

Childhood Environment and Adult Height among Polish University Students

Iwona Wronka¹ and Romana Pawlińska-Chmara²

¹ Department of Anthropology, Jagiellonian University, Kraków, Poland

² Department of Biotechnology and Molecular Biology, Opole University, Opole, Poland

ABSTRACT

The objective of the study is to assess whether the choice of a childcare type (i.e. a mother giving up a professional career to take care of her child, employing a childminder, day care centre and kindergarten) depends on a child's family socio-economic status and to investigate whether the childcare type affects an adult's height. The material for the study was gathered in the cross-section research carried out among 783 female students and 535 male students of universities in Krakow and Opole (southern Poland). The height was measured with standard anthropometric instruments. To assess a socio-economic status (SES), the following factors were analysed: a place of living before entering the university, the educational background of parents and a self-assessment of their material situation. It was found that students from families with a high socio-economic status attended crèches and kindergartens much more frequently than others of the same age, while those who grew up at home under their mothers' care, most frequently come from families with a lower socio-economic status. A socio-economic status does not significantly affect body heights of the researched sample group, however, students from high socio-economic status families are slightly taller than their peers. Females and males who spent their childhood under the care of their non-working mothers are the tallest, whereas those who attended crèche and kindergarten are the shortest. After the students to be examined were divided into three groups with low, average and high statuses respectively, it was observed that in every group the persons who spent their childhood under the care of their non-working mothers are taller than the ones who attended crèche and kindergarten.

Key words: height, socio-economic status, childcare, students

Introduction

An adult's height comes as a result of interactions between the genotype and factors of geographical as well as socio-economic environments. Researchers, for many years, have taken a great interest in investigating how social, economic and cultural variables affect the development process. Their impact on the process is indirect in nature as they influence a lifestyle, mainly nutritional habits, physical activity, including leisure time, as well as work-related activities. Environmental factors and a lifestyle may also increase or decrease a risk of a variety of illnesses¹⁻³.

Many studies have indicated a relationship between a lifestyle and a socio-economic status. It has been shown that persons having a higher status are better nourished, their diet is both better balanced and has higher vitamin and microelements content⁴⁻⁸. They partake in sports activities more frequently and do not undertake hard phy-

sical work⁹⁻¹¹. This relationship between a social status and nutritional habits as well as physical activity is evident among adults and children alike. Findings of some studies show that the lifestyle of children attending kindergarten differs significantly from that of children staying at home and being looked after by their mothers, grandmothers or nannies^{12,13}. However, in the subject literature it is hard to find studies comparing the development pace of children attending or not attending day care centres or kindergartens. This factor is not taken into consideration at all in relation to the adult body height which nonetheless takes a long time to develop.

Following changes that many societies including Poland are subject to, more and more women are taking up full-time professional careers. Being unable to care for a child and work full time at the same time, they have to make a decision when a child is born, whether to quit

their jobs or to allow someone else to take care of their babies for most of the day.

The objective of the study is to assess whether the choice of a childcare type (i.e. a mother giving up a professional career to take care of her child, employing a childminder, day care centre and kindergarten) depends on a child's family socio-economic status and to investigate whether the childcare type affects an adult's height.

Materials and Methods

The material for the study was gathered in the cross-section research carried out among 783 female students and 535 male students of universities in Krakow and Opole (southern Poland). The data regarding females has been partly presented in the paper »Childcare, Height and BMI among Female Students. 2005«, published in *Economics and Human Biology*¹⁴. The age of surveyed students ranged between 19–24 (birth cohort 1982–1984) and they were originally from the region of southern Poland. The height was measured with standard anthropometric instruments to the nearest 0.1 cm on the scale.

All measurements were made by the authors. A questionnaire contained questions about the students' socio-economic status during childhood and the childcare type they were subject to at the age of 4 months to 3 years, 3–7 years and for the first years of attending school.

The socio-economic variables contemplated herein include a place of residence prior to the commencement of the studies, mother's and fathers' education levels and a number of siblings. The students were also asked to self-assess their material situation during childhood and adolescence. A place of residence has been classified as follows: 1 – rural, 2 – urban; mother's and father's education levels: 1 – primary and vocational, 2 – secondary, 3 – university. A number of siblings was top coded at 4.

The students assessed their material situation during childhood and adolescence as: 1 – poor, 2 – average, 3 – good, 4 – very good, 0 – changeable and/or difficult to assess. As there were only three responses in the last category, it has been omitted.

The last variable above was significantly correlated with the other factors. Persons whose parents lived in large cities and had higher education and those who were

TABLE 1
SOCIAL ENVIRONMENT OF THE SURVEYED STUDENTS

Factor	Category	Women		Men		The values of χ^2 -test
		n	%	n	%	
Place of residence	1-rural	231	29.5	138	25.8	$\chi^2=2.11$ df=1 p=0.1416
	2-urban	552	70.5	397	74.2	
Education of mother	1-primary	145	18.5	99	18.6	$\chi^2=0.00$ df=2 p=0.9995
	2-secondary	374	47.8	256	47.8	
	3-university	264	33.7	180	33.6	
Education of father	1-primary	258	32.9	154	28.8	$\chi^2=3.60$ df=2 p=0.1653
	2-secondary	283	36.2	190	35.5	
	3-university	242	30.9	191	35.7	
Number of siblings	1–3 and more	101	12.9	63	11.8	$\chi^2=0.79$ df=3 p=0.8523
	2–2	182	23.2	122	21.8	
	3–1	398	50.8	273	51.0	
	4–0	102	13.1	77	14.4	
Material condition	1-poor	89	11.4	59	11.1	$\chi^2=0.70$ df=3 p=0.8153
	2-average	305	39.0	213	39.8	
	3-good	310	39.6	203	37.9	
	4-very good	79	10.1	60	11.2	
SES	1-low	180	23.0	115	21.5	$\chi^2=0.41$ df=2 p=0.8153
	2-average	378	48.2	263	49.2	
	3-high	225	28.8	157	29.3	
Type of childcare	1	183	23.4	142	26.6	$\chi^2=3.82$ df=3 p=0.2821
	2	127	16.2	96	17.9	
	3	383	48.9	230	43.0	
	4	90	11.5	67	12.5	

Type of care: group 1 – brought up at home with no-working mother looking after them, group 2 – brought up at home but with care provided by the grandmother or a child minder, group 3 – received mixed type of childcare group 4 – attended day-care centres

an only child with parents living in large cities more frequently assessed their family economic situation as good and very good, and considerably less often as poor than the ones living in the country with parents having vocational education, who had many siblings.

A sample description is presented in Table 1. A complex socio-economic status indicator was established on the basis of all the variables listed above. The sample was divided into three groups in respect of SES, i.e. low, average and high (Table 1). A division was based on a sum of digital values attributed to particular categories of the analysed variables. A distribution of summed up values was not different from a normal distribution. If a sum was below 10 percentiles a status was described as low, if above 90 – as high. Other persons were classified to a group with an average status.

Moreover, the study contained questions about a type of childcare provided to children between the ages of 3 months and 3 years, 3–7 years and early school years. Daytime childcare was divided into four groups:

- 1 group (n=325, 24.6%) were children brought up at home with a non-working mother looking after them,
- 2 group (n=223, 16.9%) was made up of children also brought up at home but with care provided by a grandmother or a childminder,

- 3 group (n=613, 46.6%) was composed of children provided with a mixed type childcare, i.e. brought up at home for several years and then attending kindergarten,
- 4 group (n=157, 11.9%) was formed by children attending daycares at the age of four months, then kindergarten and common room at school at the older age.

Statistical methods

The significance of differences in a childcare type in relation to the analysed socio-economic variables was established with the use of χ^2 -test. A multifactor analysis of variance and multiple regression was used to assess a relation between a socio-economic status, a childcare type and a body height. P values <0.05 were assumed.

Results

Relationship between a childcare type and a socio-economic status

Since a statistical analysis showed no statistical differences in SES and a type of care between women and men, the data regarding all participants in the study was analysed jointly (Table 1). The results are presented in Table 2. A childcare type is strongly related to a socio-economic status. The higher the status the fewer per-

TABLE 2
FREQUENCY DISTRIBUTION OF SOCIAL VARIABLES BY THE TYPE OF CHILDCARE

Factor	Category	Group 1		Group 2		Group 3		Group 4		The values of χ^2 -test
		n	%	n	%	n	%	N	%	
Place of residence	1-rural	114	30.9	82	22.2	159	43.1	14	3.8	$\chi^2=43.25$ df=3 p=0.0000
	2-urban	211	22.2	141	14.8	454	47.9	143	15.1	
Education of mother	1-primary	93	38.1	30	12.3	100	41.0	21	8.6	$\chi^2=42.69$ df=6 p=0.0000
	2-secondary	161	25.5	116	18.5	283	44.9	70	11.1	
	3-university	71	16.0	77	17.3	230	51.8	66	14.9	
Education of father	1-primary	134	32.5	60	14.6	176	42.7	42	10.2	$\chi^2=33.76$ df=6 p=0.0000
	2-secondary	112	23.7	100	21.1	212	44.8	49	10.4	
	3-university	79	18.3	63	14.5	225	52.0	66	15.2	
Number of siblings	1–3 and more	67	40.8	29	17.7	60	36.6	8	4.9	$\chi^2=50.13$ df=9 p=0.0000
	2–2	86	28.3	50	16.4	134	44.1	34	11.2	
	3–1	144	21.5	111	16.5	336	50.1	80	11.9	
Material condition	4–0	28	15.6	33	18.4	83	46.4	35	19.6	$\chi^2=19.19$ df=9 p=0.0236
	1-poor	47	31.8	27	18.2	62	41.9	12	8.1	
	2-average	123	23.7	85	16.4	253	48.9	57	11.0	
	3-good	132	25.7	94	18.3	220	42.9	67	13.1	
SES	4-very good	23	16.5	17	12.2	78	56.2	21	15.1	$\chi^2=27.29$ df=6 p=0.0001
	1-low	96	32.5	50	16.9	121	41.1	28	9.5	
	2-average	163	25.5	115	17.9	287	44.8	76	11.8	
	3-high	66	17.3	58	15.1	205	53.7	53	13.9	

Type of care: group 1 – brought up at home with no-working mother looking after them, group 2 – brought up at home but with care provided by the grandmother or a child minder, group 3 – received mixed type of childcare group 4 – attended day-care centres

sons from group 1, assigned with respect to a childcare type, and more from group 4. Persons living in the city, whose mothers and fathers have higher education, those who are an only child and assess their material situation as very good, attended day care centre and kindergarten more frequently in their childhood than their peers from families with a lower socio-economic status; whereas persons living in the country with parents with primary or vocational education, having many siblings as well as assessing their material situation as below average spent their childhood at home being looked after by their mothers who did not work.

Relationship between a childcare type and a body height

An average height among female students was 165.7±5.73 cm, among males 180.6±6.54 cm. A lack of both the current growth standards for Polish children and the information regarding the adult body height, unfortunately, makes it impossible to assess whether the results obtained differ significantly or not from the population average. Some studies, closest in terms of the research date and the age of the researched group, were selected from the Polish subject literature published recently. According to the reference growth percentiles for children in Warsaw, an average height of the 18-year-old young people from the 1978–1981 birth cohorts was

TABLE 3
THE RESULT OF MULTIFACTOR ANALYSIS OF VARIANCE

Factor	Women		Men	
	F	p	F	p
SES	2.87	0.0500	0.48	0.6161
Type of care	2.23	0.0830	1.09	0.3538
SES and type of childcare	2.15	0.0457	1.42	0.2069

165.5±6.09 cm for girls (n=100) and 178.4±6.38 cm for boys (n=100)¹⁵. The research carried out among the conscripts of 1995 showed that an average height of 18-year-old males (n=1519) amounted to 179.4±6.4 cm¹⁶. Thus, against this background, the students are slightly taller.

Following the correlation between a socio-economic status and a childcare type a two-factor analysis of variance, including interactions, was applied to estimate the impact of the two factors on the adult body height (Table 3). A socio-economic status does not significantly affect a body height of the researched sample group (Table 3), however, students with a high socio-economic status are slightly taller than their peers (Table 4). A difference in a body height between high and low status groups amounts to 1.5 cm for females and 1.2 cm for males. The dif-

TABLE 4
VARIATION IN MEAN HEIGHT IN RELATION TO SOCIAL BACKGROUND AND THE TYPE OF CHILDCARE

Factor	Category	n	Women		Men			
			\bar{X} height	95% CI	n	\bar{X} height	95% CI	
SES	Low	180	164.8	163.8–165.8	115	180.1	178.4–181.9	
	Average	378	166.0	165.4–166.7	263	180.4	179.6–181.3	
	High	225	166.3	165.4–167.2	157	181.3	179.5–183.0	
Type of childcare	1	183	166.4	165.4–167.3	142	181.6	179.4–183.9	
	2	127	165.5	164.4–166.6	96	180.2	178.4–182.1	
	3	383	165.6	164.8–166.4	230	181.1	179.9–182.2	
	4	90	164.2	162.9–165.4	67	179.5	177.9–181.1	
SES and type of childcare	Low	1	55	166.0	164.8–167.3	28	181.1	178.0–184.1
		2	29	163.5	161.5–165.6	29	181.7	179.4–184.0
		3	80	165.6	164.1–167.1	45	179.8	175.6–183.1
	Average	4	16	164.0	161.2–166.8	13	178.0	174.9–181.2
		1	92	166.7	165.5–167.8	80	182.1	180.0–184.2
		2	66	167.4	166.1–168.7	45	179.7	177.9–181.5
		3	176	166.2	165.4–167.1	112	179.9	178.9–181.0
High	4	44	163.8	162.2–165.5	26	179.8	178.4–180.3	
	1	36	167.6	165.7–169.5	34	182.9	179.0–186.7	
	2	32	165.4	163.4–167.3	22	183.0	178.9–187.0	
	3	127	165.9	164.9–166.8	73	181.6	179.4–183.8	
	4	30	166.4	164.4–168.5	28	177.6	174.1–181.1	

Type of care: group 1 – brought up at home with no-working mother looking after them, group 2 – brought up at home but with care provided by the grandmother or a child minder, group 3 – received mixed type of childcare group 4 – attended day-care centres

TABLE 5
REGRESSIONS COEFFICIENTS (β -VALUES) BETWEEN ADULT HEIGHT AND SOCIO-ECONOMIC VARIABLES

Parameter	Women		Men	
	β -values	p	β -values	P
Dwelling place	0.6680	0.1574	0.3746	0.6123
Mother's education	0.2851	0.4017	0.1107	0.8501
Father's education	-0.3386	0.2728	0.1611	0.7415
Number of siblings	-0.2135	0.3819	-0.6245	0.0987
Material condition	0.5752	0.0361	0.0147	0.9708
Type of childcare	-0.3178	0.0316	0.4459	0.1693
Constant	165.0		179.6	
		$R^2 = 0.0164$ $p=0.0455$		$R^2 = 0.0182$ $p=0.2604$

ference in a body height is also evident when considering a childcare type. Females and males from group 1 are the tallest, whereas those from group 4 are the shortest. The differences between extreme groups are 2.2 cm for women and 2.1 cm for men.

After the students to be examined were divided into three groups with low, average and high statuses respectively, it was observed that in every group the persons who spent their childhood under the care of their non-working mothers are taller than the ones who attended crèche and kindergarten (Table 4).

In the statistical study also multiple regression was applied taking into consideration the following variables: a place of residence, mother's educational background, father's educational background, a number of siblings and a childcare type. The results demonstrate that socio-economic variables do not have a significant effect on a body height of the researched participants, except economic conditions which affected the female students' heights to a significant extent. A statistically significant correlation between a body height and a childcare type was found only for women (Table 5).

Discussion

A variation in the growth and the stature due to socio-economic factors has been reported for many populations in developed as well as in developing countries. It has been found that children and adults from upper socio-economic classes were taller than those from the lower ones^{17–23}. Frequently such an analysis presents a dilemma in terms of determining variables that would adequately assess a social position in a particular population. Most often it is established on the basis of the level of earnings, parents' education or professions, a place of residence, a family size. However, a child's lifestyle is developed not only by a family environment, but also by friends at school or in neighbourhood as well as by customs followed in the society.

In addition, a family economic situation and lifestyle depend not merely on parental earnings but also on the

financial support from the government^{24,25}. In Poland every mother is entitled to both a 3-months' maternity leave with full salary, and a 3-years' unpaid leave. The latter is most frequently opted for by mothers paid low salaries because a low income per capita makes a family eligible for a social benefit which is almost the same as the lowest salary after deducting a fee for a crèche. Therefore low-income mothers are reluctant to work while their children are young. Day care centres present an option for parents with average incomes, as employing a childminder would stretch their finances too far and leaving a job by a mother would result in lowering their living standards.

It is commonly acknowledged that children from families with a high socio-economic status have better conditions for development, in particular a well-balanced and healthy diet, better medical care and hygiene. However, in many contemporary societies, large differences in a lifestyle and living conditions may be observed within a single social group. The reasons can be both social and economic. For example, the earnings of persons having the same education and professions can differ significantly depending on the place of employment. Also, there may be a transfer of people from one group to another. These are often people who received better education than their parents and grandparents and have greater health awareness, but on a daily basis their nutritional habits and free-time activities are the same as those acquired in their family homes.

The results of some researches indicate a tendency for disappearing of socio-economic disparities in the body sizes and in the pace of the social stratification as a result of changes^{26,27}. In spite of continuing, sometimes considerable disparities in educational background, professional qualifications or incomes, differences in biological traits may become obliterated. Most probably the reason is that when an adequately high average wealth is acquired and with a proper social policy of the government, disparities in social and material condition of families, although still present, do not determine biological development. If living conditions are generally good, their fur-

ther improvement or slight decline does not affect the development pace.

In the study no statistically significant differences in the height in relation to the economic status were found. Certain factors, however, limit the interpretation of the results. The consideration was given only to the data covering the students. Although the persons under research come from different social groups, they are not fully representative of the society. Even though education is free at all levels in Poland, a large number of people do not continue their education at a tertiary level. More frequently these are young people from poor families. The subject literature data shows that students are taller than their peers who do not go to university²⁸. Due to a lack of the current relevant data covering the Polish population it is extremely difficult to perform such a comparison for a particular group. Against the background of the results published in the subject literature, the surveyed students are taller; nonetheless it is not an easy task to assess whether it is not down to the acceleration of the development process caused by a secular trend. The 80's and the 90's of the previous century saw intensive economic and political changes in Poland, which in a very short time span brought about changes in the living conditions of the entire society and of individual families alike²⁹. Given the fact that the research sample constituted a group of people purposefully selected in terms of educational background and with smaller differentiation with respect to a material situation than the Polish society in general, it may be assumed that the relationship between a socio-economic status and a body height observed in the sample group is weaker than in the overall population.

The attendance at daily childcare centres, being an important factor affecting a child's lifestyle, was subject of the analysis in the study. The results show that a family high status frequently results in smaller amounts of time devoted to a child. In addition, persons who spent their childhood under the care of their non-working mothers are taller than those who attended day care centres and kindergartens. Although the differences are not statistically significant, this tendency is evident for the

entire research material as well as after adjusting for a socio-economic status. The differences observed may result from the fact that being a part of the group means being exposed to infections and to other children attending day care centre and kindergarten, therefore frequently getting ill. It may be assumed that a childcare type in the first years of the child's life is related to the length of the breast-feeding period.

At the older age differences in the nutrition style become more distinct between the children attending and not attending kindergarten. Institutions taking care of children generally employ nutritionists preparing menus. While mothers, especially those with poorer education, not always know the principles of healthy nutrition. The second difference is related to a number of meals. Children at kindergarten regularly have three meals, with no opportunity to have any snack in the meantime. On the other hand, however, in such institutions meals are made from the cheapest food products and unnecessarily children enjoy their taste. Just one ingredient, that a child does not like, added to a dish may make the child not eat it. At family home meals are generally prepared to child's taste and a mother watches her child to eat everything. The results of the presented study show that even for families with a low status, persons who spent their childhood under the care of non-working mothers are taller than those who attended crèche and kindergarten. The above manifest a considerable effect of the family environment on the optimum course of development. A detailed analysis of the results shows that an adult's height is affected to a much greater extent by attendance at crèche than at kindergarten.

A comparison of body heights of students from all the four groups established following the childcare type criteria shows that persons who attended day care centres and kindergartens are shorter than those who did not attend day care centre but attended kindergarten. It suggests that the first years are of key importance for a child's further development. This hypothesis is in compliance with the data presented in the subject literature^{30–33}.

REFERENCES

- HU P, WAGLE N, GOLDMAN N, WEINSTEIN M, SEEMAN TE, J Biosoc Sci, 39 (2007) 545. — 2. LISSNER L, JOHANSSON SE, QVIST J, RÖSSNER S, WOLK A, *Int J Obes*, 24 (2000) 801. — 3. STARFIELD B, ROBERTSON J, RILEY AW, *Ambulatory Paediatrics*, 2 (2002) 238. — 4. CHARZEWSKA J, ROGALSKA-NIED WIED M, CHWAJNOWSKA Z, CHABROS E, WAJSZCZYN B, LACHOWICZ A, *Socio-economic determinants of diet among adolescent in years 19871–1991 (IZ , Warsaw, 1995)*. — 5. DOWLER E, *Pub Health Nutr*, 4 (2001) 710. — 6. HART KH, HERIOT JA, TRUBY H, *J Hum Nutr Diet*, 16 (2003) 89. — 7. LALLUKA T, LAAKSONEN M, RAHKONEN O, ROOS E, LAHELMA E, *Eu J Clin Nutr*, 61 (2007) 701. — 8. STENHAMMAR C, SARKADI A, EDLUND B, *Pub Health Nutr*, 10 (2007) 1305. — 9. CERIN E, LESLIE E, *Soc Sci Med*, 66 (2008) 2596. — 10. SANCHEZ A, NORMAN GJ, SALLIS JF, CALFAS KJ, CELLA J, PATRICK K, *Am J Prev Med*, 32 (2007) 124. — 11. SINGH GK, KOGAN MD, SIAHPUSH M, VAN DYCK PC, *J Community Health*, 33(2008) 206. — 12. ENGLE PL, *Child Develop*, 62 (1991) 954. — 13. PANTER-BRICK C, *Ecol Food Nutr*, 29 (1992) 11. — 14. WRONKA I, PAWLIŃSKA-CHMARA R, *Econ Hum Biol*, 5 (2007) 435. — 15. PALCZEWSKA I, NIED WIECKA Z, *Medycyna Wieku Rozwojowego*, 2 (2001), 3. — 16. BIELICKI T, SZKLARSKA A, WELON Z, BRAJCZEWSKI C, *Social inequalities in Poland: Anthropological research into the conscripts in the three decades 1965–1995 (PAN, Wrocław, 1997)*. — 17. CAVELARS AEJM, KUNST AE, GEURTS JJM, CRIALESI R, GRÖTVEDT L, HELMERT U, LAHELMA E, LUNDBERG O, MIELCK A, RASMUSSEN NKR, REGIDOR E, SPUNHLER TH, MACKENBACH JP, *Ann Hum Biol*, 27 (2000) 407. — 18. EIBEN OG, MASCIE-TAYLOR CGN, *Econ Hum Biol*, 21 (2004) 295. — 19. GYENIS G, JOUBERT K, *Econ Hum Biol*, 21 (2004) 321. — 20. KOMLOS J, BRESTFELDER A, *Am J Hum Biol*, 20 (2006) 66. — 21. KOMLOS J, KRIWY P, *Ann Hum Biol*, 29 (2002) 641. — 22. REDŽIĆ A, HADŽIHALILOVIĆ J, *Coll Antropol*, 31 (2007) 427. — 23. WOLANSKI N, ZAREMBA H, *Coll Antropol*, 20 (1996) 37. — 24. BEETS MW, VOGEL R, FORLAW L, PITETTI KH, CARDINAL BJ, *Am J Health Behav*, 30 (2006) 278. — 25. HOHEPA M, SCRAGG R, SCHOFIELD G, KOLT GS, SCHAFF D, *Int J Behav Nutr*, 4 (2007) 54. — 26. LINDGREN

G, Secular changes and class distinctions in growth in Sweden. In: ULJASZEK SJ, JOHNSTON FE, PREECE MA (Eds) *The Cambridge Encyclopedia of Human Growth and Development* (Cambridge University Press, Cambridge, 1998). — 27. KIRCHENGAST S, BAUER M, *Coll Antropol*, 31 (2007) 419. — 28. KRZY ANOWSKA M, *J Biosoc Sci*, 39 (2006) 321. — 29. GUS (CENTRAL STATISTICAL OFFICE IN POLAND), *Statistical Yearbook of Poland* (GUS, Warsaw, 1980–1999). — 30. COLE TJ, *Econ*

Hum Biol, 1 (2003) 161. — 31. NYSTRÖM-PECK M, *J Epidemiol Community Health*, 115 (1994) 223. — 32. POULTON R, CASPI A, MILNE BJ, THOMSON WM, TAYLOR A, SEARS MR, MOFFITT TE, *Lancet*, 360 (2002) 1640. — 33. RAHKONEN O, LAHELMA E, HUUKKA M, *Soc Sci Med*, 44 (1997) 327.

I. Wronka

*Department of Anthropology, Jagiellonian University, Ingardena 6, 30-060 Kraków, Poland
e-mail: iwona.wronka@uj.edu.pl*

OKOLIŠ U DJETINJSTVU I VISINA U ODRASLOJ DOBI MEĐU POLJSKIH STUDENTIMA

SAŽETAK

Cilj ove studije je provjeriti ovisi li izbor načina brige o djetetu (majka koja je odustala od svoje profesionalne karijere kako bi se posvetila brizi o djetetu, unajmljena dadilja, dnevni boravak u školi ili vrtić) o socioekonomskom statusu obitelji te istražiti utječe li način brige o djetetu na visinu u odrasloj dobi. Uzorak za ovu studiju je prikupljen u sklopu studije provedene na 783 studentice i 535 studenta Sveučilišta u Krakowu i Opoli (južna Poljska). Visina je mjerena standardnim antropometrijskim instrumentima. Kako bi se dobio stupanj socioekonomskog statusa (SES), analizirani su sljedeći faktori: mjesto boravka prije upisa na fakultet, obrazovna pozadina roditelja i samoprocjena obiteljske materijalne situacije. Utvrđeno je da su studenti iz obitelji sa višim SES-om u većoj mjeri pohađali vrtiće i dnevne boravke u školama nego ostali vršnjaci, dok su oni koji su ostajali u djetinjstvu kod kuće s majkom u većoj mjeri doazili iz obitelji sa nižim SES-om. Nije utvrđeno da SES ima značajan utjecaj na visinu, no studenti iz obitelji sa višim SES-om su svejedno bili malo viši od svojih vršnjaka. I muški i ženski studenti koji su djetinjstvo proveli kod kuće uz majku do maćicu su bili najviši, dok su oni koji su pohađali dnevni boravak u školi i vrtić bili najniži. Nakon što su studenti podijeljeni u tri skupine s obzirom na niski, srednji i visoki SES, zapaženo je da su studenti koji su djetinjstvo proveli kod kuće s majkom u pravilu uvijek viši od onih koji su pohađali dnevni boravak u školama ili vrtić.