

Interrelations between the Morals of 5–6-Year-Old Children and Balance Exercises in Judo Physical Activities

Jekaterina Krauze, *ORCID: 0009-0000-5279-869X*

Agita Ābele, *ORCID: 0000-0002-7916-8150*

Inta Bula-Biteniece, *ORCID: 0000-0002-4585-7978*

Affiliation: RSU Latvian Academy of Sport Education, Latvia

E-mail: jekaterina.krauze@lspa.lv

Submitted: May 29, 2024; Accepted: June 20, 2024

Abstract

Objective of the study: Using psychological tests to study the level of virtues of 5–6-year-old children in Physical Activities Based on Judo Philosophy (PABJP) in preschool interest education. The methods used in the study: literature analysis and psychological tests. To check the understanding of 5–6-year-old children about virtues: respect, friendship, honesty and participation data were obtained with R. Kalinin's test and A. Košeļeva's methodology. 90 children aged 5–6 years participated in the experiment, which took place from September 2019 to September 2020. Results: The literature study identified 4 virtues that were studied in physical activities based on Judo philosophy in interest education. 5–6-year-old children develop basic movements in three groups: moving, overcoming obstacles, and moving objects. PABJP were organized in sports classes in Interest Education. The results obtained in the Story picture test are as follows: 75% of children with 2 years of experience; 60%, children with 1 year of experience: 68%, the third group have a high level of virtue honesty.. The results obtained with the method of A. Košeļeva in the indicator skill to offer help: in the 1st group – 73%, 2nd gr. – 63%, 3rd gr. – 61%, The results in the indicator of skill to help are high: in group 1: 87%, in group 2: 79% and in group 3: 72%. Conclusions: The level of development of virtues of 6-year-old children can be determined by psychological tests that encourage children to learn mutual help and participation in pair exercises.

Keywords: preschool education, interest education, virtues, judo physical activities, test, exercises.

Introduction

Evaluating the information found on basic movements (Garbeloto et al., 2023) with the physical development of the child provided for in the Latvian education reform, let's update that a 5–6-year-old child develops basic movements in three groups of basic movements: 1) movement, 2) overcoming obstacles and 3) objects resettlement (VISC, 2019, p. 14; p. 110; LR MK, 2018). For this purpose, physical activities and movement games are organized for 5–6-year-old children according to their health capabilities. The teacher's task is to encourage the child to come up with new movements individually, in pairs or in groups, without specifying a specific inventory or type of activity (VISC, 2019, 110). This preschool education content intended for the development of basic movements of 5–6-year-old children could be supplemented with the inclusion of Judo exercises in sports lessons, which would help to learn basic movements integrated with virtues. The fact about the possibilities of children's participation and initiative promotion is especially important. According to the physical capabilities of the children's age, the teacher organizes lessons for learning basic movements, so that they are strengthened until physical training for learning judo skills at the next 6–11 years of age (Garbeloto et al., 2023) and the child would have learned (Kano, 2009) the requirement for individual responsibility and for safe and decent action in the micro, meso, macro environment and society embedded in the judo philosophy. Therefore, it is an important fact that to promote the learning of the basic movements of Judo, scientists from different countries (especially Polish) (Kowalczyk et al., 2022) recommend starting at the age of 4–6 years. However, it must be recognized that so far there is still little research on how to help the educator to use PABJP for the child's development as a whole. Therefore, we believe that it is important to identify the possibilities of integrating PABJP in the learning areas of Preschool education for the systematic learning of children's virtues.

Most of the articles on judo are about the physical development of children, but the cultivation of virtues is only mentioned. Our study analysed the scientific literature on the upbringing of children's virtues and the impact of PABJP on the formation of moral qualities – respect, friendship, honesty and participation.

By evaluating the mutual compliance of Kano's judo philosophy, School 2030 methodological recommendations and regulatory documents of the Ministry of Education, the criteria and indicators for determining the level of virtues of 5–6-year-old children were clarified in the study. In classes with movement activities for preschool children, it is important to include balance development exercises in order to be able to maintain balance in any form of children's activity – play, household processes, various ways of the child's movement in the room, including PABJP (Kakebeeke et al., 2019). The moral qualities of preschoolers can be promoted (Доржy, 2018) by setting and solving specific educational tasks in each lesson. Fostering mutual assistance is one of the tasks implemented by PABJP. The chosen methods of development of balance affect children's moral qualities, especially mutual help and participation. Taking into account what was analysed, a set of exercises was developed for the education of mutual help for 5–6-year-old children. The created methodology

included gradation in various pair tasks using circles, exercise benches (height – 25 cm from the floor), fitness balls and exercise stairs (on the floor). It is important to know how to teach/learn how to sit on the ball correctly and how to protect yourself during the exercise, teach this to children in relation to swing exercises on the ball. For this purpose, football in pairs was useful, the task of which was to help the partner not to fall off the ball from different starting positions. One always protects the other during the exercise. In small games (king of the log, hit the target), the children followed the safety technique in order not to get injured, they help their friends. A technique for developing balance is performing tasks on a raised and lowered support. Thus, bench exercises can be used to develop balance (Strahm, 2016). For the development of static and dynamic balance, pair exercises on the bench were effectively used in the preschool sports classes of PABJP.

R. Kalinina's methodology is characterized by the fact that it affects not only the cognitive aspect (understanding of moral qualities), but also the emotional aspect (the child's personal attitude towards the fulfilment of these virtues). This methodology made it possible to determine the children's attitude towards the qualities: respect, friendliness and honesty. There were no reliable differences in the levels of mental processes among the children of these three groups. During the ascertainment experiment, each child participated in two experimental situations with identical moral content: a story situation (scenario pictures with a representation of behaviour techniques), where the level of verbal behaviour was determined; observation of behaviour in a real situation (real level of behaviour). The experiment analysed the level of formation of children's moral qualities, determining the connection of their psychological qualities with moral qualities in mutual relations. The current level of virtues of 5–6-year-old children was determined. Individual discussions (purposefully organized conversation) with children revealed the results of moral qualities in two spheres of children's behaviour and interpersonal relationships: in a story situation (showing verbal behaviour) and in a real-life situation (expression of real behaviour).

With the method of theoretical research, the philosophy of judo was brought up to date and the opportunities for the cultivation of virtues were identified in the sports lessons of Interest Education in the process of learning basic movements. The relationship between the regulations of the Cabinet of Ministers of the Republic of Latvia, the methodological recommendations of the Education Reform School 2030 and Kano's findings on the development of virtues in sports classes in preschool education with judo physical activities has been clarified. In our study, an analysis of the scientific literature on the upbringing of children's virtues and the impact of PABJP on moral qualities – respect, friendship, honesty and participation – formation.

Materials and Methods

In the research, psychological tests were used (R. Kalinina's "Story Cards" test and A. Koseleva's methodology "Research of preschoolers' mutual help in cooperation") to check the understanding of 5–6-year-old children about virtues: respect, friendship, honesty and participation. The research used a comparative ascertainment experiment for

three pre-school groups based at the Vocational Education Institution [VEI] Vsevolod Zelioni Sports School [VZSS]: 1) The first was a group of 6-year-old children with two years of experience in PABJP. 2) The second was a group of 6-year-old children with one year of experience in PABJP. 3) A group of 6-year-old children is engaged in PABJP for the 1st year (beginner group 3).

Both cognitive (knowledge of moral norms) and emotional (observance of these norms) development were studied with R. Kalinina's (2011) psychological test "Story Cards" (Kalinina, 2011). The test was conducted individually, orally, to record the child's emotional response. It is explained to the child: "Look at the cards with pictures, where you can see different actions of children. Take the card that shows the good behaviour and put it on one side and put the card that shows the bad behaviour on the other side. Explain why you think so." Evaluate the child's answers. The age norm is the result of 3 points, which indicates that the child's emotional response is adequate, but the understanding of virtues has developed to a sufficient degree. A score of 2 is considered satisfactory. A low score is 0–1 point.

Methodology of A. Koseleva (2003) "Research of mutual help of preschoolers in collaboration". During PABJP, the teacher uses pair tasks. Their main task is to help the partner correctly perform the task, exercise and promote virtues. Each child's attitude, collaboration with other children during lessons is recorded in the protocol.

Results

In all three groups, during the first stage of the ascertaining experiment, according to the methodology "Story cards", the results of a two-virtue sample are shown in the figures. The results of the emotional reaction of 5–6-year-old children with different knowledge and experience in judo physical activities (according to R. Kalinina's methodology "Story cards") are in the figures (see Figure 1 and Figure 2).

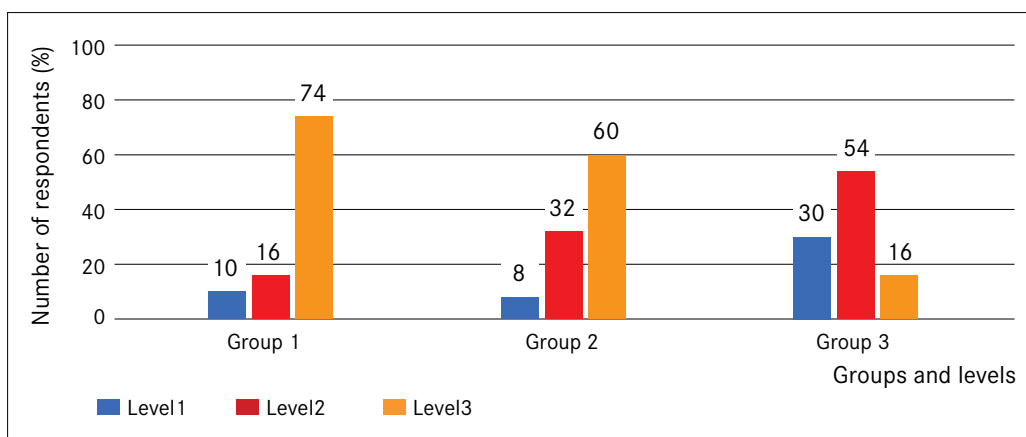
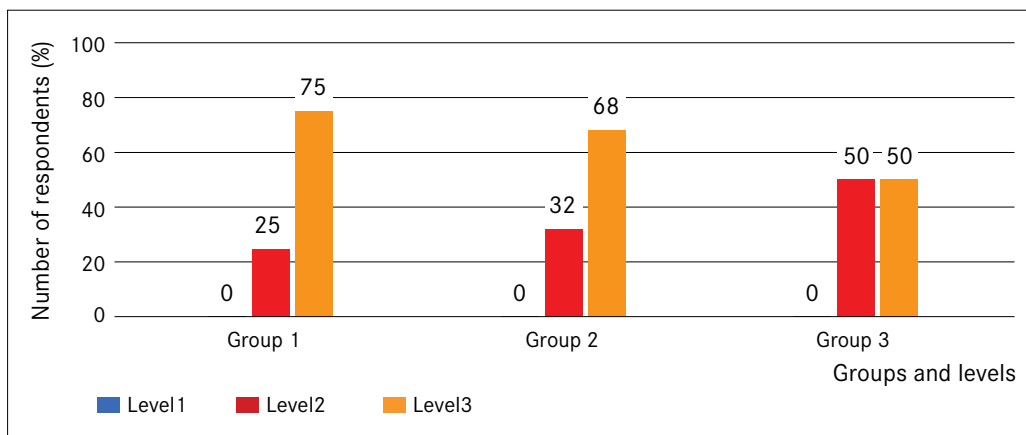


Figure 1. Honesty (Virtue 3)

Figure 2. **Participation (Virtue 4)**

The results obtained in the Story Cards test are as follows: children with 2 years of experience have a high level of virtues: honesty 74%, participation 75%, children with 1 year experience: honesty – 60%, participation, 68%, while group 3 has 30% and 50%. In the group with two years of experience in PABJP, the children justified their choice (named a virtue) in all pictures. This emotional reaction is vividly expressed, it is visible in mimicry, gestures, voice intonation. The scores are slightly lower for the group of children with 1 year of experience in PABJP, the children grouped the pictures correctly, justified their actions, but the emotional reaction was neutral, without special manifestations. The children in the novice group posted the pictures correctly, but could not justify their actions and their emotional response was markedly low. Its targeted and systematic balancing exercises in pairs for 6-year-old children promoted the virtues of helpfulness, friendship, respect and honesty.

With the diagnostic method of A. Koseleva, mutual help was studied according to two indicators: *Skill to offer help* and *Skill to help* level. This methodology allowed us to determine the level of mutual assistance skill. The results of the conducted research were assessed using the method of mathematical statistics.

Table 1 shows that in the indicator of *skill to offer help* in the first group, mutual help shows 73% and in comparison, with the second group (63%) – higher by 10%, with the third group (61%) – by 12% higher. This could be explained by the fact that two years of experience in PABJP, where pair balance exercises are used, significantly affects the development of virtues of preschool children. In the *skill to help*, the results of mutual assistance are higher in all three groups. In group 1 it is 87%, in group 2 – 79% and in group 3 – 72%. This could be explained by the fact that children like to help the teacher and peers, regardless of the situation. Lower indicators are in group 3. This is explained by the fact that their experience of mutual assistance in balance exercises in pairs is small. During the fact-stating experiment, the children of the 3rd group did not show a special initiative and were not always ready to help others compared to the children of the first and

second groups who had previous experience in PABJP. Collaboration is promoted through mutual assistance, in which the activity of one child is directed to the stimulation, support and involvement of another child. Children's mutual aid encourages participation. In a fact-stating experiment, mutual support was promoted in PABJP pair balance exercises with different equipment.

Table 1

**Indicators of virtue understanding (according to A. Koseleva)
for three groups of 5–6-year-old children**

Parameters	Indicators and level of virtue qualities					
	Skill to offer help			Skill to help		
	Group 1	Group 2	Group 3	Group 1	Group 2	Group 3
Σ	66	60	57	78	71	65
μ	2.2	2.0	1.9	2.6	2.36	2.16
%	73	67	63	87	79	72

Discussion

In the literature on the impact of judo on child development, opportunities to promote basic movements are discussed. There is evidence that judo helps to reduce aggression and strengthen self-control (Lindell-Postigoet et al., 2023) and a recommendation for judo to predict and prevent violent behavior and bullying in intervention programs (Montero-Carretero et al., 2021). The cultivation of virtues is not considered, it is only mentioned that judo promotes ethical norms. Therefore, we conducted a study on the fact that the content of preschool education intended for the development of basic movements of 5–6-year-old children could be supplemented with the inclusion of Judo exercises in sports lessons, which would help to learn basic movements integrated with virtues. The fact about the possibilities of children's participation and initiative promotion is especially important. According to the physical capabilities of the children's age, the educator organizes lessons for learning basic movements, so that they are strengthened until the physical training for learning judo skills in the next age of 6–11 years (Garbeloto et al., 2023) and the child would have learned the requirement of individual responsibility and for safe and decent behavior in a smaller or larger community. Therefore, it is an important fact that to promote the learning of the basic movements of Judo, scientists from different countries (especially Polish) (Kowalczyk et al., 2022) recommend starting at the age of 4–6 years. However, it must be recognized that so far there is still little research on how to help the educator use PABJP for the whole development of the child. In the conducted research, PABJP was organized in sports lessons in the education of interests in such a way that the learning of basic movements was integrated with the simultaneous learning of virtues. This is an important task of the School2030 educational reform, which has been approved in the regulations of the Cabinet of Ministers. First of all, it requires careful and systematic work of the teacher and the children.

Conclusions

Physical activities based on the philosophy of judo in the form of games in the preschool sports lesson meet the requirements: learning basic movements and balance on the mat, effective movements, encourages learning to solve problem situations, reduces aggressiveness and gives satisfaction.

In the fact-stating experiment, it was found that the level of development of virtues of 6-year-old children can be determined with psychological tests that encourage children to learn mutual help and participation in pair exercises.

In the physical activities based on judo philosophy in preschool education for 5–6-year-old children, virtues are promoted: friendship, respect, honesty, participation and children's independence are encouraged, which corresponds to the 21st century educational paradigms for the child-centered approach.

References

1. Garbeloto, F., Miarka, B., Guimarães, E., Gomes, F. R. F., Tagusari, F. I., & Tani, G. (2023). A new developmental approach for judo focusing on health, physical, motor, and educational attributes. *International journal of environmental research and public health*, 20(3), 2260. <https://doi.org/10.3390/ijerph20032260>
2. Kakebeeke, T. H. et al. (2019). A quick and qualitative assessment of gross motor development in preschool children// *European journal of pediatrics*.. T. 178. №. 4. AR. 565–573.
3. Kano J. (2009). Judo Kodokan. 16 p. Books google.com. Retrieved 28 June, 2022 from <https://www.judopourτους.com/Zip/DelpratSebastien/Gokyo.pdf>
4. Kowalczyk, M., Zgorzalewicz-Stachowiak, M., Błach, W., Kostrzewa, M. (2022). Principles of Judo Training as an Organised Form of Physical Activity for Children. *Int. J. Environ. Res. Public Health* 2022, 19, 1929. <https://doi.org/10.3390/ijerph19041929>
5. Lindell-Postigo, D., Zurita-Ortega, F., Melguizo-Ibáñez, E., González-Valero, G., Ortiz-Franco, M., & Ubago-Jiménez, J. L. (2023). Effectiveness of a Judo Intervention Programme on the Psychosocial Area in Secondary School Education Students. *Sports*, 11(8), 140. Retrieved 20 June, 2022 from https://www.mdpi.com/2075-4663/11/8/140_
6. LR MK. (2018). Noteikumi par valsts pirmsskolas izglītības vadlīnijām un pirmsskolas izglītības programmu paraugiem. Ministru kabineta noteikumi [MKN] Nr. 716. Skatīts 2023. gada 5. maijā no <https://likumi.lv/ta/id/303371-noteikumi-par-valsts-pirmsskolas-izglitibas-vadlinijam-un-pirmsskolas-izglitibas-programmu-paraugiem>
7. Montero-Carretero, C., Roldan, A., Zandonai, T., & Cervelló, E. (2021). A-Judo: an innovative intervention programme to prevent bullying based on self-determination theory—a pilot study. *Sustainability*, 13(5), 2727.. https://doi.org/10.3390/su13052727_
8. Strahm, S. A. (2016). Gleichgewichtstraining bei 6-bis 7-jährigen Kindern: Auswirkungen auf die Gleichgewichtsfähigkeit, Kraftentwicklung, antizipierbare und nicht-antizipierbare Perturbationen: Université de Fribourg. Retrieved 20 June, 2023 from <https://core.ac.uk/download/pdf/79426521.pdf>

9. VISC. (2019). Pirmsskolas mācību programma. Skola 2030. Skatīts 2024.g. 20.aprīlī no <https://mape.gov.lv/catalog/materials/1F6E6155-9FAF-4B29-A41D-A3AF9A965B4F/view>
10. Dorzhu, M. D. (2018). The relevance of fostering kindness and mutual assistance in modern Tuvan families. *World of Science, Culture, and Education*, 5(72), 321–323. Retrieved May 20, 2022, from <https://cyberleninka.ru/article/n/aktualnost-vospitaniya-detey-dobrote-i-vzaimopomoschi-v-sovremennyh-tuvinskih-semyah>
(Доржу, М. Д. (2018). Актуальность воспитания детей доброте и взаимопомощи в современных тувинских семьях. *Мир науки, культуры, образования*, 5(72), 321–323. Retrieved 20 May, 2022 from <https://cyberleninka.ru/article/n/aktualnost-vospitaniya-detey-dobrote-i-vzaimopomoschi-v-sovremennyh-tuvinskih-semyah>)
11. Kalinina, R. R. (2011). The “Story Pictures” method. *School of My Dream*. Retrieved June 20, 2022, from <https://shkolabudushego.ru/shkola/metodika-syuzhetnyie-kartinki-r-r-kalininoy-v-rabote-s-doshkolnikami-i-mladshimi-shkolnikami.html>
(Калинина, Р. Р. (2011). Методика «Сюжетные картинки». Школа Моей Мечты. URL: Retrieved 20 June, 2022 from <https://shkolabudushego.ru/shkola/metodika-syuzhetnyie-kartinki-r-r-kalininoy-v-rabote-s-doshkolnikami-i-mladshimi-shkolnikami.html>)
12. Kosheleva, A. D. (2003). *Emotional development of preschoolers*. Moscow: Academy. 166 pages.
(Кошелева, А. Д. (2003). Эмоциональное развитие дошкольников. Москва: Академия. 166с.)
13. Krauze, E. V. (2021). The influence of balance development techniques during judo training on fostering mutual assistance in 5–6-year-old preschoolers. In *Problems and Prospects of Physical Education, Sports Training, and Adaptive Physical Culture* (pp. 622–627). Kazan: Volga State Academy of Physical Culture, Sports, and Tourism. (Краузе, Е. В. (2021). Влияние методики развития равновесия во время занятий дзюдо на воспитание взаимопомощи у дошкольников 5–6 лет. In *Проблемы и перспективы физического воспитания, спортивной тренировки и адаптивной физической культуры*. Казань: Поволжская государственная академия физической культуры, спорта и туризма. с. 622–627)