sciendo

10.2478/sjph-2023-0016 Zdr Varst. 2023;62(3):113-120

Šlosar L, Puš K, Marušič U. Validation of the Slovenian version of the Movement Imagery Questionnaire for Children (MIQ-C): A measurement tool to assess the imagery ability of motor tasks in children. Zdr Varst. 2023;62(3):113-120. doi: 10.2478/Sjph-2023-0016.

VALIDATION OF THE SLOVENIAN VERSION OF THE MOVEMENT IMAGERY QUESTIONNAIRE FOR CHILDREN (MIQ-C): A MEASUREMENT TOOL TO ASSESS THE IMAGERY ABILITY OF MOTOR TASKS IN CHILDREN

VALIDACIJA SLOVENSKE RAZLIČICE VPRAŠALNIKA MOVEMENT IMAGERY QUESTIONNAIRE FOR CHILDREN (MIQ-C): MERILNO ORODJE ZA OCENO SPOSOBNOSTI GIBALNIH PREDSTAV

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Received: Oct 19, 2022
Accepted: Mar 17, 2023

Original scientific article

ABSTRACT

Keywords:
Linguistic validation
Mental practice
Imagery ability

Purpose: The ability to perform motor imagery has been shown to influence individual athletic performance and rehabilitation. Recent evidence supports its potential as a training tool to improve motor skills in children. Although there is a standardized assessment of the imagery abilities in Slovenian-speaking adults, there is currently no validated instrument for use with Slovenian children. Therefore, the aim of the present study was to conduct a linguistic validation study of the movement imagery questionnaire for children (MIQ-C).

Methods: A total of 100 healthy children (mean age 10.3±1.3 years; 50 female) were assessed with a Slovenian version of the MIQ-C at Day 1 and Day 8. Inter-day agreement was examined using intraclass correlation coefficients (ICC). Construct validity and internal consistency were assessed using a Cronbach's alpha coefficient and exploratory – confirmatory factor analysis, respectively.

Results: The test-retest ICC were very high for all three scales examined (ICCKI=0.90; ICCIVI=0.92; ICCEVI=0.90). Excellent internal consistency (up to 0.90) was found for kinaesthetic and both visual imageries. Confirmatory analysis confirmed a three-factorial structure of the MIQ-C.

Conclusions: The Slovenian version of the MIQ-C proved to be highly reliable and valid in assessing children's motor imagery abilities, and as such for use with Slovene-speaking children. Moreover, this standardized instrument can be a helpful tool in training and rehabilitation practice with children aged 7-12 years.

IZVLEČEK

Ključne besede:
jezikovna validacija
mentalna vadba
sposobnost imaginacije

Namen: *Dokazano je, da sposobnost izvajanja gibalnih predstav vpliva na posameznikovo športno zmogljivost in rehabilitacijo. Najnovejši dokazi potrjujejo, da lahko služi kot vadbeno orodje za izboljšanje gibalnih sposobnosti otrok. Čeprav obstaja standardizirano ocenjevanje zmožnosti gibalnih predstav odraslih, ki govorijo slovensko, trenutno ni potrjenega instrumenta za uporabo pri slovenskih otrocih. Zato je bil namen pričujoče študije izvesti jezikovno validacijsko študijo vprašalnika o gibalnih predstavah za otroke (MIQ-C).*

Metode: *Vzorec je predstavljalo 100 zdravih otrok (povprečna starost 10,3 ± 1,3 leta; 50 žensk), ki so bili ocenjeni s slovensko različico vprašalnika MIQ-C prvega in osmega dn. Ujemanje med dnevi je bilo preverjeno s koeficienti znotrajrazredne korelacije (ICC). Veljavnost konstrukcije in notranja skladnost sta bili ocenjeni z uporabo Cronbachovega testa alfa oziroma raziskovalno-potrditvene faktorske analize.*

Rezultati: *Rezultati ICC za vse tri pregledane lestvice so bili zelo visoki (ICCKI = 0,90; ICCIVI = 0,92; ICCEVI = 0,90). Odlična notranja konsistentnost (do 0,90) je bila ugotovljena pri kinestetičnih in obeh vizualnih predstavah. Potrditvena analiza je potrdila trifaktorsko strukturo MIQ-C.*

Zaključki: *Slovenska različica vprašalnika MIQ-C se je izkazala kot zelo zanesljiv in veljaven inštrument za oceno gibalne predstave in se kot tak uporablja pri slovensko govorečih otrocih. Poleg tega je ta standardizirani inštrument lahko koristno orodje v vadbeni in rehabilitacijski praksi z otroki, starimi od 7 do 12 let.*

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1 INTRODUCTION

Motor imagery (MI) is a cognitive phenomenon of creating a mental simulation of a motor action without visible body movement or muscular activation (1, 2). There is ample evidence showing that the mental simulation of a motor task can elicit very similar brain activity patterns to actual task execution. This congruent activation of cortical and subcortical motor areas during motor imagery is very likely the reason why this non-physical training is an effective means when learning a motor task (3). MI can be divided into two main modalities – kinaesthetic imagery (KI) and visual imagery, which further divides into internal (IVI) and external (EVI) visual perspective (4, 5).

Evidence suggests that MI training could be an effective tool for learning of general motor performance (6) and that performing MI just before the movement improves the execution of the athletic gesture (7), such as in tennis (8). In addition, it can promote the rehabilitation of injured people (9) and adult patients after a stroke (10). Although a recent meta-analysis (11) shows the positive effect of MI on improving children's motor learning, especially when combined with physical practice, there is still no evidence on the age at which a child can use MI and the level of vividness it can achieve.

To date, MI in children has been researched using three main instruments: mental rotation, mental chronometry, and self-report questionnaires. The latter have been the most suitable instruments so far, as they are inexpensive and of short duration (4, 12). When examining a wider age range of participants, studies have found that few children between the age of 5 and 7 years are able to use MI, while this ability stabilizes in most children between the ages of 10 and 12 years (13-15). Moreover, Dey et al. (16) show that participation in sports improves mental representation in children, but it is not yet clear which modality (KI, IVI or EVI) was used and contributed the most. Dhouibi et al. (17) found that adolescent athletes use the visual MI more frequently than non-athletes and that this ability is more vivid, pronounced and evoked than KI. The development of KI ability is a gradual process that can take many years to reach completion. This is because the creation of a complete kinaesthetic image for a movement requires genuine sensory information that may not be fully achieved in the early stages of development (18). Parker and Lovell (19) have shown that children have more difficulties with KI than with VMI, which presents a challenge when considering the use of kinaesthetic practice techniques with children. Nevertheless, studies have shown that children who participate in youth sports have better KI ability than peers who do not participate in sports (14, 20), highlighting the role of actual physical activity in the development of the KI ability (21).

In adapting a movement imagery questionnaire for children to better assess their mental representational abilities and therefore be able to detect differences in imagery abilities for the three different modalities, Martini et al. (12) validated a 12-item questionnaire, the Movement Imagery Questionnaire for Children (MIQ-C). This can be used as an assessment tool in research, sports or rehabilitation to identify children who may benefit from imagery intervention and to determine the modality that most needs improvement. It is therefore very important that the MIQ-C is translated into Slovenian and validated for further use in clinical and research settings, which was the aim of the present work.

2 METHODS

The translation process, including adaptation and validation, was performed following the methodology guidelines provided in Sousa and Rojjanasrirat (22).

2.1 Translation procedure

The questionnaire was translated by two independent bilingual translators, one of whom was a researcher with experience in the field of MI. An additional independent translator and the research team resolved any discrepancies between the two versions. The last Slovene version was retranslated into English by a native English-speaker working in Slovenia for over 30 years and later compared with the original MIQ-C (12) by the research team.

2.2 Study sample

The questionnaire was administered to 100 children (50 females, 50 males, average age 10.3±1.3 years, range 7-12 years). Parents and children were given detailed information regarding the study, its purpose, and design before written consent was obtained. When signing the consent form the parents were asked to provide the following personal information about their children: age, gender, and current athletic status (athlete or non-athlete), defined as at least half-year of regular participation in a structured activity designed to develop specific skills or achieve specific goals and involving consistent and frequent attendance on a predetermined schedule, such as weekly attendance at classes or sessions that involve guided instruction or coaching and are aimed at improving specific skills. Participants were recruited from the local primary schools. According to the original article's age limitations (12), participants aged 7 to 12 years were included in the study. Excluded were participants with injuries, long-term physical impairments and cognitive disorders. The study was approved (ID: 0624-65/22) by the Science and Research Centre Koper Ethics Committee.

2.3 Procedure

A team of three researchers conducted cognitive interviews with the participants on Day 1 and Day 8 (±2 days). Team members followed the same protocol, and all participants were placed in identical conditions, i.e., a calm and silent room with optimal temperature. At Day 8, participants were interviewed by the same researcher as on Day 1. Children were asked to continue their daily activities between tests in order to minimize potential disruption of their MI ability.

As described in the original study (12), the MIQ-C was developed to adapt the Movement Imagery Questionnaire 3 (MIQ-3) for children aged 7-12 years. Using visual imagery from an IVI or EVI perspective, as well as KI, both MIQ-C and MIQ-3 assess the ability of individuals to image the following four movements: leg raising and jumping, arm adduction, and standing hip flexion. To make its 12 items appropriate for use with children, the MIQ-C was modified by adapting their wording and instructions. While performing the questionnaire, children self-rated their imagery ability using a 7-point Likerts scale, ranging from 1 (”very hard”) to 7 (”very easy”) (questionnaire in the Appendix). A mean score for each assessed imagery perspective (IVI, EVI, and KI) was obtained, with higher score indicating better mental imagery ability. On average the researchers needed 14 minutes (range 11–22 minutes) to complete the MIQ-C of each participant.

2.4 Expert evaluation

A panel of selected experts (from the author’s affiliated institutions with expertise in mental representation and the target population) evaluated the Slovenian version of the MIQ-C with regard to item quality, instruction comprehensiveness, and response format clarity, i.e., face validity. A clear vs. unclear rating was assigned to each evaluated aspect and the inter-rater agreement was determined (80% is considered acceptable). In the case of unclear responses, suggestions on how to improve the statements were provided. A total of seven evaluations were submitted to the research team.

2.5 Psychometric testing

The Slovenian MIQ-C questionnaire was revised and refined by evaluating the internal consistency, repeatability, and the construct-related validity of its items. This study attempted to reach the recommended sample size of 10 subjects per item as proposed by Sousa and Rojjanasrirat (22), i.e. a total of 120, but this process ended at 100 subjects due to resource constraints.

2.5.1 Determining the internal consistency of the MIQ-C (Slovenian version)

A standardized Cronbach’s alpha coefficient was used to evaluate the internal consistency of the questionnaire. It is generally considered acceptable when the internal consistency coefficient is above 0.7, good when it is 0.8, and excellent when it is 0.9.

2.5.2 Determining the test-retest reliability of the MIQ-C (Slovenian version)

We assessed the repeatability of the ratings on each of the scales (visual and kinaesthetic) by comparing the ratings on Day 1 and Day 8. Reliability was estimated using the intraclass correlations coefficient (ICC) (with 95% confidential intervals). ICC values were interpreted as proposed by Malcata, Vandenbogaerde, and Hopkins (23) as follows: >0.99, extremely high; 0.99–0.90, very high; 0.75–0.90, high; 0.50–0.75, moderate; 0.20–0.50, low; <0.20, very low. In order to determine absolute reliability and within subject variation, the Standard Error of Measurement (SEM) and the Coefficient of Variation (CV) were calculated (24). In addition, a minimal detectable change (MDC) was calculated to address further concerns about reliability. The MDC represents a measure of minimal change unrelated to variations in the assessment (25).

2.5.3 Construct validity of the MIQ-C (Slovenian version)

Validity was tested first by exploratory factor analysis and later by confirmatory factor analysis, comparing the obtained models with those of a previous study (26). The following adjustment indexes were further used to measure the matching between the obtained data and expected models: Comparative Fit Index (CFI) and the Tucker-Lewis Index (TLI) – for both values >0.90 is considered acceptable; Root Mean Square Error of Approximation (RMSEA), Root Mean square Residual (RMR) and the Standardized RMS (SRMR) – values around .05 generally indicate close fit of a model to data whereas .08 show a reasonable fit.

2.6 Statistical analysis

Averages, standard deviations and 95% confidence intervals are provided for all data. Statistical tests were all performed with SPSS 25.0 (IBM, Chicago, USA). All dependent variables (IMI, EVI, KI) were tested for homogeneity of variance using Levene’s test, while normality was confirmed by visual inspection and the Shapiro-Wilk test. Significance was set at $p<0.05$.

3 RESULTS

3.1 Face validity

The experts agreed that the translations correctly and exhaustively defined the task that needed to be completed. They found the MIQ-C easy to administer and a helpful tool for assessing children’s MI abilities. A consensus of experts was reached regarding the clarity of each of the twelve descriptions.

3.2 Motor imagery scores

At Day 1 and Day 8 (Table 1), internal visual imagery had the highest overall score (IVI–Day 1: 5.32±1.09; Day 8: 5.26±1.10); in contrast, the kinaesthetic imagery score was the lowest in both assessments (KI– Day 1: 4.67±1.28; Day 8: 4.59±1.24; p≤0.001). The external visual imagery score was slightly higher at the test (5.26±1.32) compared to the re-test (5.15±1.16). The same trend is observed for IVI and KI, suggesting that no learning effect occurred. Considering each scale separately, no differences were found between scores at Day 1 and Day 8 (all ps>0.05). No differences in mean IMI, EVI, and KI values were found between gender and athletic status (Table 2).

Table 1. Descriptive statistics for the motor imagery scores: kinaesthetic and visual (internal and external) scales at Day 1 and Day 8.

Dimensions	n	Mean	Standard deviation
Day 1 (test)			
KI	100	4.67	1.28
IVI	100	5.32	1.09
EVI	100	5.26	1.32
VI-comb	100	5.29	1.08
Day 8 (re-test)			
KI	100	4.59	1.24
IVI	100	5.26	1.10
EVI	100	5.15	1.16
VI-comb	100	5.21	0.95

Legend: KI – kinaesthetic imagery; n – number of investigated subjects; IVI – internal visual imagery; EVI – external visual imagery; VI-comb – combined results of both the IVI and EVI

A summary of the mean scores, the standard deviations, and the minimum and maximum scores of the 100 participants at Day 1 is shown in Table 3.

Table 2. Table 2. Differences in imagery ability scores for kinaesthetic and visual (internal and external) scales considering participants' gender and athletic status. Data were presented as Means ± Standard Deviations (SD) for all participants assessed in Day 1 (n=100).

Dimensions	Category	Number of subjects	Mean±SD	P value between groups
KI	**Gender**			
	females	50	4.49±1.35	
	males	50	4.84±1.21	0.970
	Athlete or non-athlete			
	athlete	39	4.91±1.31	
	non-athlete	61	4.50±1.24	0.083
IVI	**Gender**			
	females	50	5.36±1.07	
	males	50	5.28±1.13	0.388
	Athlete or non-athlete			
	athlete	39	5.34±1.02	
	non-athlete	61	5.25±1.13	0.661
EVI	**Gender**			
	females	50	5.16±1.34	
	males	50	5.38±1.32	0.890
	Athlete or non-athlete			
	athlete	39	5.23±1.21	
	non-athlete	61	5.21±1.37	0.964

Legend: KI – kinaesthetic imagery; n – number of investigated subjects; IVI – internal visual imagery; EVI – external visual imagery

3.3 Internal consistency

The highest Cronbach's alpha coefficient, i.e., 0.92, was obtained for IVI, whereas the same coefficients of 0.90 were obtained for both KI and EVI. The results indicate the excellent internal consistency of the Slovenian version of the MIQ-C.

Table 3. Analysis of the means, standard deviations, minimum and maximum scores for each item at Day 1 (n=100 subjects).

Items	Scale	Mean score	Standard deviation	Minimum score	Maximum score
1	KI	4.50	1.62	1	7
2	IV	5.04	1.59	1	7
3	EVI	5.30	1.62	1	7
4	KI	4.75	1.55	1	7
5	IV	4.95	1.70	1	7
6	EVI	5.33	1.55	1	7
7	KI	4.76	1.66	1	7
8	IV	5.60	1.36	1	7
9	EVI	5.13	1.70	1	7
10	KI	4.67	1.62	1	7
11	IV	5.70	1.27	1	7
12	EVI	5.30	1.67	1	7

Legend: KI – kinaesthetic imagery; n – number of investigated subjects; IVI – internal visual imagery; EVI – external visual imagery

3.4 Test-retest reliability

The ICC (relative reliability analysis; Table 4) revealed a very high reliability for all three evaluated scales (ICCKI=0.90; ICCIVI=0.92; ICCEVI=0.90). The average coefficient of variation ranged from 6.4% (EVI) to 10.6% (KI).

Table 4. Between Day 1 and Day 8 reliability analysis of the kinaesthetic and visual (internal and external) motor imagery scales.

Variable	Day 1	Day 8	P_{ANOVA}	CV (%)	MDC	SEM	ICC (95% CI)
KI	4.67±1.28	4.59±1.24	0.296	10.5	0.56 points	0.40	0.90 (0.86-0.94)
IVI	5.32±1.09*	5.26±1.10*	0.308	7.0	0.44 points	0.31	0.92 (0.87-0.94)
EVI	5.26±1.32*	5.15±1.16*	0.132	6.4	0.55 points	0.39	0.90 (0.85-0.93)

Legend: P_{ANOVA} - P value of repeated measures analysis of variance; CV – within subject coefficient of variation; MDC – minimal detectable change; SEM – standard error of estimate; ICC (95% CI) – intra-class correlation coefficient with 95% confidence intervals; * significantly different from KI

3.5 Construct validity

After exploratory factor analysis, three factors can be distinguished that explain 62% of the variance (Table 5). To further confirm our findings, the three-factor models were tested with confirmatory factor analysis. MODEL 1 represents the correlated trait-correlated uniqueness model with IVI, EVI, and KI as separate factors, whereas MODEL 2 corresponds to the correlated trait-correlated uniqueness model with external and internal visual imagery perspectives on one factor and KI on the other. MODEL 3 shows the correlated trait-correlated uniqueness model with IVI and KI on one factor and external visual imagery on the other. Detailed results are presented in Table 6. Similar results were found in a previous study conducted among Slovenian-speaking adults (25). In both studies, MODEL 1 with IVI, EVI, and KI as separate factors produced the best model fits. While the fit indices were lower in some cases (e.g., RMSEA), the results still depict a reasonable approximation fit. Both the first and second models are represented graphically in Figure 1.

Table 5. Results of exploratory factor analysis for the Slovenian version of the MIQ-C.

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	CV (%)	% of Variance	Cumulative %
1	4.928	41.068	41.068	4.928	41.068	41.068
2	1.487	12.392	53.461	1.487	12.392	53.461
3	1.029	8.578	62.039	1.029	8.578	62.039
4	0.975	8.128	70.167			
5	0.693	5.772	75.938			
6	0.642	5.350	81.289			
7	0.560	4.665	85.954			
8	0.460	3.830	89.784			
9	0.405	3.375	93.159			
10	0.370	3.083	96.242			
11	0.260	2.163	98.405			
12	0.191	1.595	100.000			

Table 6. MIQ-C confirmatory factor analysis goodness-of-fit indices for the models with a proper solution.

Model	Chi^2	df	p	CFI	TLI	RMR/SRMR	RMSEA
Present Study							
MODEL 1 (EVI vs. IVI vs. KI)	94.924	51	<0.001	0.90	0.87	0.114	0.09
MODEL 2 (EVI and IVI vs. KI)	115.028	53	<0.001	0.86	0.82	0.130	0.11
MODEL 3 (IVI and KI vs. EVI)	135.022	53	<0.001	0.81	0.77	0.162	0.12
Previous Study (25)							
MODEL 1 (EVI vs. IVI vs. KI)	75.403	51	0.015	0.94	0.93	0.108	0.07
MODEL 2 (EVI and IVI vs. KI)	91.36	53	0.001	0.91	0.89	0.120	0.09
MODEL 3 (IVI and KI vs. EVI)	191.10	53	<0.001	0.67	0.59	0.332	0.18

Legend: KI – kinaesthetic imagery; IMI – internal visual imagery; EVI external visual imagery; Chi^2 – chi-squared test; df – degrees of freedom; p – statistical significance of test; CFI – Comparative Fit Index; TLI – Tucker-Lewis index; RMR/SRMR – Root Mean square Residual and Standardized RMR; RMSEA – Root Mean Square Error of Approximation

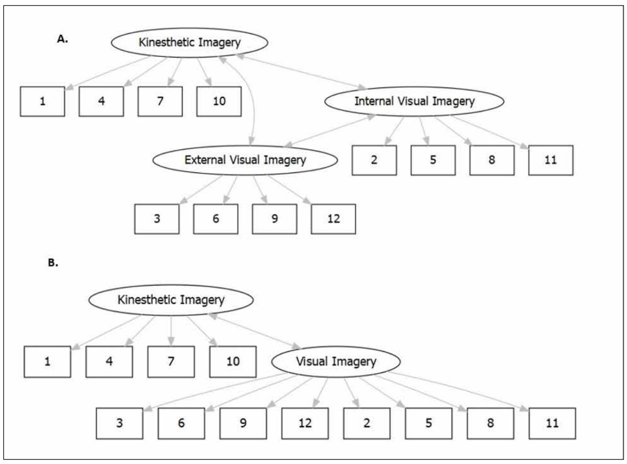

Figure 1. Exploratory factor analysis for the Slovenian version of the MIQ-C. MIQ-C confirmatory factor analysis goodness-of-fit indices for the models with a proper solution. The graphic representation of two models tested by the confirmatory factor analysis: A) MODEL 1 is the correlated trait– correlated uniqueness model with IVI, EVI, and KI all as separate factors and B) MODEL 2 is the correlated trait-correlated uniqueness model with EVI and IVI perspectives as one factor and KI as another. The numbers in the rectangles represent the number of items in the questionnaire, and in the ellipses are the names of the factors. Best model fits were achieved with Model 1 (three-factor model with IVI, EVI and KI all as separate factors).

4 DISCUSSION

The aim of this study was to validate the Slovenian translation of the MIQ-C for use with Slovenian-speaking children aged 7-12 years. Our results show excellent internal consistency (≥0.90) and very high reliability (all ICCs≥0.90) for all three evaluated scales (i.e., IVI, EVI, and KI). The construct validity of the MIQ-C confirmed its three-dimensional structure, with the best model representing each factor separately as IVI, EVI, and KI. In addition, the results reveal no differences between gender, athletic status, and time (i.e., Day 1 and Day 8).

Confirmatory factor analysis showed that the three-factor model produced the best model fit. The same results were obtained in adult assessments (26, 27) suggesting that IVI, EVI, and KI are distinct constructs in both primary school-aged children and adults. Compared with the model fit of Paravlic's MIQ-3 (26) and Williams et al.'s MIQ-R (27), the model fit of MIQ-C was slightly worse, but still excellent. Our findings support previous research with children (12) and point to the benefits of using the MIQ-C as a comprehensive assessment of MI abilities.

Consistent with the original validation study of the MIQ-C (12), children achieved the lowest scores when using KI when compared to IVI and EVI, supporting the notion that including kinaesthetic aspects in the mental representation is difficult. The same results were obtained in children with developmental coordination disorders (28, 29), highlighting the relationship between the maturation process (as a limiting factor) and the kinaesthetic MI modality, regardless of the child's health status. The maturation process theory is also supported by a meta-analysis showing that the neural network is more involved in action sensing compared to visual representation (30). Neural plasticity resulting from motor skill training appears to influence the development of KI (31). Accordingly, our results suggest that children who participate in a regular training process tend to score higher on KI. Although not significant, the trend visibly differs from that of the IVI and EVI. The fact that athletes can more easily imagine things from a kinaesthetic perspective has already been demonstrated using the MIQ-3 questionnaire (32), but no previous attempt to apply this instrument has yet been conducted with children. Our results are the first to suggest that regular training provides a variety of motor experiences that allows children to develop their abilities to efficiently perceive kinaesthetic sensations. Further studies using neurophysiological measures in children (e.g., fMRI) should support our behavioral findings.

Of the two visual modalities, IVI was found to be the easiest, although no significant difference was found between them. In contrast to the results of the present study, Martini et al. (2) found a significant difference between IVI and EVI, with children reporting that they visualized more easily with the external modality. When commenting on the different visual modalities, a large number of children noted similarities between IVI and first-person shooter games. Rapid advances in gaming technology, particularly in the last five years, may explain why the internal MI modality was easier to elicit. Consistent with previous studies conducted with adults (26, 27) and children (12), we found no gender differences in MIQ-C scores, regardless of the imagery modality. Unfortunately, in the current study no light could be shed on age as a differentiating factor in reported imagery experiences, as the group was very homogeneous. Only eight children were assessed in the 7- to 8-year-old age group, while most children aged were aged 9 years or older.

Several limitations are acknowledged in the study. Since our study did not examine a sufficient number of 7- to 8-year-old children, the validation of our results for this age group needs to be viewed critically due to the small sample size. In addition, the cutoff of six months based on athletic status may not indicate the time required to gain the practice-based experience necessary to improve MI ability. For the same reason, we were unable to assess age-related differences between the different MI modalities. Future studies should therefore recruit a more heterogeneous sample to obtain valid age-related findings on MI performance.

5 CONCLUSIONS

MI has been shown to improve motor skill learning and performance. In order to effectively assess MI ability in Slovenian-speaking children, the present authors conducted a linguistic validation study of the MIQ-C. The Slovenian translation of the MIQ-C proved to be a valid, reliable, and accurate instrument for assessing the abilities of MI in Slovenian-speaking children aged 7-12 years. Furthermore, we have shown that the MIQ-C is able to distinguish between different MI modalities which supports its application for further testing and use in (mental) rehabilitation and training practice.

ACKNOWLEDGEMENTS

We are sincerely grateful to the children and their parents for generously giving their time to participate in this study. We also want to thank Dr. Miloš Kalc for his valuable suggestions on statistical analysis, which greatly contributed to the quality of our research.

CONFLICTS OF INTEREST

The authors declare that no conflicts of interest exist.

FUNDING

The authors acknowledge the financial support from the Slovenian Research Agency (research core funding No. P5-0381). This study was also supported by the European Union's Horizon 2020 research and innovation programme under grant agreement no. 952401 (TwinBrain – TWINning the BRAIN with machine learning for neuro-muscular efficiency).

ETHICAL APPROVAL

Research has been performed in accordance with the Declaration of Helsinki. The study protocol was approved (ID: 0624-65/22) by the Science and Research Centre Koper Ethics Committee.

AVAILABILITY OF DATA AND MATERIALS

The data and materials utilized in this study were collected, anonymized, and securely stored in a coded access personal computer at the facilities of the Science and Research Centre Koper. Requests for data availability should be discussed with the project team and will be considered on a reasonable basis.

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