groups, stable coexistence groups were guaranteed both in the classroom and in the dining room or in the different activities to be carried out in the center, and with this the not-obligation of maintaining the safety distance of 1.5 m between stable coexistence groups.

The instructions also indicated that in the case that a child had symptoms, he or she should not go to school, with the same rule applied if they were diagnosed as being positive for coronavirus. In this case, the entire stable group would be quarantined. Lastly, it was established that in the case of two positive diagnoses in two different stable groups, the closure of the center would be assessed, as long as the health authorities considered it justified.

As for the school recess, the authorities established that these should still be conducted, always applying the safety measures. Thus, the recesses would take place in turns and in defined spaces for each stable group. The mixing of children from different groups was forbidden at recess, and the use of masks and the safety distance would be mandatory, if needed. The schoolteachers would be responsible for ensuring that recess took place under the conditions established.

On their part, to resolve the transitions, different entry and exit from the school schedules were established. Different schedules were also established at recess, to avoid agglomerations in the different spaces. Additionally, different transition schedules were set from classroom to recess, and recess to classroom.

In this way, our education context was aligned with the theories which argued that although recess could provoke a certain stress due to the chaos it could produce, a greater weight was granted to the physical, psychological, and emotional benefits of the children [25–28].

5. Materials and Methods

5.1. Objectives

This study took place in two phases with specific objectives in each phase.

PHASE I: school recess before the pandemic. Two objectives are pursued here: first, to analyze the treatment of breaks during the school day, focusing on adult supervision. Second, to identify the actions of adults and students in situations that affect school coexistence during breaks.

PHASE II: school recesses during the pandemic. The barging in of the COVID-19 effect at the schools studied forced the broadening of the present study with the objective of identifying changes in school breaks forced by the pandemic.

5.2. Procedure

The following procedure was followed: for PHASE I, an observational method was utilized, through the application of the Great Recess Framework scale (GRF-OT) [5]. This scale is a valid and reliable evaluation tool to be used in the measurement of contextual factors associated with recess, and the behaviors manifested within this context. This observation tool was designed to help schoolteachers and researchers evaluate and plan the school recess with using a holistic approach.

The scale records 24 items, in a Likert scale of 4 points, where 1 represents a bad situation/state of the education center, and 4 a good situation/state. These 24 items were shaped around five dimensions:

- Dimension 1: Safety: structure and resources—5 items.
- Dimension 2: Transitions at recess—4 items.
- Dimension 3: Commitment of the student and adult (supervision of the adult)—9 items.
- Dimension 4: Pro-social and antisocial behaviors—4 items.

- Dimension 5: Student empowerment—2 items.

For the present study, this scale was translated and subjected to a process of retro-translation to obtain a provisional version. This version was subjected to content validity by 10 judges, who evaluated the uniqueness, pertinence, and degree of importance of each item. Afterwards, a construct validity was performed, with an internal consistency (Cronbach's α) = 0.87, similar to the original language versions, to create the final version, GRF-OT.Cat, which was used in the present study.

In the case of all the Dimensions analyzed, the focus was placed on the actions of the adults and the adult–student interactions at school recess before the pandemic. For this, the attention is placed on the GRF-OT.Cat results for:

- Dimension 3: Commitment of the student and adult (supervision of the adult) (items 21, 22, 23).
- Dimension 4: Pro-social and antisocial behaviors (items 15, 16, 17 and 18).
- Dimension 5: Student empowerment (items 19 and 20).

These were also correlated with the results from Dimension 2: Transitions at recess (items 5, 6, 7, 24), as we sought the affectation in the actions of the adults and students during the transitions.

The GRF-OT.Cat scale was utilized, considering that in the original version, each dimension of the GRF-OT.Cat had a greater stability when the observations were conducted on different days (minimum three days) and at different points in time. Thus, three different points in time were selected for the observations, and on three different days: two observations of recess during the morning hours, corresponding to days with different weather conditions (1st observation = sunny day, 2nd observation = rainy day). Additionally, one observation during noon recess (3rd observation = noon), in the margin of the morning/afternoon split school day.

After this, two observers were trained so that they would be experts on the recording of data, ensuring the quality and objectivity of the information provided, since it was always the same observers who collected the data.

In PHASE II, the schools participating in the first phase were visited and a semi-structured interview was conducted to inquire about COVID-19 regulations and protocol and the role of adults during breaks in times of pandemic. A total of 34 volunteer schoolteachers responded. The interview consisted of five questions, grouped into four large blocks or meta-categories: identification data (question 1: mark the type of school), hygiene (question 4: are there conflicts at school recess due to hygiene measures?), COVID-19 protocol (question 5: are there conflicts during school recess due to COVID-19 measures: use of masks, hand washing, not sharing materials and respecting the safety distance) and teacher's tasks during recess (questions 2 and 3: with the new normality, what are the tasks that schoolteachers carry out during recess? and do you consider that the tasks that schoolteachers carry out during recess belong to the teaching staff?).

5.3. Sample: Recruitment

This study was conducted in the context of schools in Catalonia.

Through probabilistic cluster sampling, a total of 23 different types of Catalan schools were selected according to the existing classification in this educational context:

- 6 high complexity public schools, which serviced socio-economically vulnerable populations, and which did not have satisfactory results in basic competency tests.
- 6 normal public schools, which serviced a population that could be classified within a medium or medium-high range from the socio-economic point of view, and which obtained satisfactory or very satisfactory scores in the basic competency tests.
- 6 concerted schools (public-private agreement), with characteristics similar to normal schools, and which only differed in the type of center ownership.

- 5 RAS schools (Rural Area School), incomplete rural schools which serviced a rural population with a medium socio-economic level, and with satisfactory or very satisfactory scores in the basic competency tests.

The essential differences between the schools lie in the type of students they receive and in how this fact can lead to disparities in adult intervention and the organization of recess. This will make it possible to make correlations taking into account this diversity of schools.

To access the education centers, the researchers obtained the informed consent from the management and teaching staff.

In a second phase, 34 volunteer schoolteachers were recruited, distributed proportionally to the participating schools (9 from high complexity public schools, 9 from normal public schools, 9 from concerted schools and 7 from RAS schools).

5.4. Data Analysis

Once the data from the observation scale were obtained GRF-OT.Cat in PHASE I, a descriptive analysis of the items was performed, which were separated by dimensions in each of the observation periods. For this statistical analysis, the IBM SPSS v25 program was utilized.

The techniques and statistical tests employed were the usual descriptive tests for quantitative variables and also the Friedman test for the contrast of repeated measures. The significance level set was the usual 5% (significant if $p < 0.05$).

Then, the frequency was calculated, along with the calculation of the mean, median, and standard deviation values. Additionally, we verified the existence of statistically significant changes between the three observations performed. A non-parametric test was used for this, more specifically Friedman's test (equivalent to a repeated measure ANOVA). A total mean value for each item was calculated with the results from the contrast test.

A comparative analysis was then performed of the average values (mean/median) of all the previous variables from the five dimensions, considering the type of schools where observations were made. Given that in this case, these four groups were independent between them, a difference in means comparison test for non-related samples was conducted. The strongest of these tests was the one-way ANOVA test of fixed effects. Thus, Kruskal–Wallis H test was utilized.

On PHASE II, a semi-structured interview was given to 34 schoolteachers who participated in the previous phase, and who were representative of the different types of schools studied.

The data from the semi-structured interview were analyzed with the ATLAS.ti program, categorizing the responses of the interviewees as a function of the new actions performed by the schoolteachers, according to meta-categories, and explicit categories, as shown in Table 1.

Table 1. Relationship between the meta-categories and categories.

Meta-Categories	Categories
Hygiene	Disinfection of the equipment Use of the water–alcohol gel/washing of hands
COVID-19 protocol	Stable groups Use of masks Distance and safety Spaces of the stable groups Staggered entry to the spaces Taking of temperature
Teacher's tasks during recess	Surveillance/supervise Resolution of conflicts Invigoration Observation

6. Results

6.1. Recesses before the Pandemic

The results show that when we focus on Dimension 2: Transition of the recesses (items 5, 6, 7, and 24), practically all the mean values were found between 2.00 and 3.00 points, an average score. This indicates that the class/recess/class transitions in the morning were mostly performed in an organized and fluid manner, with the score being lower in the noon recess. The comparison between the three observations (Table 2) shows that with respect to item 5 (class/recess transition), a high level of significance ($p < 0.01$) was found between the evaluations from the 1st observation and the other two, with the effect size of this difference = 28.4% (very high). Thus, the transition in the morning was much more organized and fluid than in the other two observations (rainy day and noon recess), where the transitions were more disorganized. Thus, in the second observation (rainy day), the means of all the variables analyzed were lower as compared to the first observation (sunny day), coming closer to the third observation in the noon recess, corroborating that the transitions did not occur in an organized manner very often.

Table 2. Comparative analysis between observations. Items from Dimension 2: Transition during recesses. GRT-OT.Cat. N = 23 schools.

Item	Values of Mean/Median			Friedman Test	
	1st Ob	2nd Ob	3rd Ob	Value	<i>p</i> -Sig
5: Class/recess transition	3.04/3.00	2.52/3.00	2.48/2.00	13.51 **	0.001
6: Amount of adult supervision time	2.96/3.00	2.74/2.00	2.74/3.00	2.38 NS	0.321
7: Ratio	2.61/3.00	2.30/2.00	2.26/2.00	6.00 NS	0.093
24: Recess/class transition	2.74/3.00	2.30/2.00	2.39/2.00	5.14 NS	0.107

NS = non-significant ($p > 0.05$); ** = highly significant at 1% ($p < 0.01$).

The ratio of students to adults was 35–74:1. It should be highlighted that the adults arrived late to recess, with this especially being observed at noon, which compromised the supervision, as the ratio significantly increased.

When Dimension 3: Commitment of the student and adult: supervision of the adult (items 21, 22 and 23) was analyzed, it was observed that the least/worst evaluation was found in aspects evaluated in items 21 (intervention of the adult in conflict resolution), and 22 (physical location of the adult).

The comparison between these three observations leads us to conclude that in item 21 (intervention of the adult in conflict resolution) differences existed between the three observations, with the 2nd dimension where we find highest values, and the 1st where lower values were found (Figure 1). Thus, the intervention of the adult on conflict resolution was greater in the morning recess on rainy days and was somewhat higher at noon than in the mornings on sunny days (Table 3).

According to the observations performed, the intervention of the adult in conflict resolution consisted, in most cases, of providing a positive environment, with proactive language, making the students participate in conflict resolution. Friedman's test shows that there were no significant differences between the three observations if we analyzed the physical location of the adult in the playground and his or her intervention in the game. It can be affirmed that no or very few adults played or were dedicated to the students, and this attitude was more evident in the noon recess.

In Dimension 4: Pro-social and antisocial behaviors of the GRF-OT.Cat (items 15, 16, 17 and 18), the scale had a range of 1–5, with 5 indicating the absence of conflict. The descriptive results indicated that in items 16, 17, and 18, most of the observations used the score of 5, signaling a lack of conflicts, with the rest of the observations distributed along the scale. On the other hand, in item 15 (physical altercations), it was observed that the observations conducted tended to place the schools within the values of 3–4 on the positive end.

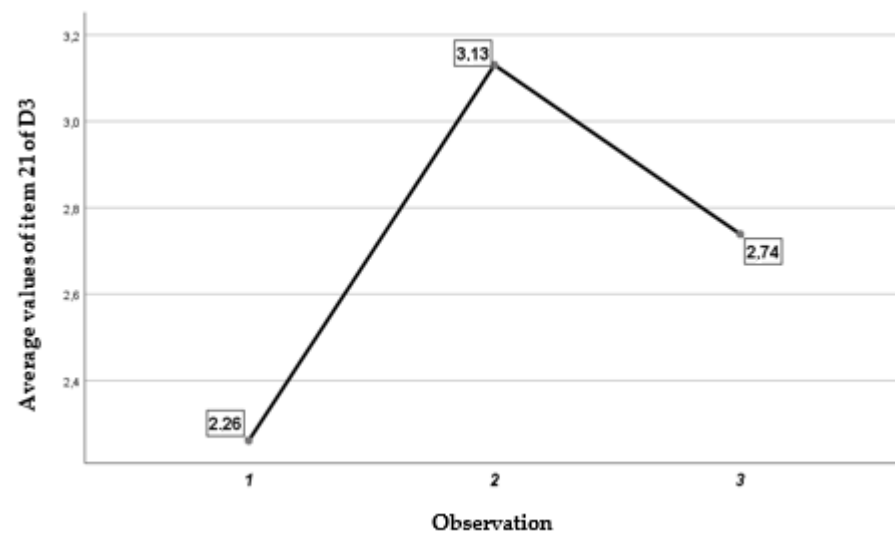


Figure 1. Diagram of the means. Comparison of Item 21 between the three observations ($p < 0.001$) ($N = 23$).

Table 3. Comparative analysis between observations. Items from Dimension 3: Commitment of the student and adult: supervision of the adult. GRF-OT.Cat. $N = 23$ schools.

Item	Values of: Mean/Median			Friedman Test	
	1st Ob	2nd Ob	3rd Ob	Value	p -Sig
21: Intervention of the adult in conflict resolution	2.13/2.00	3.13/3.00	2.74/3.00	18.20 **	0.000
22: Physical location of the adult	2.22/2.00	2.39/2.00	2.57/2.00	3.50 ^{NS}	0.267
23: Intervention of the adult in games	1.43/1.00	1.57/1.00	1.39/1.00	0.29 ^{NS}	0.909

^{NS} = non-significant ($p > 0.05$); ** = highly significant at 1% ($p < 0.01$).

When comparing the results of the three observations between them (Table 4), no differences were found that could be considered statistically significant in items 15 (physical altercations), 16 (adult intervention/physical altercation) and 18 (communication altercations) ($p > 0.05$). However, on the contrary, a significant difference was found in item 17 (communication altercation) ($p < 0.05$), which together with a high effect size (19.1%), implied changes in the three moments in time observed, especially between the 1st observation and the rest (Figure 2).

Table 4. Comparative analysis between observations. Items from Dimension 4: Pro-social and antisocial behaviors GRF-OT.Cat. $N = 23$ schools.

Item	Values of: Mean/Median			Friedman Test	
	1st Ob.	2nd Ob	3rd Ob	Value	p -Sig
15: Physical altercations	3.13/3.00	3.22/3.00	3.30/4.00	2.40 ^{NS}	0.357
16: Adult intervention/physical altercations	3.74/5.00	3.61/4.00	3.39/3.00	2.80 ^{NS}	0.278
17: Communication altercations	4.00/5.00	3.70/4.00	3.65/4.00	9.00 *	0.011
18: Adult intervention/communication altercation	3.83/5.00	3.83/5.00	3.57/3.00	0.08 ^{NS}	0.961

^{NS} = non-significant ($p > 0.05$); * = significant at 5% ($p < 0.05$).

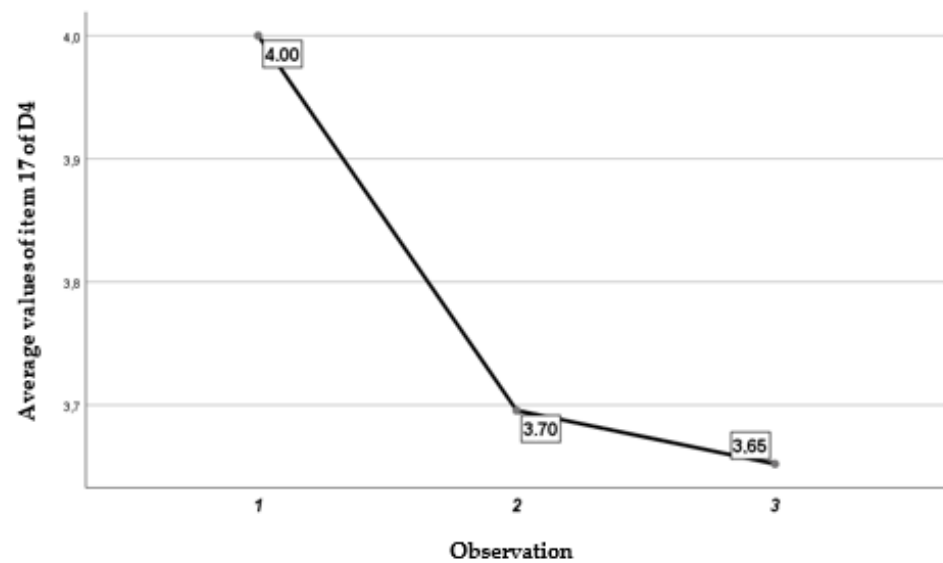


Figure 2. Diagram of means. Comparison of Item 17 between the three observations ($p < 0.05$) ($N = 23$).

We can thus confirm that verbal and non-verbal communication between the students was positive and encouraging, especially in the morning recess on sunny days, which helped in the lack of conflict generation. This attitude fell significantly, especially in the noon recess.

As for the other items in Dimension 4, we can only highlight the trend of few physical altercations between the students in the three moments observed, and that the intervention of the adults in these cases, and in most of the occasions, was proactive and positive.

Lastly, when analyzing Dimension 5: Student empowerment (items 19 and 20), the focus was placed on the students to see their level of participation in conflict resolution. In this dimension, the scale ranged from 1 to 5, with 5 representing the absence of conflict.

We can see how the observations were distributed throughout all the values, with the predominance at both ends, but somewhat higher in the more positive values (3–4–5). For this reason, all the means were found to be higher than 3.

A small significance was found in item 20 ($p < 0.05$), and although slight, it was accompanied by a moderate-high effect size (11.5%), which leads us to conclude that changes were found between the observations (Table 5). The data obtained (Figure 3) indicate that the significance was due to the increase in the score obtained in the 3rd observation with respect to the previous ones.

Thus, in all the observations where a type of conflict was described, the students did not show disagreement with the compliance of the norms and put into practice their own resolution strategies with the minimum or null intervention from an adult. This was more relevant on the third observation, during the noon recess.

Table 5. Comparative analysis between the observations. Items from Dimension 5: Empowerment of the student. GRF OT.Cat. $N = 23$ schools.

Item	Values of: Mean/Median			Friedman Test	
	1st Ob	2nd Ob	3rd Ob	Value	p -Sig
19: Students/disagreement with norms	3.04/3.00	3.09/3.00	3.30/4.00	2.91 ^{NS}	0.261
20: Students/conflict resolution strategies	3.39/4.00	3.22/4.00	3.52/4.00	7.09*	0.038

^{NS} = non-significant ($p > 0.05$); * = significant at 5% ($p < 0.05$).

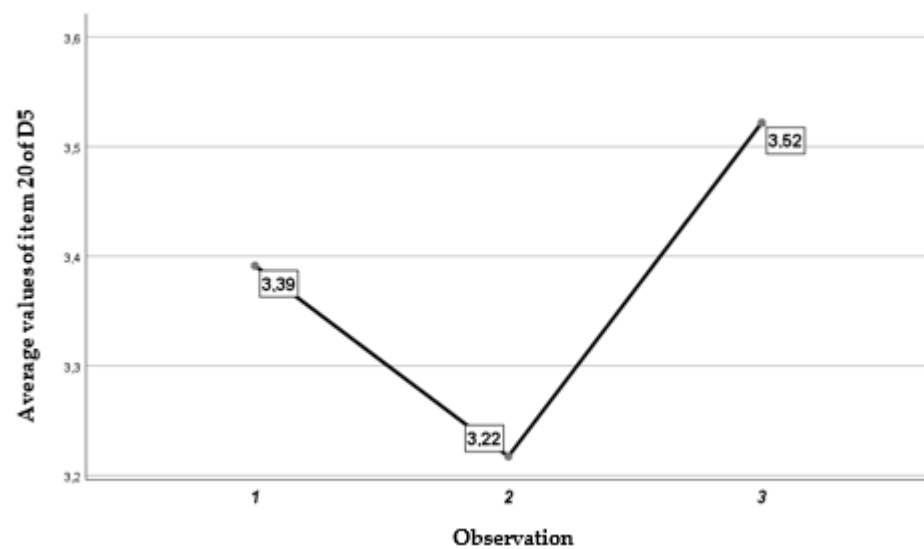


Figure 3. Diagram of means. Comparison of Item 20 between the three observations ($p < 0.05$) ($N = 23$).

After the descriptive phase, it is important to perform a comparative analysis between the results depending on the different types of schools, through the use of the Kruskal–Wallis test for the comparison of independent groups. The results related to Dimension 2: Transitions at recess (Table 6) indicate that:

- Highly significant differences were found ($p < 0.01$) with a large effect (40.2%), so that the mean value was higher in the highly complex schools and lower in the rest, but especially in normal schools. It is in these complex schools where all or almost all of the class/recess/class transitions were performed in an organized and fluid manner, especially in the mid-morning recesses. In the normal schools, in which the levels of conflict were supposedly lower, none or almost none of the transitions were performed in an organized and fluid manner.
- This was especially evidenced in the first two observations from item 15 (transitions class/recess), where high significant values were observed ($p < 0.001$ and $p < 0.01$), with large effects (61.3% and 43.9%). This was explained by the especially low values found in normal schools, where it was confirmed that little or no transitions were performed in an organized and fluid manner.
- A high significance was also found ($p < 0.01$) in items 6 and 24, with very high effects (66.3% and 51.9%), which were due to the highly complex schools having higher values. It was also in these high complexity schools where the adults were on time to their supervision times, and there were no periods in time in which the students were not accompanied by an adult. In this case, the concerted school had the lowest values, pointing out that the adults were not usually on time, and the surveillance was compromised by the increase in the student/teacher ratio.

Table 6. Difference in means. Comparison of significance of the differences between the variables Figure 2. Transitions in the recesses as a function of the type of school ($N = 23$).

Variable/Item	Mean/Median According to Type of School				KW Test		Effect Size R^2
	High Complex.	Normal	Concerted	RAS	Statistic	p	
Total D2	3.34/3.28	2.14/2.08	2.52/2.56	2.46/2.50	11.98 **	0.007	0.402
5: Class/recess transition/1st Ob	3.33/3.00	2.00/2.00	3.00/3.00	4.00/4.00	15.69 **	0.000	0.613
5 Class/recess transition/2nd Ob	3.17/3.00	2.00/2.00	2.00/2.00	3.00/3.00	10.61 **	0.007	0.439
5: Class/recess transition/3rd Ob	3.00/3.00	2.00/2.00	2.50/2.50	2.40/2.00	2.47 NS	0.516	0.171
6: Adult supervision time	4.00/4.00	2.50/2.50	2.28/2.17	2.40/2.67	13.24 **	0.001	0.663
7: Ratio	2.94/2.83	2.00/2.00	2.89/3.00	1.60/1.67	6.67 NS	0.075	0.289
24: Recess/class transition	3.61/3.67	2.33/2.00	2.44/2.67	1.33/1.33	10.17 **	0.009	0.519

NS = non-significant at 5% ($p > 0.050$); ** = highly significant at 1% ($p < 0.010$).

In Dimension 3: Commitment of the student and adult (supervision of the adult) (Table 7), it is found that in items 21 (Intervention of the adult in conflict resolution), 22 (Physical location of the adult) and 23 (Intervention of the adult in the game), the low score tended to be repeated with a certain frequency in rural schools (RAS).

Table 7. Difference in means. Comparison of the significance of the differences in the variables from Dimension 3. Commitment of the student and adult (adult supervision), as a function of type of school (N = 23).

Variable	Mean/Median According to Type of School				KW Test		Effect Size R ²
	High Complex.	Normal	Concerted	RAS	Statistic	p	
21: Adult intervention in conflict resolution/1st Ob	3.00/ 3.00	2.00/2.00	2.50/2.50	1.40/1.00	7.27 ^{NS}	0.055	0.345
21: Adult intervention in conflict resolution/2nd Ob	3.83/4.00	3.50/3.50	3.00/3.00	2.00/2.00	11.59 ^{**}	0.004	0.552
21: Adult intervention in conflict resolution/3rd Ob	4.00/4.00	2.50/2.50	2.50/2.50	1.80/2.00	16.68 ^{**}	0.000	0.794
22: Physical location of adult	2.94/2.83	2.67/2.67	2.11/2.33	1.73/1.67	7.12 ^{NS}	0.059	0.318
23: Intervention of adult in games	1.33/1.17	1.67/1.67	1.61/1.50	1.20/1.33	6.42 ^{NS}	0.085	0.271

^{NS} = non-significant ($p > 0.05$); ^{**} = highly significant at 1% ($p < 0.01$).

The RAS, the adults did not intervene when a conflict arose by utilizing a positive language or involving the students in conflict resolution. Additionally, they tended not to be strategically positioned, they tended to huddle together and not tend to the students during recess.

It was curious to see that this situation was reversed in highly complex centers, where higher values were found, indicating the greater number of adults who were well-positioned, who tended to intervene in the conflicts, creating a positive environment and making the students participate in the resolution of conflicts.

Lastly, it should be highlighted that at every school, the involvement of the adult in the play activities was almost null, especially in the RAS and the high complexity schools.

In Dimension 4: Pro-social and antisocial behaviors, and comparing the different types of schools (Table 8), the existence of significant values was clearly evident ($p < 0.01$), with almost all of them high, along with very high effect sizes (most > 45%). Thus, the total D4 score ($p < 0.01$; effect: 57.2%) was due to the low RAS scores. This trend was maintained in all the other variables in this dimension, except for item 15 (physical altercations), where the significance ($p < 0.01$; effect: 46.4%) was explained by the low scores in the RAS, as well as the concerted schools.

Table 8. Difference in means. Comparison of the significance of the differences in the variables from Dimension 4: Pro-social and antisocial behaviors, as a function of the type of school (N = 23).

Variable	Mean/Median According to Type of School				KW Test		Effect Size R ²
	High Complex.	Normal	Concerted	RAS	Statistic	p	
Total D4	4.44/4.83	4.33/4.33	3.45/3.33	2.10/2.22	12.14 ^{**}	0.002	0.572
15: Physical altercations	3.83/4.00	3.67/3.67	2.56/2.17	2.73/2.67	10.02 ^{**}	0.009	0.464
16: Adult intervention/physical altercations	4.67/5.00	4.33/4.33	3.50/3.00	1.47/1.33	14.21 ^{**}	0.000	0.694
17: Communication altercations/1st Ob	4.50/5.00	5.00/5.00	3.67/4.00	2.60/3.00	12.11 ^{**}	0.003	0.473
17: Communication altercations/2nd Ob	4.50/5.00	4.50/4.50	3.50/3.50	2.00/2.00	10.79 ^{**}	0.007	0.522
17: Communication altercations/3rd Ob	4.50/5.00	4.00/4.00	3.67/4.00	2.20/2.00	8.80 [*]	0.024	0.378
18: Adult intervention/communication alteration	4.67/5.00	4.50/4.50	3.83/4.00	1.60/1.67	13.45 ^{**}	0.001	0.693

^{*} = significant at 5% ($p < 0.05$); ^{**} = highly significant at 1% ($p < 0.01$).

These data inform us that physical and communication altercations between adults were especially produced in the RAS, with the non-intervention of the adults, whom, as we recall, were badly positioned in the physical space for supervision. This situation was found to a lower degree in the concerted schools.

However, in the highly complex and normal schools, the physical and communication altercations were reduced, and the intervention of the adult appeared to be constructive, especially in highly complex centers (Table 8).

Lastly, for the comparison between the different variables for Dimension 5 (Table 9): Empowerment of the student, we observe a high significance in the total D5 score ($p < 0.001$) found with an effect size of 49.3% (very large), which was produced by the high score in the highly complex schools, as well as by the low value observed in the concerted ones.

This same trend, with high significance ($p < 0.01$) and large effects (between 44.1% and 56.6%) was found in the three measurements of item 20.

Table 9. Comparison of the significance of the differences in the variables from Dimension 5: Empowerment of the student, as a function of the type of school (N = 23).

Variable	Mean/Median according to Type of School				KW Test		Effect Size R ²
	High Complex.	Normal	Concerted	RAS	Statistic	p	
Total D5	4.67/4.67	3.13/3.13	2.14/1.79	3.35/2.58	15.10 **	0.000	0.493
19: Students/Disagreement with norms	3.67/3.67	3.50/3.50	2.22/1.67	3.20/3.33	4.86 ^{NS}	0.184	0.376
20: Students/conflict resolution strategies/1st Ob	5.00/5.00	3.50/3.50	2.00/1.50	3.00/2.00	10.52 **	0.008	0.441
20: Students/conflict resolution strategies/2nd Ob	5.00/5.00	2.50/2.50	2.00/1.50	3.40/3.00	13.09 **	0.001	0.504
20: Students/conflict resolution strategies 3rd Ob	5.00/5.00	3.00/3.00	2.33/2.50	3.80/3.00	13.44 **	0.001	0.566

^{NS} = non-significant ($p > 0.05$); ** = highly significant at 1% ($p < 0.01$).

It is in the highly complex centers where the students sought strategies for resolving conflicts, which was not found in concerted centers.

6.2. Recesses during the Pandemic

The pandemic brought with it new procedures in education centers, and the recesses, transitions, and the role of the adults and students were also affected. New ways to act, where health safety was the primary concern, were added to what had been done until then, as described in the first part of the present article. The following data were obtained after categorizing the responses from the semi-structured interviews (Table 10).

Table 10. Relationship between meta-categories and categories of the study.

Mega-Categories	Categories	Transitions	During Recess
Hygiene	Disinfection of the equipment	2.2%	3.9%
	Use of the water–alcohol gel/washing of hands	18.3%	0.2%
COVID-19 protocol	Stable groups	5.6%	1.6%
	Use of masks	0%	1.7%
	Distance and safety	3.8%	2.2%
	Spaces of the stable groups	5.6%	1.6%
	Staggered entry to the spaces	6.7%	1.1%
	Taking of temperature	13.9%	0%
Teacher tasks during recess	Surveillance/supervise	9.4%	14.3%
	Resolution of conflicts	0%	1.7%
	Invigoration/participated in games	0%	0%

These data determined that:

- The transitions were much more organized at every type of school analyzed. New roles were given to the professors, such as the use of water-alcohol gels, washing of hands, ensuring the distance of safety, and respecting the stable groups. New adult figures appeared, aside from schoolteachers, such as educators, support personnel (conciierge, administrative personnel), which helped reduce the ratio during recess. With respect to the new functions of adults, the schoolteachers considered that these functions corresponded to their supervisor role during recess, although they highlighted the support from other figures:

“These tasks should be performed by the tutors, although we need support personnel, as the new protection habits against COVID-19 require more hands and time.” (CEPO_E8 1: 3 (12:12))

“I think the tasks we are doing correspond to the schoolteachers, as they revolve around the surveillance of the children, the solution to possible conflicts that could arise, and presently, on the surveillance of the compliance with using the masks correctly, and that stable groups should be mixed with others.” (CEPO_E10 30:34 (20:20))

- The recesses were organized in defined spaces for each stable group, avoiding interactions with other groups. The transitions were also conducted according to itineraries and schedules defined for each stable group. This greater organization and control had an effect on the actions of the adults, who ensured that their function was basically to supervise and not accompany the students, or invigoration of recess:

“With the pandemic situation, the professors are the ones who can directly control these situations, as they are part of the stable group. Their tasks help guarantee the safety of everyone. On the other hand, the time spent in the playground is also considered as a education moment.” (CEPO_E5 8:12 (5:5))

- The conflict situations between students were reduced. The intervention of the adult was exclusively to remind the students about the use of the mask, on numbered occasions during recess, but never during the transitions. The students were strongly aware about their individual responsibility during the pandemic:

“They are well aware about the stable groups and respecting the limits marked. However, at the beginning of the course, it was difficult, as they wanted to be with children from other groups. The most difficult aspect was for them to be responsible with the correct use of the mask (especially in the playground), as many students use it incorrectly.”

(CEPO_E17 54:28 (17:17))

- All the students were empowered, responsibly complying with the new health safety guidelines:

“The students have demonstrated to be very responsible, and have adapted to the new normality without complaining and accepting the safety measures at recess and within the stable class group. A very good lesson from the children.” (CEC_E1 28:31 (5:5))

- At every type of school, changes were made on the routines during the transitions and the recesses, but in highly complex centers, many of these routines had been already defined, for example the differentiation of the spaces in the playground for the different classes. It should be highlighted that at the rural schools (RAS), the schoolteachers believed that the new actions or norms were not too different from what they had done in the past, having in mind that there was more flexibility in the organization of the stable groups:

“What we have done in the RAS is to supervise the students while they play, as we have always done. There was no problem with the mixing of stable groups, and therefore, we were calm about this aspect.” (CEPZ_E3 40:43 (3:3))

- There was a scarcity or lack of training for the adults to perform this task during recess. Neither the schoolteachers nor the supervisors had received specific training to become involved at recess, aside from strict supervision. Likewise, during the pandemic, the schoolteachers had to make their resilience effective, without specific training to tend to the new contingency. In the interview, some schoolteachers manifested that they were not prepared and did not receive support in the beginning:

“At the start it was hard, we didn’t have protection equipment, we have to do everything. The specialists professors became support staff. The truth is we did many tasks that did not correspond to a teacher, but all for the good of the children.” (CEPZ_E5 41:23 (4: 3))

7. Discussion

Recess is one of the few moments of the school day, if not the only one, designed exclusively for play, to disconnect from academic activities, but at the same time it is a privileged space to stimulate and promote learning.

The multiplicity of activities that can be developed, the versatility of the spaces destined for recess and the diversity of interactions that take place, must be elements to be considered in the planning for an integral development of the students. During recess, values and attitudes of respect for others, care for the environment, health promotion and all those issues that make a more sustainable world viable can be worked on.

Phase I of this study aimed to analyze the treatment of breaks during the school day, focusing attention on adult supervision. We also identified the actions of adults and students in situations that affect school coexistence during breaks.

It should not be forgotten that different studies [19,20] indicate that adults should develop functions during school breaks that go beyond supervision and control of student activity. Adults should accompany students, but at the same time, they should be involved in making this time of the school day more dynamic. They should aim at learning objectives that are easier to achieve outside the classroom, at recess, which is a playful space where a variety of social interactions take place.

Recesses should be designed and planned from the beginning, as well as transitions from the classroom to the playground or vice versa, both in the morning and at noon, during the school day. The present study shows that it is in the midday breaks that the projection of transitions is not taken into consideration, and this makes the generation of conflict situations more likely. Another curious fact is that in highly complex centers, transitions are much more organized, thus avoiding the possibility of conflict in a context where it is more likely to occur. It is in this context where the adult exercises greater supervision, being punctual and where there are no periods of time in which the students are unaccompanied.

Authors such as [19,22,28–32] argue the importance of adult supervision and above all to prevent conflict situations, but at the same time point to other functions that can be developed during recess [2–5] among other studies, arguing that in the design of recesses it is necessary to take into account the role that the adult should play, and let us remember that all the experts affirm that this should go beyond participation only in cases of conflict [27]. Although this study points out that these actions of the adult, on most occasions, are developed through positive, proactive language and involving the students in the search for solutions to resolve the conflict, after these moments, the adult once again becomes an invisible element, although omnipresent, since the students are aware of his presence.

On the other hand, in no case does the adult intervene in the play and activities of the students [12,13], showing no initiative to get involved. This fact is even more evident among the adults who intervene in the midday recesses, who are generally not teachers, but monitors hired for surveillance tasks. The lack of dynamization of recess is more evident in rural and highly complex schools. However, studies such as this one [29] highlight how students want the adult to play a more active role at recess and not just watch, guard and observe what happens. The students want them to play more and get involved in the activities, interacting proactively.

It was also observed that in highly complex schools (with very well delimited areas), this makes better coexistence possible, although at the same time, it limits the possibilities of interaction between students from different groups. This good coexistence is also favored by lower ratios, as occurs in RAS schools and schools of high complexity.

In Phase 2 the objective was to identify changes in school breaks forced by the pandemic. Everything observed in Phase 1 is altered in a pandemic situation, conflicts are reduced, among other reasons because fewer students coincide in the playground and only the bubble groups are in the playground.

The pandemic forced a rethinking of the actions of adults [10,11], and protocols were systematized to regulate transitions and exercise clear supervision at recess, with bubble groups and a lower ratio, thanks to the assistance of support staff. This form of action is generalized in all schools, which previously seemed to be the case only in highly complex schools.

Thus, their supervisory actions are reinforced in the control of masks, or keeping safety distances at transitions, for example. Students are very aware and empowered to respect and apply health safety standards.

In relation to adult participation in play after the pandemic, adult intervention is ruled out even more. From the interviews it is clear that their main role is supervision.

Let us recall that authors such as [27,28] state that it is important to involve students in the planning and design of recess. Facilitating their empowerment for the mediation and resolution of conflicts, under the adult's gaze, ensures key learning and better socialization indexes. In times of pandemic, the empowerment of students was also dimensioned towards a responsibility for their health and collective health as they say [33,34], resulting in a satisfactory development of school breaks and transitions.

8. Conclusions

Several conclusions can be drawn from the present study. The first is that greater planning and supervision of school recess may lead to a lower risk of conflict.

Another conclusion is that, if the ratios of students per supervising adult were lower, it would be possible to more directly stimulate the activities that take place. If the ratio is high, it is difficult for the teacher to develop other functions beyond supervision.

There is little or no initial training for adults to carry out the task of accompanying, energizing and supervising during recess. Neither teachers nor monitors have received specific training to become involved in recess, beyond strict supervision.

This was particularly evident during the pandemic, when teachers had to make their resilience effective, without specific training to deal with the new contingency. Some teachers stated, in the interview, that they were not prepared and that they did not receive support in the first moments. In addition, many of them had to take on the role of support staff to supervise the implementation of the COVID-19 protocols.

It is important to make recess a pedagogical resource for the development of the curriculum, with the necessary proactive involvement of the adult, sharing proposals with the students.

In short, it is necessary to work from the initial teacher training to make effective changes in the role of the adult in recess. While supervision is important, it is also necessary to learn how to make school recesses more dynamic.

Author Contributions: Conceptualization, I.d.A. and Ò.F.; methodology, I.d.A. and A.R.-P.; validation, I.d.A., Ò.F. and A.R.-P.; formal analysis, I.d.A.; investigation, I.d.A., Ò.F. and A.R.-P.; data curation, I.d.A.; writing—original draft preparation, I.d.A., Ò.F. and A.R.-P.; writing—review and editing, I.d.A., Ò.F. and A.R.-P.; visualization, I.d.A., Ò.F. and A.R.-P.; supervision, I.d.A. All authors have read and agreed to the published version of the manuscript.

Funding: This study has been co-financed under the RETSASO EFA 341/19 Project with FEDER funds. It has also been subsidized by the DOTS University Chair (Chair for the Development of Healthy and Sustainable Organizations and Territories), approved by agreement no. 193/2017 of the Governing Council of the University of Lleida on 19 July 2017.

Informed Consent Statement: Informed consent was obtained from all subjects involved in the study.

Data Availability Statement: Data presented in this study are available on request from the corresponding author. The data are not publicly available due to the conditions of the project contract with the funder: DOTS University Chair (Chair for the Development of Healthy and Sustainable Organizations and Territories).

Acknowledgments: Thanks to the DOTS Chair of the University of Lleida for their support in carrying out this study.

Conflicts of Interest: The authors declare no conflict of interest.

References

- Romera, E.; Ortega, R.; Monks, C. Impacto de la actividad lúdica en el desarrollo de la competencia social. *Int. J. Psychol. Psychol. Ther.* **2008**, *2*, 193–202.
- Aguilera, E. ¡Recreo!... ¡Vamos a Jugar! Espacios y Juegos: Una Responsabilidad Compartida. Available online: <https://www.scielo.sa.cr/scieloOrg/php/reflinks.php?refpid=S1409-4258201300010000500001&pid=S1409-42582013000100005&lng=es> (accessed on 19 July 2021).
- Murray, R.; Ramstetter, C. The crucial role of recess in school. *Pediatrics* **2012**, *131*, 183–188. [[CrossRef](#)]
- Martínez, J.; Aznar, S.; Contreras, O. El recreo escolar como oportunidad de espacio y tiempo saludable. *Rev. Int. Med. Cienc. Act. Física Deporte* **2015**, *15*, 419–432.
- Massey, W.V.; Stellino, M.B.; Mullen, S.P.; Claassen, J.; Wilkinson, M. Development of the great recess framework—Observational tool to measure contextual and behavioral components of elementary school recess. *BMC Public Health* **2018**, *18*, 394. [[CrossRef](#)] [[PubMed](#)]
- Murray, R.; Ramstetter, C. El papel crucial del recreo en la escuela. *Pediatría* **2012**, *80*, 517–519.
- Grant, S.; Hamilton, L.; Wrabel, S.; Gomez, C.; Whitaker, A.; Leschitz, J.; Unlu, F.; Chavez-Herrerias, E.; Baker, G.; Barrett, M.; et al. *Social and Emotional Learning Interventions Under the Every Student Succeeds Act: Evidence Review*; RAND Corporation: Santa Monica, CA, USA, 2017.
- Chaves, A.L. Una mirada a los recreos escolares. El sentir y pensar de los niños y niñas. *Rev. Electrónica Educ.* **2013**, *17*, 67–87. [[CrossRef](#)]
- Massey, W.; Stellino, M.; Claassen, J.; Dykstra, S.; Henning, A. Evidence-based Strategies for Socially, Emotionally and Physically Beneficial School Recess. *J. Phys. Educ. Recreat. Danc.* **2018**, *89*, 48–52. [[CrossRef](#)]
- del Arco, I.; Flores, Ó.; Guitard, M.L.; Saltó, E.; Ramos-Pla, A.; Massey, W.; Llebaria, X.; Silva, P.; Jover, A.; Barcenilla, F.; et al. En las organizaciones saludables y sostenibles. El empoderamiento individual como nuevo paradigma en la gestión del conocimiento. In *La nueva Gestión del Conocimiento*, 1st ed.; Gairín, J., Suárez, C.I., Díaz-Vicario, A., Eds.; Wolters Kluwer: Madrid, Spain, 2020; pp. 473–519.
- Ramos-Pla, A.; Massey, W. Escuelas como organizaciones saludables: Estudio sobre los recesos en la escuela. In *La Nueva Gestión del Conocimiento*, 1st ed.; Gairín, J., Suárez, C.I., Díaz-Vicario, A., Eds.; Wolters Kluwer: Madrid, Spain, 2020; pp. 491–497.
- del Arco, I.; Ramos-Pla, A. Per què cal repensar el temps de pati a les escoles? *Fòrum. Rev. D'organització Gestió Educ.* **2020**, *52*, 5–10.
- Generalitat de Catalunya. Mesures Extraordinàries de Salut per Evitar els Brots de la COVID-19 a les Escoles. Available online: <http://educacio.gencat.cat/web/.content/home/actualitat/escolasegura/actualitat/curs-2020-2021/carta-families.pdf> (accessed on 15 June 2021).
- Generalitat de Catalunya. Altres Recomanacions i Procediment D'actuació. Available online: <http://educacio.gencat.cat/web/.content/home/actualitat/escolasegura/actualitat/curs-2020-2021/annex-mesures-estraordinaries.pdf> (accessed on 16 June 2021).
- Ehlers, D.K.; Huberty, J.L.; Beseler, C.L. Changes in community readiness among key school stakeholders after Ready for Recess. *Health Educ. Res.* **2013**, *28*, 943–953. [[CrossRef](#)]
- Centers for Disease Control and Prevention and SHAPE America; Society of Health and Physical Educators. *Strategies for Recess in Schools*; U.S. Dept. of Health and Human Services: Atlanta, GA, USA, 2017.
- Marín, I. Los patios escolares: Espacios de oportunidades educativas. *Rayuela Rev. Iberoam. Sobre Niñez Juv. En Lucha Por Sus Derechos* **2013**, *4*, 88–94.
- Ritscher, P. *El Jardín de los Secretos: Organizar y Vivir los Espacios Exteriores en las Escuelas*; Ediciones Octaedro: Barcelona, Spain, 2006.
- Artavia-Granados, J.M. El papel de supervisión del personal docente durante el desarrollo del recreo escolar. *Rev. Educ.* **2014**, *38*, 19–36. [[CrossRef](#)]
- Pereira, O.; Neto, C.; Smith, P.; Angulo, J.C. Reinventar los espacios de recreo para prevenirla violencia escolar. *Cult. Educ.* **2002**, *14*, 297–312. [[CrossRef](#)]
- Centers for Disease Control and SHAPE America. Recess. Available online: <https://www.cdc.gov/healthyschools/physicalactivity/recess.htm> (accessed on 6 June 2021).
- Leff, S.S.; Costugan, T.E.; Power, T.J. Using participatory-action research to develop a playground-based prevention program. *J. Sch. Psychol.* **2004**, *42*, 3–21. [[CrossRef](#)]
- Huberty, J.L.; Siahpush, M.; Beighle, A.; Fuhrmeister, E.; Silva, P.; Welk, G. Ready for recess: A pilot study to increase physical activity in elementary school children. *J. Sch. Health* **2011**, *81*, 251–257. [[CrossRef](#)] [[PubMed](#)]
- Ehlers, D.K.; Huberty, J.K.; Beseler, C.L. Is school community readiness related to physical activity before and after the Ready for Recess intervention? *Health Educ. Res.* **2013**, *28*, 192–204. [[CrossRef](#)]
- Clavenger, K.A.; Pfeiffer, K.A. Recess Should NOT Be Cut: Considerations for COVID-19 School Reopening Plans. *Transl. J. Am. Coll. Sports Med.* **2020**, *5*, 1–5. [[CrossRef](#)]
- Global Recess Alliance. School reopening? Make Sure Children Have Daily Time for Recess. Available online: <https://globalrecessalliance.org/recess-statement/> (accessed on 23 June 2021).
- London, R.A. When schools reopen, don't neglect recess. *Phi Delta Kappan* **2020**, *102*, 26–27. [[CrossRef](#)]

28. Meyerhoff, M.K. Perspectives on parenting: Having fun and learning. *Pediatrics Parents* **2001**, *19*, 8–9.
29. Marín, I.; Molins, C.; Martínez, M.; Hierro, E.; Aragay, X. *Els patis de les escoles: Espais d'oportunitats educatives*; IPA España: Barcelona, Spain, 2010.
30. Castillo-Rodríguez, G.; Córdoba, C.C.P.; Gil-Madrona, P. Dinamización del recreo como resolución de conflictos y participación en actividades físico-deportivas. *Rev. Electrónica Educ.* **2018**, *22*, 237–258. [[CrossRef](#)]
31. Follett, M. El Recreo: Una Parte Clave de la Jornada Escolar. Available online: <https://aprendiendoalarelibre.com/wp-content/uploads/sites/19/2017/07/El-Recreo-como-Parte-Clave-de-la-de-la-Jornada-Escolar-A5.pdf> (accessed on 24 August 2021).
32. Mayfield, C.A.; Child, S.; Weaver, R.G.; Zarrett, N.; Beets, M.W.; Moore, J.B. Effectiveness of a playground intervention for antisocial, prosocial, and physical activity behaviors. *J. Sch. Health* **2017**, *87*, 338–345. [[CrossRef](#)] [[PubMed](#)]
33. Massey, W.V.; Stellino, M.B.; Wilkison, M.; Whitley, M.A. The impact of a recess-based leadership program on urban elementary school students. *J. Appl. Sport Psychol.* **2017**, *30*, 45–63. [[CrossRef](#)]
34. Karasel Ayda, N.; Güneyli, A. “Recess” in the Eyes of Primary School Students: Cyprus Case. *Sustainability* **2018**, *10*, 355. [[CrossRef](#)]