Kinesiology education and sports

How to encourage physical activity, sports spirit and fair play in children and youth? How to apply kinesiological principles and methods in the development of sports skills and abilities? How to use sports and recreation as a means of promoting health?

Section Editor: izv. prof. dr. sc. Marijana Hraski; doc. dr. sc. Mateja Kunješić Sušilović

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Differences in the manifestation of undesirable behavior in early school-age children during the performance of kinesiology activities with regard to gender

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Abstract

The goal of the research is to determine whether there are statistically significant differences in the frequency of occurrence of unacceptable forms of behavior during the implementation of kinesiology activities among early school-aged students, with regard to the gender of the respondents.
The research was conducted on 199 students of the fourth grade of primary education in elementary schools in Zadar County. Considering the criterion of the respondents gender, the sample was divided into two sub-samples; girls: N= 104 and boys N= 95. The frequency of occurrence of unacceptable forms of behavior was examined with an appropriate questionnaire designed for the purpose of conducting research. The statements in the questionnaire are divided into four scales: the scale of inappropriate verbal expression, the scale of aggressiveness, the scale of attitudes towards authorities - the teacher, the scale of attitudes towards authorities - parents and the scale of negligence towards obligations (at school and in the family). Research participants expressed the frequency of occurrence of unacceptable behavior on a scale ranging from 1 to 5 (1 – never; 2 – rarely; 3 – sometimes; 4 – often; 5 – always). Differences according to the sex of the subjects were tested with the Mann Whitney U test.
The research results indicate that there are statistically significant differences in the frequency of implementation of unacceptable forms of behaviour during kinesiology activities between boys and girls in primary education. According to the mentioned results, boys, compared to girls, show a higher frequency of unacceptable behaviour on all scales.
The obtained research results point to the fact that when designing and implementing interventions aimed at reducing unacceptable forms of behaviour, special attention should be directed towards boys.

Key words

aggressiveness; behaviour; inappropriate differences; negligence; students

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Sažetak

Cilj je istraživanja utvrditi postoje li statistički značajne razlike u učestalosti pojave neprihvatljivih oblika ponašanja tijekom provedbe kineziološkiih aktivnosti kod učenika rane školske dobi s obzirom na spol ispitanika.
Istraživanje je provedeno na 199 učenika četvrtih razreda primarnoga obrazovanja osnovnih škola Zadarske županije. S obzirom na kriterij podjele prema spolu ispitanika, uzorak je podijeljen na dva poduzorka; djevojčice: N = 104 i dječaci N = 95. Učestalost pojave neprihvatljivih oblika ponašanja ispitana je prigodnim upitnikom koji je osmišljen u svrhu provedbe istraživanja. Tvrdnje unutar upitnika podijeljene su na četiri skale: skalu nedoličnoga verbalnog izražavanja, skalu agresivnosti, skalu odnosa prema autoritetima - učitelju, skalu odnosa prema autoritetima – roditeljima i skalu nemarnosti prema obvezama (u školi i u obitelji). Sudionici istraživanja izražavali su učestalost pojave neprihvatljivih ponašanja na skali raspona od 1 do 5 (1 – nikad; 2 – rijetko; 3 – ponekad; 4 – često; 5 – uvijek). Razlike prema spolu ispitanika testirane su Mann Whitney U testom.
Rezultati istraživanja pokazuju kako postoje statistički značajne razlike učestalosti provedbe neprihvatljivih oblika ponašanja tijekom provođenja kineziološkiih aktivnosti između dječaka i djevojčica primarnoga obrazovanja. Prema navedenim rezultatima dječaci, u odnosu na djevojčice, pokazuju veću učestalost postojanja neprihvatljivih ponašanja na svim skalama.
Dobiveni rezultati istraživanja ukazuju na činjenicu da prilikom osmišljavanja i provedbe intervencija koje imaju za cilj reduciranje neprihvatljivih oblika ponašanja posebna pozornost treba biti usmjerena prama dječacima.

Ključne riječi

agresivnost; nemarnost; neprimjereno ponašanje; razlike; učenici

How child’s gender and parents’ gender affect the play and physical activity of early and preschool age children / Kako spol djeteta i spol roditelja utječe na igru i fizičku aktivnost djece

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Abstract

Girls and boys differ not only physically, psychologically, and sociologically, but also in the way and in the approach to a particular type of play.
The paper contains research related to play and physical activity of early and preschool age children. The paper states the differences between boys and girls during different types and places of play and how parents' gender affects play and physical activity of early and preschool age children.
Research has shown that there are certain differences between boys and girls in the way they play, the choice of games, according to the choice of activities, locations, props, and devices. The outdoor play of boys and girls has certain similarities and differences. Research suggests that boys and girls are equally physically active when playing outdoors. Rough play is characteristic for boys, but girls are also involved in this form of play. Girls' rough play differs from boys' rough play. Boys will be more physically active and spend more time playing when they have props.
Just as there is a difference in the way boys and girls play, research shows that there is a difference between the way the father and mother approach play with the child. Fathers may encourage physical play a little more and involve children in it more, while mothers will prefer quieter games and activities. Certain studies have shown that fathers participate more in physical play with children than mothers, while others have shown that both parents participate equally or even that mothers participate more than fathers. Considering the different results of research on the involvement of parents in children's physical play, this could perhaps lead us to a general conclusion that in fact there is no difference. However, in everyday situations, it could still be stated that fathers participate more in physical play with children. Research shows that a parents' physical play with a child can encourage and improve the child's cognitive, language, and motor development.
Considering the research mentioned in this paper, it can be said that nowadays mothers and fathers generally play almost the same games with their children, the only question is how they approach the game itself.
Various studies point to the conclusion that fathers will encourage children's gender-stereotyped play much more than mothers and that fathers are more inclined to risk and perform risky activities, but the actual application of these attitudes in everyday life situations may be questionable. Fathers believe that children should engage in risky situations and gain certain experiences in that way, but it is still too dangerous for them to implement them in real game situations.
Both parents should be equally involved in all aspects of the child's care and upbringing, which also applies to the field of play. Each parent has a different approach to play and the way they will play with their child, which contributes to the enrichment of the child's emotional and social knowledge and the development of motor and cognitive skills and abilities.

Key words

differences between boys and girls, differences between fathers and mothers, physical activity, play

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Sažetak

Djevojčice i dječaci ne razlikuju se samo fizički, psihološki i sociološki nego i u načinu i pristupu pojedinoj vrsti igre.
U radu su navedena istraživanja koja su se odnosila na igru i fizičku aktivnost djece rane i predškolske dobi. U radu se navode razlike između dječaka i djevojčica tijekom različitih vrsta i mjesta za igru te kako spol roditelja utječe na igru i fizičku aktivnost djece rane i predškolske dobi.
Istraživanja su pokazala da između dječaka i djevojčica postoje određene razlike u načinu igre, izboru igara, prema odabiru aktivnosti, lokaliteta, rekvizita i sprava. Igra dječaka i djevojčica na otvorenom ima određenih sličnosti i razlika. Istraživanja upućuju na to da su dječaci i djevojčice podjednako fizički aktivni kada provode igru na otvorenom. Gruba je igra karakteristična za dječake, ali se u takav oblik igre uključuju i djevojčice. Gruba igra djevojčica se razlikuje od grube igre dječaka. Dječaci će biti fizički aktivniji i više će vremena provoditi u igri kada imaju rekvizite.
Kao što se razlikuje način provođenja igre dječaka i djevojčica, istraživanja pokazuju da se razlikuje način i pristup igri s djetetom između oca i majke. Očevi će možda malo više poticati fizičku igru te će u nju više uključivati djecu, dok će majke preferirati mirnije igre i aktivnosti. Pojedina su istraživanja pokazala da očevi u odnosu na majke više sudjeluju u fizičkoj igri s djecom, dok su druga pokazala da oba roditelja sudjeluju podjednako ili čak da majke sudjeluju više u odnosu na očeve. Uzevši u obzir različito dobivene rezultate istraživanja o uključenosti roditelja u fizičku igru djece to bi nas moglo usmjeriti prema možda općem zaključku da zapravo razlike i ne postoje. Međutim, razmišljajući o svakodnevnim situacijama moglo bi se ipak ustvrditi da očevi više sudjeluju u fizičkoj igri s djecom. Istraživanja pokazuju da fizička igra roditelja s djetetom može potaknuti i unaprijediti djetetov kognitivni, jezični i motorički razvoj.
Uzevši u obzir istraživanja koja su navedena u ovom radu može se reći da majka i otac općenito u današnje vrijeme provode gotovo iste igre s djecom, samo je pitanje na koji način pristupaju samoj igri.
Različita istraživanja upućuju na zaključak da će očevi mnogo više poticati kod djece spolno stereotipnu igru nego majke te da su očevi skloniji riziku i izvođenju rizičnih aktivnosti, ali stvarna primjena tih stavova u svakodnevnim životnim situacijama možda je upitna. Očevi smatraju da bi se djeca trebala upuštati u rizične situacija i tako stjecati određena iskustva, ali im je to ipak preopasno da se stvarno realizira u realnim situacijama igre.
Oba roditelja trebala bi se podjednako uključiti u sve aspekte brige i odgoja djeteta što se odnosi i na područje igre. Svaki roditelj ima drugačiji pristup igri i način kako će ju provoditi s djetetom što pridonosi obogaćivanju djetetovih emocionalnih i socijalnih spoznaja te razvoju motoričkih i kognitivnih vještina i sposobnosti.

Ključne riječi

fizička aktivnost; igra; razlike dječaka i djevojčica, razlike očeva i majki

Implementation of physical and health education in primary education / Provedba nastave tjelesne i zdravstvene kulture u primarnom obrazovanju

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Abstract

The goal of this quantitative research is to examine the opinions of classroom teachers about the frequency of physical and health education classes in primary education and the role of teachers' kinesiology competencies, social support, as well as the material working conditions necessary for the implementation of physical and health education classes in primary education. A research study involving 120 classroom teachers from several counties in Croatia during the 2023/2024 school year will examine the relationship between teachers' kinesiology competences, material working conditions, social support, and the frequency of implementing physical and health education classes in primary education. For the purposes of this research, the TZK 99 questionnaire (Petračić, 2023) was modified and contains three parts, i.e. the factors are divided into three categories: 1) kinesiological competences, 2) social support, and 3) material working conditions, with answers given on a Likert scale. Descriptive statistical indicators will be calculated for all variables, while the connection between certain factors and the frequency of physical education classes will be determined by correlation analyses, and the contribution of kinesiology competences, social support and material working conditions to the prediction of the implementation of physical and health education classes in primary education will be determined by hierarchical regression analysis. Given that there are home and regional schools in the Republic of Croatia and their equipment differs from county to county, different results are expected in terms of material working conditions and social support.

Key words

classroom teachers, kinesiology competences, lifelong learning, physical exercise, TK curriculum, supporting factors

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Sažetak

Cilj je ovoga kvantitativnoga istraživanja ispitati mišljenja učitelja razredne nastave o učestalosti provedbe nastave tjelesne i zdravstvene kulture u primarnom obrazovanju te ulogu kineziološkim kompetencija učitelja, socijalne podrške, kao i materijalnih uvjeta rada potrebnih za provedbu nastave tjelesne i zdravstvene kulture u primarnom obrazovanju. Na uzorku od 120 ispitanika učitelja razredne nastave iz nekoliko županija Republike Hrvatske u školskoj godini 2023./2024. koji rade u matičnim i područnim školama testirat će se hipoteze povezanosti između kineziološkim kompetencija učitelja, materijalnih uvjeta rada i socijalne podrške s učestalosti provedbe nastave tjelesne i zdravstvene kulture u primarnom obrazovanju. Za potrebe ovoga istraživanja modificiran je upitnik TZK 99 (Petračić, 2023) koji sadrži tri dijela, tj. čimbenici su podijeljeni u tri kategorije: 1) kineziološke kompetencije, 2) socijalna podrška i 3) materijalni uvjeti rada, uz primjenu Likertove ljestvice. Za sve varijable izračunat će se deskriptivni statistički pokazatelji, dok će povezanost između određenih čimbenika i učestalosti provedbe nastave TZK biti utvrđena korelacijskim analizama, a doprinos kineziološkim kompetencija, socijalne podrške i materijalnih uvjeta rada predikciji provedbe nastave tjelesne i zdravstvene kulture u primarnom obrazovanju hijerarhijskom regresijskom analizom. S obzirom na to da u Republici Hrvatskoj postoje matične i područne škole te je njihova opremljenost različita od županije do županije očekuju se različiti rezultati kod materijalnih uvjeta rada i socijalne podrške.

Ključne riječi

cjeloživotno učenje; kineziološke kompetencije; kurikul TZK; podržavajući čimbenici; tjelesno vježbanje; učitelji razredne nastave

Construction of a specific test for coordination assessment in rhythmic gymnastics / Konstrukcija specifičnoga testa za procjenu koordinacije u ritmičkoj gimnastici

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Abstract

Rhythmic gymnastics is a conventional sport that contains its own artistic component. In addition to skillfully manipulating the five required apparatus, rhythmic gymnasts must also control their body movements in harmony with the music to create a unified and aesthetically pleasing performance. The same requires great coordination ability, as one of the most important motor abilities in rhythmic gymnastics. The aim of this paper was to construct a coordination assessment test applicable specifically to rhythmic gymnastics. The sample consisted of 40 rhythmic gymnasts aged 9-12. For coordination assessment, three previously developed tests and one newly constructed test were used: "Side gallop with rope". The results show that the newly constructed test measures the coordination necessary for the successful performance in rhythmic gymnastics, but only in the observed sample. There is a statistically significant difference between individual measurements ($p<0.05$) and a statistically significant correlation ($p<0.001$), therefore this test is considered reliable. It would be good to implement the newly constructed test when selecting children for the rhythmic gymnastics program, as well as during transition measurements in the training process.

Key words

metric characteristics, motor abilities, newly developed test, rhythmic gymnasts

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Sažetak

Ritmička gimnastika je konvencionalni sport koji ima svoju umjetničku komponentu. Osim što manipulira s pet rekvizita prateći ritam i tempo glazbe, ritmičarka kontrolira zadane pokrete tijelom, što čini jedinstvo u ljepoti izvedbe. Za isto je potrebna velika sposobnost koordinacije, kao jedne od najvažnijih motoričkih sposobnosti u ritmičkoj gimnastici. Cilj rada bio je konstruirati test za procjenu koordinacije primjenjiv specifično za ritmičku gimnastiku. Uzorak ispitanica činile su 40 ritmičarki u dobi od 9 do 12 godina. Koordinacija je procijenjena s već tri poznata testa i jednim novokonstruiranim testom Galop strance kroz vijaču. Rezultati pokazuju da isti procjenjuje koordinaciju potrebnu za uspješnu izvedbu elemenata u ritmičkoj gimnastici, no samo na promatranom uzorku ispitanica. Postoji statistički značajna razlika između pojedinih mjerenja ($p < 0,05$) i statistički značajna korelacija ($p < 0,001$), stoga se ovaj test smatra pouzdanim. Bilo bi dobro da se novi test implementira pri odabiru djece za selekciju u ritmičkoj gimnastici kao i kod prolaznih mjerenja u trenažnom procesu.

Ključne riječi

metrijske karakteristike; motoričke sposobnosti; novokonstruirani test; ritmičarke

The influence of sports on the motor development of preschool children / Utjecaj sporta na motorički razvoj djece predškolske dobi

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Abstract

Involving children in sports at an early age contributes to their physical and mental health. The motor skills that children develop during childhood greatly influence their abilities later in life. Although it is known that physical activity is one of the most important factors for the healthy development of children, some studies show that more and more children are insufficiently active, which results in obesity and numerous other health losses. It is extremely important to educate parents and educators about the importance of sports, its contribution to a better quality of life, and the benefits children achieve by engaging in physical activity or sports. Therefore, the goal of this research was to determine the current state of motor skills of preschool children and whether there is a difference in the motor skills of children who play sports and those who do not play any sport. The research involved 40 children from a Zagreb kindergarten, aged 5 to 6.5. Within the research, an affirmative hypothesis was put forward, which shows that there are differences in motor skills between preschool children who play sports and those who do not, in favor of those who play sports. This hypothesis was partially confirmed since the child athletes showed better motor skills in four measured variables, namely: back bend polygon, sit-ups in 30 seconds, standing long jump and hand tapping. In the two measured variables, the results show that there is no statistically significant difference between athletes and non-athletes, namely: standing on one leg on a cube and torso forward bend. While the statistical analysis did not reveal significant differences between athletes and non-athletes in the two measured variables, athletes consistently outperformed their non-athlete peers. This suggests that sports undoubtedly have a positive impact on children's motor skills, emphasizing the importance of encouraging children to participate in physical activities whenever possible.

Key words

motor skills, parental support, quality of life

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Sažetak

Uključivanje djece rane dobi u sport doprinosi njihovom fizičkom i psihičkom zdravlju. Motoričke sposobnosti koje dijete razvija tijekom djetinjstva uvelike utječu na njegove sposobnosti u daljnjem životu. Iako je poznato da je tjelesna aktivnost jedna od najvažnijih čimbenika za zdrav razvoj djece, neka istraživanja pokazuju da je sve više djece nedovoljno aktivno što rezultira pretilošću i brojnim drugim gubitcima za zdravlje. Iznimno je bitno educirati roditelje i odgojitelje o važnosti sporta, na koji način on pridonosi boljoj kvaliteti života te koje sve benefite djeca ostvaruju baveći se nekom tjelesnom aktivnošću odnosno sportom. Stoga je cilj ovoga istraživanja bio utvrditi aktualno stanje motoričkih sposobnosti djece predškolske dobi te postoji li razlika u motoričkim sposobnostima djece koja se bave sportom i one djece koja se ne bave ni jednim sportom. U istraživanju je sudjelovalo 40 djece jednoga zagrebačkog dječjeg vrtića, u dobi od 5 do 6,5 godina. Unutar istraživanja postavljena je afirmativna hipoteza koja pokazuje da postoji razlika u motoričkim sposobnostima između predškolske djece koja se bave i koja se ne bave sportom u korist djece koja treniraju neki sport. Ova hipoteza djelomično je potvrđena zbog toga što su djeca sportaši pokazali bolje motoričke sposobnosti u 4 mjerene varijable, a to su: poligon natraške, trbušnjaci u 30 sekundi, skok u dalj iz mjesta te taping rukom. U dvije mjerene varijable rezultati pokazuju da nema statistički značajne razlike između sportaša i nesportaša, a to su: stajanje na jednoj nozi na kocki i pretklon trupa. Iako je u dvije mjerene varijable pokazano da statistički nema velike razlike između sportaša i nesportaša rezultati su ipak bili bolji kod sportaša što dokazuje da sport nedvojbeno utječe na motoričke sposobnosti djece te da bi odrasli trebali poticati djecu kada je god to moguće da se uključe u sportsku ili na bilo kakvu tjelesnu aktivnost.

Ključne riječi

kvaliteta života; motoričke sposobnosti; podrška roditelja

Physical activity as educational value / Tjelesna aktivnost kao odgojna vrijednost

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Kinesiology education and sports | **Number of the paper: 176**

Abstract

The aim of this work is the analysis of upbringing or educational values from the aspect of physical activity with the aim of obtaining the best possible information about the creation of a healthy lifestyle for students. Physical movement is considered one of the most important human life needs. The fact itself, which has been scientifically proven in numerous previous studies, indicates that people today engage in insufficient physical activity, directly putting their health at risk. Physical inactivity has reached the proportions of a pandemic occurring in the lives of young people today. A review of previous research revealed that physical activity and sedentary behavior are strong predictors of compromised health in children and young people. Education is one of the components of educational systems whose values would try to instill the habit of lifelong physical exercise. Students' continuous participation in physical activity can only be achieved with physical exercise content that will cause a feeling of motivation and satisfaction. These facts are observed through the prism of each child's or student's progress, and the discussion revolves around whether the education system can provide children and students with the opportunity to adopt educational values for physical exercise. The important role of upbringing in physical education is emphasized, considering all the facts, thus ensuring a better, higher-quality, and healthier future for children of all age groups, as well as for society. Children today are surrounded by countless modern sources that offer access to numerous varied contents in a short time. Due to the large number of these contents, they do not focus and concentrate on anything for long periods. The inability to maintain attention and concentration makes it difficult to master educational content, necessitating the introduction of shorter physical activities during the teaching process that will contribute to their concentration and motivation.

Key words

health, physical education, physical exercise, school, upbringing

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Kineziološka edukacija i sport	**Broj rada: 176**	

Sažetak

Cilj je ovoga rada analiza odgoja odnosno odgojnih vrijednosti s aspekta tjelesne aktivnosti s ciljem dobivanja što kvalitetnijih informacija o stvaranja zdravoga životnog stila učenika. Tjelesno kretanje odnosno aktivnost smatra se jednom od najvažnijih ljudskih životnih potreba. Sama činjenica koja je znanstveno dokazana u brojnim dosadašnjim istraživanjima odnosi se na to da se suvremeni čovjek nedovoljno kreće i da time direktno svoje zdravlje dovodi u zdravstveni rizik. Tjelesna neaktivnost zauzela je razmjere pandemije koja je danas osobito uočljiva u životu mladih. Pregledom dosadašnjih istraživanja utvrđeno je da su tjelesna aktivnost i nekretanje jedan od snažnih prediktora narušenoga zdravlja djece i mladih. Odgoj je jedna od komponenti obrazovnih sustava pomoću čijih bi se vrijednosti pokušalo usaditi stvaranje navike cjeloživotnoga tjelesnog vježbanja. Kontinuirano participiranje u tjelesnoj aktivnosti učenika moguće je ostvariti samo sadržajima tjelesnoga vježbanja koji će izazvati osjećaj motiviranosti i zadovoljstva. Navedene činjenice promatraju se kroz prizmu napretka svakog djeteta odnosno učenika te se raspravlja može li se kroz školski sustav pružiti djeci i učenicima mogućnost za usvajanje odgojnih vrijednosti za tjelesno vježbanje. Naglašena je značajna uloga odgoja u tjelesnoj i zdravstvenoj kulturi uzimajući u obzir sve činjenice te se time osigurava bolja, kvalitetnija i zdravija budućnost djece svih dobnih skupina, ali i cjelokupnoga društva. Djeca današnjice okružena su bezbrojnim suvremenim izvorima koji im nude da u kratkom vremenu pristupe velikom broju različitih sadržaja. Zbog brojnosti tih sadržaja ni na čemu ne zadržavaju pozornost i koncentraciju dulje vrijeme. Nemogućnost zadržavanja pažnje i koncentracije otežava savladavanje obrazovnih sadržaja te je potrebno uvoditi kraće tjelesne aktivnosti tijekom nastavnoga procesa koje će doprinijeti njihovoj koncentraciji, ali i motiviranosti.

Ključne riječi

odgoj; škola; tjelesna i zdravstvena kultura; tjelesno vježbanje;, zdravlje

The relationship between diet, leisure-time habits, and the physical fitness of students enrolled in Military Studies at the University of Zagreb

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Kinesiology education and sports | **Number of the paper: 177**

Abstract

The aim of the research was to establish the relationship between diet, lifestyle habits during leisure time, and the physical fitness of students of Military Studies at the University of Zagreb. A total of 206 participants, comprising 159 males and 47 females, were included in the study.
The participants completed a questionnaire regarding the frequency of consumption of various foods, a survey on physical activity during leisure time, and inquiries about certain lifestyle habits. The overall result of the physical fitness test, conducted as part of the Physical and Health Education curriculum, served as the measure of physical fitness. Regression and covariance analyses were conducted to examine the relationship between physical activity during leisure time, dietary behaviors, and physical fitness. Additionally, differences in physical fitness based on the frequency of consumption of specific foods were explored.
The findings indicated that the model incorporating physical activity during leisure time, attention to the consumption of healthy foods, and the use of dietary supplements significantly predicted participants' physical fitness. Notably, the use of dietary supplements emerged as a significant factor, with supplement users demonstrating higher physical fitness test scores.
Furthermore, participants who reported daily consumption of desserts, sweets, and fast food tended to achieve slightly lower physical fitness test results, even when controlling for their level of physical activity during leisure time.

Key words

dietary supplements, functional abilities, motor skills, smoking, physical activity

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Kineziološka edukacija i sport	**Broj rada: 177**	

Sažetak

Cilj istraživanja bio je ustanoviti vezu između prehrane i nekih životnih navika u slobodno vrijeme te tjelesne spremnosti studenata Vojnih studija Sveučilišta u Zagrebu. U istraživanje je bilo uključeno 206 sudionika, 159 muškoga i 47 ženskoga spola.
Sudionici su ispunjavali upitnik o učestalosti konzumacije različitih namirnica, upitnik o tjelesnoj aktivnosti u slobodno vrijeme, nekim životnim navikama, dok se kao tjelesna spremnost koristio ukupni rezultat na testu tjelesne spremnosti koji se za studente provodi na nastavi tjelesne i zdravstvene kulture.
Provedene su regresijska analiza i analize kovarijance pri čemu se testirala povezanost tjelesne aktivnosti u slobodno vrijeme i nekih ponašanja vezanih u prehranu s tjelesnom spremnošću te razlika u tjelesnoj spremnosti ovisno o učestalosti konzumacije pojedinih namirnica.
Rezultati su pokazali da model koji uključuje tjelesnu aktivnost u slobodno vrijeme pozornost usmjerenu na unos zdravih namirnica i korištenje suplemenata značajno predviđa tjelesnu spremnost sudionika. Prvenstveno se pokazalo značajnim korištenje suplemenata u prehrani pri čemu sudionici koji koriste suplemente, postižu više rezultate na testu tjelesne spremnosti.
Također, sudionici koji na dnevnoj bazi konzumiraju deserte i slastice te brzu hranu, postižu nešto niže rezultate na testu tjelesne spremnosti čak i kad se njihova tjelesna aktivnost u slobodno vrijeme drži pod statističkom kontrolom.

Ključne riječi

dodatci prehrani; funkcionalne sposobnosti; motoričke sposobnosti; pušenje; tjelesna aktivnost

Metric characteristics of tests of ball handling skills in preschool age / Metrijske karakterstike testova vještine baratanja loptom u predškolskoj dobi

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Kinesiology education and sports | **Number of the paper: 178**

Abstract

The aim of the research was to verify the metric characteristics of motor tests for assessing ball handling skills from the TGMD-2 battery in preschool children. The research was conducted on a sample of 30 children, of which 15 were girls and 15 were boys between 5 and 7 years of age. The level of ball handling skill was checked with three tests (out of 5 possible) that form part of the battery for the assessment of gross motor skills based on effective object control, namely: guiding the ball with the hand in place, kicking the ball with leg and catching the ball with two hands. The tests of hitting the ball with a bat with two hands (hitting in baseball) and throwing the ball into the wall were omitted because, according to the authors, the rotational technique of performing the movement was demanding. Children of this age do not have enough prior knowledge to properly perform the mentioned technique, and this could adversely affect the test results. The results showed satisfactory values of the metric characteristics of the tests and confirmed their possibility of use for further research on our population as well.

Key words

children, motor skill, TGMD -2 battery of tests

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Sažetak

Cilj istraživanja bio je provjera metrijskih karakteristika motoričkih testova za procjenu vještine baratanja loptom iz TGMD-2 baterije kod djece predškolske dobi. Istraživanje je provedeno na uzorku od 30 djece od čega je 15 djevojčica i 15 dječaka u dobi od 5 do 7 godina. Razina vještine baratanja loptom provjerena je s tri testa (od 5 mogućih) koji čine dio baterije za procjenu grube motoričke vještine temeljene na učinkovitoj kontroli predmeta i to: vođenje lopte rukom u mjestu, udaranje lopte nogom i hvatanje lopte s dvije ruke. Izostavljeni su testovi udarac loptice palicom s dvije ruke (udarac u bejzbolu) i bacanje loptice u zid zbog, prema procjeni autorica, zahtjevne rotacijske tehnike izvođenja gibanja. Za pravilno izvođenje spomenute tehnike djeca ove dobi nemaju dovoljno predznanja, a to bi moglo nepovoljno utjecati na rezultate testiranja. Rezultati su pokazali zadovoljavajuće vrijednosti metrijskih karakteristika testova te potvrdili njihovu mogućnost korištenja za daljnja istraživanja i na našoj populaciji.

Ključne riječi

djeca; motorička znanja; TGMD baterija testova

Progress in individual components of physical fitness of primary education students with respect to nutritional status / Napredak u pojedinim sastavnicama tjelesnoga fitnesa učenika primarnog

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Kinesiology education and sports | **Number of the paper: 179**

Abstract

The benefits of monitoring physical fitness are multifaceted. It provides information that can be directed for prevention and improvement of health, indicates an individual's progress, and provides the ability of targeting on individual sports. The purpose of the paper is to assess the progress in individual components of physical fitness of students during the school year, and to assess the significance of differences in the progress of certain components of physical fitness with regard to nutritional status.
Methods: The study was conducted on a sample of 39 third graders of primary school (9 years ± 6 months). The motor component of physical fitness was evaluated based on hand taping tests, standing long jump, polygon backwards, sit up test, and sit and reach test. The cardiorespiratory component was evaluated using 3-minute running tests, and the morphological component based on body mass index. Basic descriptive indicators were calculated, and univariate analysis of variance was used to assess progress in individual components of physical fitness between the first and second measurements according to nutritional status.
Results: Of the total sample, 74.36% had a normal nutritional status, 20.51% were overweight, and 5.13% were obese. In the first measurement, regarding the nutritional status, a significant difference was obtained in the hand tapping test, and in the second measurement in all motor tests. Respondents with normal weight achieved the best results in tests for speed, explosive power, coordination, and repetitive power. Also, respondents with a normal nutritional status achieved the best results in tests for assessing cardiorespiratory fitness.
Conclusion: Nutritional status can be reflected on progress in certain components of physical fitness.

Key words

body mass index, functional ability, health, motor skills

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Kineziološka edukacija i sport	Broj rada: 179	

Sažetak

Praćenje tjelesnoga fitnesa višestruko je korisno jer pruža informacije koje se mogu usmjeriti za očuvanje i poboljšanje zdravlja, ukazuje na napredak pojedinca i pruža mogućnost usmjeravanja u pojedine sportove. Svrha je rada procijeniti napredak u pojedinim sastavnicama tjelesnoga fitnesa učenika tijekom školske godine te procijeniti značajnost razlika u napretku pojedinih sastavnica tjelesnoga fitnesa s obzirom na status uhranjenosti.
Metode: Istraživanje je provedeno na uzorku 39 učenika trećih razreda osnovne škole (9 godina ± 6 mjeseci). Motorička sastavnica tjelesnoga fitnesa procijenjena je temeljem testova taping rukom, skok u dalj s mjesta, poligon natraške, podizanje trupa i pretklon raznožno, kardiorespiratorna sastavnica procijenjena je testovima trčanje 3 minute, a morfološka sastavnica temeljem indeksa tjelesne mase. Izračunati su osnovni deskriptivni pokazatelji, a za procjenu napretka u pojedinim sastavnicama tjelesnoga fitnesa između prvoga i drugoga mjerenja prema statusu uhranjenosti primijenjena je univarijatna analiza varijance.
Rezultati: Od ukupnoga uzorka ispitanika 74,36 % normalno je uhranjeno, 20,51 % je prekomjerno uhranjeno, a 5,13 % pretilo. U prvom mjerenju je s obzirom na status uhranjenosti dobivena značajna razlika u testu taping rukom, a u drugom mjerenju u svim motoričkim testovima. Normalno uhranjeni ispitanici postigli su najbolje rezultate u testovima za procjenu brzine, eksplozivne snage odraza, koordinacije i repetitivne snage. Također učenici s procijenjenim normalnim statusom uhranjenosti postigli su najbolje rezultate u testovima za procjenu kardiorespiratornoga fitnesa.
Zaključak: Status uhranjenosti može se odraziti na napredak u pojedinim sastavnicama tjelesnoga fitnesa.

Ključne riječi

funkcionalne sposobnosti; indeks tjelesne mase; motoričke sposobnosti; zdravlje

Differences in the acquisition and improvement of motor tasks in students with disabilities through different learning methods / Razlike u usvajanju i usavršavanju motoričkih zadataka kod uče

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Abstract

Difficulties in acquiring and perfecting motor tasks for students with disabilities can represent a significant challenge, but with an adapted approach and support they can be overcome. This may include individualized exercises and activities that are tailored to the needs of students, the use of visual and tactile aids to support learning, and encouragement of collaboration and support between teachers and parents.
The aim of this research is to examine whether there are differences between students with disabilities in acquiring and perfecting a motor task during certain learning methods. For the purposes of the research, an evaluation questionnaire was created in the application of methodological principles of the organization of physical exercise in the teaching of physical education (PE), which is part of the institutional project "Didactic-methodological difficulties in classroom teaching with students with special educational needs. ". The sub-sample of students includes 5 groups, namely 64 students with intellectual disabilities, 51 with impaired language-speech-voice communication, 32 with ADHD, 25 with an autism spectrum disorder, while other disabilities were represented to a lesser extent and made up one group in the observed sample.
Non-parametric methods were used in the work, and the results of the Kruskal Wallis test showed that there are statistically significant differences between students with difficulties in certain methods of learning a motor task: when using the situational learning method ($\chi2(4) = 26.14$, $p = .00$) and when using the analytical method learning ($\chi2(4) = 28.79$, $p = .00$), especially for students with autism spectrum disorders.
The results show that students with disabilities, especially students with an autism spectrum disorder, need additional support in certain methods of learning motor tasks.

Key words

acquisition and improvement of the motor task, customized approach, learning methods, students with disabilities, support

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Kineziološka edukacija i sport	**Broj rada: 180**	

Sažetak

Poteškoće u usvajanju i usavršavanju motoričkih zadataka kod učenika s teškoćama mogu predstavljati značajan izazov, ali prilagođenim pristupom i podrškom mogu se prevladati. To može uključivati individualizirane vježbe i aktivnosti koje su prilagođene potrebama učenika, upotrebu vizualnih i taktilnih pomagala za potporu učenju te poticanje suradnje i podrške između učitelja i roditelja.
Cilj je ovoga istraživanja ispitati postoje li razlike između učenika s teškoćama u usvajanju i usavršavanju motoričkoga zadatka prilikom pojedinih metoda učenja. Za svrhu istraživanja osmišljen je upitnik vrednovanja u primjeni metodičkih zakonitosti organizacije tjelesnoga vježbanja u nastavi TZK koji je dio institucijskoga projekta „Didaktičko-metodičke poteškoće u razrednoj nastavi s učenicima s posebnim odgojno-obrazovnim potrebama“.
Od 309 učitelja, njih 185 trenutačno je u svojem razrednom odjelu poučavalo učenika s teškoćama. Poduzorak učenika obuhvaća 5 grupa: 64 učenika s intelektualnim teškoćama, 51 s oštećenjem jezično-govorno-glasovne komunikacije i specifičnim teškoćama učenja, 32 s ADHD-om, 25 s poremećajem iz spektra autizma, dok su ostale teškoće bile zastupljene u manjoj mjeri i sačinjavale su jednu grupu u promatranom uzorku.
U radu su korištene neparametrijske metode te rezultati Kruskal Wallis testa koji su pokazali da postoje statistički značajne razlike između učenika s teškoćama u pojedinim metodama učenja motoričkoga zadatka: prilikom situacijske metode učenja ($\chi2(4) = 2,14$, $p = ,00$) i prilikom analitičke metode učenja ($\chi2(4) = 28,79$, $p = ,00$), posebno kod učenika s poremećajem iz spektra autizma. Rezultati pokazuju da je učenicima s teškoćama, posebno učenicima s poremećajem iz spektra autizma potrebna dodatna podrška u pojedinim metodama učenja motoričkog zadatka.

Ključne riječi

metode učenja; učenici s teškoćama; usvajanje i usavršavanje motoričkoga zadatka; prilagođeni pristup; podrška

Relationship between parental upbringing style and children’s use of electronic media and their participation in kinesiology activities / Povezanost roditeljskoga odgoja s korištenjem elektro

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Kinesiology education and sports | **Number of the paper: 181**

Abstract

The aim of this study was to determine the frequency of electronic media use by primary school children and the intensity of their participation in certain physical activities, as well as to investigate the relationship between parental prohibition of electronic media use and encouraging children to participate in various leisure activities, and finally, to determine which activities children prefer in their leisure time. The research included 509 parents of primary school children in four primary schools in Zagreb County and the City of Zagreb. The research instrument was an anonymous questionnaire with a five-point Likert type scale. The data were processed by descriptive and inferential statistics, which was used to determine possible differences and a correlation and discriminant analysis. The results revealed statistically significant differences between parents who restrict their children’s access to electronic media and those who do not. What distinguishes these two categories of parents is that parents who restrict their children's access to electronic media significantly more encourage children to read and learn than the other group of parents. A statistically significant difference was not established between these same two categories of parents in relation to the activities that children prefer to do in their free time. The conclusion is that parental control over the use of electronic media has positive effects because it is associated with encouraging children to participate in activities useful for their growth and development.

Key words

children's leisure time, mass media, restricting access to electronic media, primary education, parental influence

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Kineziološka edukacija i sport	**Broj rada: 181**	

Sažetak

Cilj je ovoga istraživanja bio utvrditi učestalost korištenja elektroničkih medija učenika u primarnom obrazovanju, intenzitet bavljenja određenim fizičkim aktivnostima te istražiti vezu između roditeljske zabrane korištenja elektroničkih medija i poticanja djece na različite aktivnosti u slobodno vrijeme te utvrditi koje aktivnosti djeca najradije čine tijekom slobodnoga vremena. Istraživanje je provedeno na 509 roditelja učenika u primarnom obrazovanju u četiri osnovne škole Zagrebačke županije i Grada Zagreba. U istraživanju je korišten instrument anonimnoga anketnog upitnika s Likertovom skalom od pet stupnjeva. Podatci su obrađeni deskriptivnom i inferencijalnom statistikom, kojom je utvrđeno postojanje razlika te je napravljena korelacijska i diskriminacijska analiza. Rezultati su pokazali statistički značajne razlike između roditelja koji ograničavaju djeci pristup elektroničkim medijima i onih koji to ne čine. Ono što razlikuje ove dvije kategorije roditelja jest da roditelji koji ograničavaju pristup djeci elektroničkim medijima, djecu znatno više potiču na čitanje i učenje u odnosu na drugu kategoriju roditelja. U istraživanju se također nije pokazala statistički značajna razlika između ove iste dvije kategorije roditelja u odnosu na aktivnosti kojima se djeca najradije bave u svoje slobodno vrijeme. Zaključak iznosi kako roditeljski nadzor korištenja elektroničkih medija ima pozitivne učinke jer je povezan s poticanjem djece na aktivnosti korisnim za njihov rast i razvoj.

Ključne riječi

dječje slobodno vrijeme; masovni mediji; ograničavanje pristupa elektroničkim medijima; primarno obrazovanje; roditeljski utjecaj

Physical fitness as a factor in adolescent health: perspectives and challenges of systematic monitoring in the military system / Tjelesna spremnost kao čimbenik zdravlja adolescenata: Perspe

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Kinesiology education and sports | **Number of the paper: 182**

Abstract

A sedentary lifestyle, stress, and lack of physical activity are characteristics of today's lifestyle and cause numerous health problems. Insufficient physical activity and inadequate body composition are present in military systems as well. The purpose of the paper is to highlight the importance of systematic monitoring of physical fitness in order to improve health status and maintain an optimal level of muscular endurance.
Methods: The study was conducted on a sample of 199 adolescents (18-21 years old). The motor component of physical fitness was evaluated based on the push-up and sit-up test. The cardiorespiratory component was evaluated using 3200 m running test, and the morphological component based on: abdominal circumference, hip circumference, body mass index (BMI) and waist-to-hip ratio (WHR). The obtained results were processed by partial correlation analysis and analysis of variance. Basic descriptive indicators were calculated for all variables.
Results: A low correlation of anthropometric variables and variables for the assessment of muscular endurance was obtained. The largest negative correlation was obtained between the variables hip circumference and push-up (-0.22). The largest positive correlation between was obtained between the variables running 3200 m and body mass index (0.17). Of the total sample, 1.0% of the respondents were underweight, 73.9% had a normal nutritional status, 24.1% were overweight and 1.0% were obese. Overweight subjects achieved the best results in the push-up test, in the sit-up test the best overweight and normal. In the 3200 m run test the best results were achieved by subjects with normal nutritional status.
Conclusion: Anthropometric characteristics significantly determine physical fitness in the military system.

Key words

body mass index, functional ability, health, motor skills

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Kineziološka edukacija i sport	**Broj rada: 182**	

Sažetak

Sjedilački način života, stres i manjak tjelesne aktivnosti karakteristike su današnjega stila življenja i uzrokuju brojne zdravstvene probleme. Nedostatna tjelesna aktivnost i nepoželjna tjelesna građa sve su više prisutni i u vojnim sustavima. Sukladno navedenom, svrha je rada ukazati na nužnost sustavnoga praćenja tjelesne spremnosti kako bi se očuvao i poboljšao zdravstveni status te održavala optimalna razina mišićne izdržljivosti tijekom duljega razdoblja.
Metode: Istraživanje je provedeno na uzorku od 199 adolescenata (18-21 godine). Motorička sastavnica tjelesne spremnosti procijenjena je temeljem testova sklek i pregib, kardiorespiratorna sastavnica testom trčanje 3200 m, a morfološka sastavnica mjerama: opseg trbuha, opseg bokova, indeks tjelesne mase i indeks rizičnosti tipa pretilosti. Dobiveni rezultati obrađeni su parcijalnom korelacijskom analizom i univarijatnom analizom varijance, a za sve varijable i zračunati su osnovni deskriptivni pokazatelji.
Rezultati: dobivena je niska povezanost antropometrijskih varijabli i varijabli za procjenu mišićne izdržljivosti. Najveća negativna korelacija dobivena je između varijabli opseg bokova i sklek (-0,22), a najveća pozitivna korelacija između varijabli trčanje 3200 m i indeks tjelesne mase (0,17). Od ukupnoga broja ispitanika u uzorku je 1,0 % ispitanika pothranjeno, 73,9% je normalno uhranjeno, 24,1% je prekomjerno uhranjeno, a 1,0% je pretilo. Prekomjerno uhranjeni ispitanici postigli su najbolje rezultate u testu sklek, u testu pregib najbolji su bili prekomjerno i normalno uhranjeni, a u testu trčanje 3200 m najbolje rezultate su ostvarili ispitanici s normalnim statusom uhranjenosti.
Zaključak: Antropometrijske karakteristike u značajnoj mjeri određuju tjelesnu spremnost u vojnom sustavu.

Ključne riječi

funkcionalne sposobnosti; indeks tjelesne mase; motoričke sposobnosti; zdravlje

Kindergarten teachers' perception of physical activities at preschool age / Percepcija odgojitelja o tjelesnim aktivnostima u predškolskoj dobi

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Abstract

The aim of this research was to determine how kindergarten teachers, with regard to their years of work experience, estimate the importance of physical activities impact on the development of preschool children, as well as the implementation of structured and unstructured physical activities in kindergarten. A total of 112 kindergarten teachers participated in the research. For this purpose, a scale of 19 statements was constructed, on which the value was estimated from 1 (do not agree at all) to 5 (completely agree). Using factor analysis, 4 main components were isolated, which in total explain 45% of the variance. With varimax rotation, 4 factors were obtained - teachers' competence and motivation for implementing physical activities in kindergarten (6 items), influence of regular physical activity on children's development (5 items), implementing physical activities in kindergarten (5 items), support and material conditions (4 items). The differences in factors with regard to years of work experience were calculated by the Mann Whitney U test. The results showed significant differences in favor of kindergarten teachers with 11 and more years of work experience in the factors of influence of regular physical activity on children's development and support and material working conditions. Teachers with more years of work experience have a significantly more positive attitude towards physical activity on the development of children. They also estimate that they have more support from the school principal and other professional services in the implementation of kinesiological activities, as well as more sports requisites and equipment for various physical activities.

Key words

educators, free play, preschool age, self-assessment, structured physical activities

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Sažetak

Cilj ovoga istraživanja bio je utvrditi kako odgojitelji zaposleni u ustanovama ranoga i predškolskoga odgoja i obrazovanja, s obzirom na godine radnoga iskustva procjenjuju važnost utjecaja tjelesnih aktivnosti na razvoj predškolske djece kao i provođenje strukturiranih i nestrukturiranih tjelesnih aktivnosti u vrtiću. Ukupno je sudjelovalo 112 odgojitelja. U tu svrhu konstruirana je skala s 19 tvrdnji na kojoj se vrijednost procjenjivala od 1 (uopće se ne slažem) do 5 (u potpunosti se slažem). Faktorskom analizom izolirane su 4 glavne komponente koje ukupno objašnjavaju 45 % varijance. Uz varimax rotaciju dobivena su 4 faktora –kompetencije i motivacija odgojitelja za provođenje tjelesnih aktivnosti u vrtiću (6 čestica), utjecaj redovite tjelesne aktivnosti na razvoj djece (5 čestica), provođenje tjelesne aktivnosti u vrtiću (5 čestica), podrška i materijalni uvjeti (4 čestice). Razlike u faktorima s obzirom na godine radnoga iskustva izračunate su Mann Whitney U testom. Rezultati su pokazali značajne razlike u korist odgojitelja s 11 i više godina radnoga iskustva u faktorima utjecaja redovite tjelesne aktivnosti na razvoj djece te podrške i materijalnih uvjeta rada, odnosno odgojitelji s više godina radnoga iskustva imaju značajno pozitivniji stav tjelesne aktivnosti na cjelokupni razvoj djece. Također, procjenjuju da imaju veću podršku ravnatelja i ostalih stručnih službi u provođenju kineziloških sadržaja te više sportskih rekvizita i sprava za raznovrsne tjelesne aktivnosti.

Ključne riječi

odgojitelji; predškolska dob; samoprocjena; slobodna igra; strukturirane tjelesne aktivnosti

The immediate impact of aerobic exercise on pre-math skills of 4–6-year-old children / Neposredan utjecaj aerobnoga vježbanja na predmatematičke vještine djece od 4 do 6 godina

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Abstract

The current study assessed the acute effects of aerobic exercise on early numeracy skills of preschool children. Ninety-three children were randomly assigned to either an experimental group or a control group. Besides 5 minutes of warm-up and 5 minutes of cooling down activities, the exercise protocol performed by the experimental group involved games and relay races at moderate to high intensity for 20 min. Immediately following the exercise participants from the experimental group completed tasks from math areas of numeracy, operations, geometry and spatial sense, patterning, and measurement. The same tasks were completed by the control group, but the time of the test was not related to the exercise. The experimental treatment was conducted once a week for one month, allowing four assessments. Composite scores of each testing were compared favoring children from the experimental group in two of four examinations. Findings from the current study suggest that acute exercise may benefit some aspects of early numeracy skills in preschool children.

Key words

early numeracy, exercise, preschool children

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Sažetak

U istraživanju su ispitani neposredni učinci aerobnoga vježbanja na rane matematičke vještine djece predškolske dobi. Devedeset i troje djece nasumično je raspoređeno u eksperimentalnu ili u kontrolnu skupinu. Osim 5 minuta aktivnosti zagrijavanja i 5 minuta opuštanja, protokol vježbanja eksperimentalne skupine uključivao je elementarne i štafetne igre umjerenoga do visokoga intenziteta u trajanju od 20 minuta. Neposredno nakon vježbanja ispitanici iz eksperimentalne skupine rješavali su zadatke iz matematičkih domena brojanje, računske operacije, geometrije i prostornih odnosa, uzorkovanja i mjerenja. Iste zadatke rješavala je i kontrolna skupina, no vrijeme testiranja nije bilo povezano s vježbanjem. Eksperimentalni tretman provođen je jednom tjedno u trajanju od mjesec dana, što je omogućilo četiri procjene. Usporedba kompozitnih rezultata u dva od četiri ispitivanja favorizira djecu iz eksperimentalne skupine. Nalazi trenutačnoga istraživanja pokazuju da bi neposredno vježbanje moglo koristiti nekim aspektima ranih matematičkih vještina kod djece predškolske dobi.

Ključne riječi

rano računanje; vježbanje; djeca predškolske dobi

The relationship between students’ perceptions of their school environment and motivation for sport and exercise / Povezanost učeničkih percepcija školskoga okružja i motivacije za sport i tj

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Abstract

The study aimed to examine the relationships between students' perception of their school environment, which includes the relationship between teachers, students, coaches, school equipment and arrangement, and the impact of the environment on student motivation for sports and exercise. The research was conducted on a sample of 139 children aged 7 to 10, who attend the second, third, and fourth grades.
Students completed the Participation Motivation Questionnaire (PMQ; Gill, Gross, & Huddleston, 1983) and the School Environment Questionnaire (Q-SPACE; Robertson-Wilson, Lévesque, & Holden, 2007).
Statistical analysis showed that children like to spend time with friends, prefer to do something they are good at, and do not pay attention to reputation and popularity. The data also showed that children were motivated by motor skill development, exercise, having fun, and a team atmosphere. The differences between the genders were not statistically significant. A high correlation between the motivation to participate and the school environment was found ($r=.62$, $p<.01$). The scales of skills/competitiveness ($r= .47$, $p < .01$) and team atmosphere ($r=.44$, $p < .01$) correlated the most with the social environment scale.
According to the results of the current research, the school environment is important for children since they spend a significant part of their time at school. At school, they should be informed about the physical activities that are carried out within the school, but also in the community, so that they can acquire the habit of engaging in physical activities.

Key words

exercise equipment, exercise facility, motivation, school-age children

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Sažetak

U istraživanju je ispitan odnos između učeničke percepcije školskoga okružja, što uključuje odnos učitelja, učenika, trenera, opreme i uređenosti škole te utjecaja okružja na motivaciju učenika za sport i tjelovježbu. Istraživanje je provedeno na uzorku od 139 djece u dobi od 7 do 10 godina koja su pohađala drugi, treći i četvrti razred.
Učenici su ispunjavali Upitnik o motivaciji za sudjelovanje (PMQ; Gill, Gross i Huddleston, 1983) i Upitnik o školskom okružju (Q-SPACE; Robertson-Wilson, Lévesque i Holden, 2007).
Statistička je analiza pokazala da djeca vole provoditi vrijeme s prijateljima i radije rade nešto u čemu su dobri, a ne obraćaju pažnju na ugled i popularnost. Rezultati su također pokazali da su djeca bila motivirana razvojem motoričkih vještina, vježbanjem, zabavom i timskom atmosferom. Razlike među spolovima nisu bile statistički značajne. Utvrđena je visoka korelacija između motivacije za sudjelovanje i školskoga okružja ($r = ,62$, $p < ,01$). Ljestvice vještine/kompetitivnost ($r = ,47$, $p < ,01$) i timska atmosfera ($r = ,44$, $p < ,01$) najviše koreliraju s ljestvicom socijalnoga okružja.
Sudeći prema rezultatima istraživanja, školsko je okružje važno za djecu budući da u školi provode značajan dio svojega vremena. U školi ih treba informirati o tjelesnim aktivnostima koje se provode unutar škole, ali i u zajednici, kako bi stekli naviku bavljenja tjelesnim aktivnostima.

Ključne riječi

oprema za vježbanje; prostor za vježbanje; motivacija; djeca školske dobi