The long-hair effect

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Long hair has always been regarded as a symbol for sexuality and instinctual power. Furthermore, it is a sign of power, life-blood, active cheerfulness, vitality and success - at least according to symbol dictionaries, biblical and mythological sources. But what about long hair in everyday life? Does long hair really have more benefit? Are long-haired people really more successful? Do they really have better position in the community? The author has empirically tested the hypothesis of long-hair effect. Based on the method of sociometry the examination clearly showed that long-haired girls are really more successful: they have more friends, are more attractive and they are regarded more popular in their groups in comparison to boys and short-haired girls.

According to social learning theories parents dress in a different way and provide with different toys their daughters and sons (Rheingold & Cook, 1975). Moreover, the adults reward the gender consistent behaviour, so they prefer little girls dressing, dancing and playing with dolls, but criticise their daughters whenever they run, jump, climb or destroy objects like little boys (Fagot, 1978). In the framework of Bem's gender schema theory little girls are encouraged from their very early years to act and behave like females and to look at the world through the lenses of their own gender (Bem, 1989, 1993). And they do that. Talking with children about gender differences we put the question: "How do you recognise the difference between boys and girls?" They mentioned clothing, different behaving, different body shapes, even different sexual organs, but the most significant answer was: "It's the hair!". Of course, five-years-old children know that boys wear different clothes, play and move in a different way, they have different bodies with different sexual organs, but the most typical girls' attribute was the long hair. Children insisted on long hair as the most important difference (B. Korsós, 1995).

Why does hair have such an important role? There is no doubt that long hair has a favoured role in child's world: it is a consistent positive attribute of praise, an epithet in many stories and drawings as well. The princesses and other female beauties of fairy tales generally wear long hair (Von Franz, 1977; Bettelheim, 1985). Children's drawings, especially girl's drawings usually represent the female figures with emotionally enlarged long-hair (Mérei et al, 1975; Molnár, 1990, 1998).

Gizella Baktay-Korsós, Department of Psychology and Education, Teacher-Training College, Etövös Lóránd University, Kazinczy Street 23-27, H-1075 Budapest, Hungary. E-mail: baktaym@elender.hu (Correspondence concerning this article should be sent to this address). From a sociobiological point of view, the shiny, glamorous, cascading hair signs lack of pathogens (Bereczkei, 1992, 1998). In children it may represent parent's investment, and in adults-reproductive fitness. Long hair needs a high grooming activity which affords a good status too.

Concerning the hair's roles in human culture we find that, occupying the most significant position at the top of the head, hair has always been a symbol for sexuality and instinctual power (Freud, 1925; Róheim, 1984, 1985; Morris, 1985; Szőnyi, 1998). According to symbol dictionaries the long hair is a sign of power, life-blood, active cheerfulness, vitality and success (Cirlot, 1962; Cooper, 1971; Vries, 1974; Hoppál et al, 1990; Koch, 1996). Biblical and mythological stories as well as fairy tales speak of this important role of the hair (Ipolyi, 1923; Graves, 1970; Kerényi, 1977). This is the presupposition of some projective test's interpretations too (Machover, 1949, Hárdi, 1983; Bagdy, 1988).

Despite the accumulating evidence coming from above mentioned sources neither empirical studies nor experiments have proved yet this important role of long hair.

The goal of this study is to gain facts about questions like: Are long-haired girls really more successful? Do they really have more friends? Are they really more attractive, more popular in the community? All in all, do we really like them more only because of their long hair?

METHOD

Participants

Participants were 579 children from five Hungarian primary schools (city elite, city outlying district, town, vil-

lage, small village), 27 classes of 8 to 31 children. 158 of the 279 girls had long hair, that is, their hair was shoulder-length at least. So, by definition, all other girls are short-haired.

Measures, procedures

The sociometric questionnaire requested information related to sympathy, friendship, attractivity and popularity in four questions regarding the status of the children in their classes:

- 1. Who do you like best in the class?
- 2. Who is your best friend in the class?
- 3. Who do you think is your nicest class-mate?
- 4. Who do you think is your most popular class-mate?

The questionnaire instructed the children as follows:

"Please answer each question by full names of a couple of your class-mates!"

RESULTS

The data summarised in the matrix of mutual relations had to be *standardised*¹ because the total number of choices depends on the size of the class.

Three different groups were selected for the analysis of variance: long-haired girls, short-haired girls, and boys. The one-way ANOVA was computed with the standardised data.

In order to validate the interpretation of the other statistical tests, the number of given votes had to be tested. If it had shown differences it would have questioned all other results. Fortunately, there was no difference among the examined groups in this regard (M = 7.64).

With regard to the total of the received votes longhaired girls differed significantly both from short-haired girls and boys. There was no difference between shorthaired girls and boys in this regard (see table 1).

This result is a clear verification of the basic hypothesis. But what about the question-by-question analysis? For example, the difference may come from the beauty advantage of long-haired girls which could cover up advantages of short-haired girls and boys in other regards. The basic hypothesis is strong enough to prohibit long-haired girls any lost. It would be denied if long-haired girls received less votes than short-haired girls or boys in any kind of choices.

Table 1
Total of received votes

	М	Long-haired girls	Short-haired girls	Boys
Long-haired girls	12.99		**	**
Short-haired girls	5.67	**		
Boys	5.62	**		
M_{tot}	7.64			

Note. long-haired girls (n=158); short-haired girls (n=121); boys (n=300); ** p<0.01; * p<0.05.

With regard to the received votes at Question 1 (Who do you like best in the class?) long-haired girls differed significantly from both short-haired girls and boys. There was no difference between short-haired girls and boys in this regard (see table 2).

Table2

Received votes at Question 1

	М	Long-haired girls	Short-haired girls	Boys
Long-haired girls	3.05		**	**
Short-haired girls	1.60	**		
Boys	1.75	**		
M_{tot}	2.08			

With regard to the received votes at Question 2 (Who is your best friend in the class?) short-haired girls differed significantly from both long-haired girls and boys. There was no difference between long-haired girls and boys in this regard (see table 3).

Table 3
Received votes at Question 2

	М	Long-haired girls	Short-haired girls	Boys
Long-haired girls	2.39		**	
Short-haired girls	1.52	**		*
Boys	2.06		*	
M_{tot}	2.03			

¹ Dividing by the actual and multiplying by the average class-number that is 21.

Regarding friendship, boys tend to choose boys, and girls, of course - girls. So, the votes remain within the sex groups but, as predicted by the hypothesis, among girls long-haired girls received the majority.

With regard to the received votes at Question 3 (Who do you think is your nicest class-mate?), long-haired girls differed significantly from both short-haired girls and boys. But in this regard there was a difference between short-haired girls and boys, too (see table 4).

Table 4
Received votes at Question 3

•	М	Long-haired girls	Short-haired girls	Boys
Long-haired girls	4.15		**	**
Short-haired girls	1.40	**		*
Boys	.53	**	*	
M_{tot}	1.70		<u> </u>	

Beauty is, however, the most feminine category.

With regard to the received votes at Question 4 (Who do you think is your most popular class-mate?), long-haired girls differed significantly from both short-haired girls and boys. There was no difference between short-haired girls and boys in this regard (table V).

Table 5
Received votes at Question 4

	М	Long-haired girls	Short-haired girls	Boys
Long-haired girls	3.35		**	**
Short-haired girls	1.15	**		
Boys	1.28	**		
M _{tot}	1.82			

Besides real mutual choices (both children voted for each other in the very same question) there were crossed mutual choices too. A crossed mutual choice has less value then a real but more then a simple vote. For example if a boy mentions a certain girl at Question 3 and she mentions him at 1, it means evidently less than as if both would choose each other at 1, but more than as if only he would choose her or inversely. Considering the difference between real and crossed mutual choices latters were multi-

plied by .5. So the total of mutual choices sometimes exceeded the number of the real mutual choices.²

With regard to the total of transformed mutual choices, long-haired girls differed significantly from both short-haired girls and boys. There was no difference between short-haired girls and boys in this regard (see table 6).

Table 6

Total of transformed mutual choices

	М	Long-haired girls	Short-haired girls	Boys
Long-haired girls	4.49		**	**
Short-haired girls	2.54	**		
Boys	2.42	**		
M_{tot}	3.01			

It is interesting which items cause this significant difference.

With regard to the mutual choices at Question 1 (Who do you like best in the class?), long-haired girls differed significantly from both short-haired girls and boys. There was no difference between short-haired girls and boys in this regard (see table 7).

Table 7

Mutual choices at Question 1

	М	Long-haired girls	Short-haired girls	Boys
Long-haired girls	1.25		**	**
Short-haired girls	.71	**		
Boys	.74	**		
$M_{ m tot}$.87			

With regard to the mutual choices at Question 2 (Who is your best friend in the class?), long-haired girls differed significantly from short-haired girls but there was no difference between sexes in this regard (see table 8).

² The transformed sum of the mutual choices: MUCH = much1+much2+much3+much4+((TOMU-much1-much2-much3-much4)/2), where TOMU is the total of mutual choices, much 1, 2, 3, 4 are the numbers of real mutual choices in questions 1, 2, 3, 4.

Table 8

Mutual choices at Question 2

•	М	Long-haired girls	Short-haired girls	Boys
Long-haired girls	1.27		**	
Short-haired girls	.84	**		
Boys	1.08			
$M_{\rm tot}$	1.08			

As already seen, votes on friendship remain within sex groups: there is no difference between girls and boys. The significant difference between long-haired girls and short-haired girls shows that long-haired girls have much more friends.

With regard to the mutual choices at Question 3 (Who do you think is your nicest class-mate?), long-haired girls differed significantly from both short-haired girls and boys. There was no difference between short-haired girls and boys in this regard (see table 9).

Table 9

Mutual choices at Question 3

_	М	Long-haired girls	Short-haired girls	Boys
Long-haired girls	.66		**	. **
Short-haired girls	.25	**		
Boys	.07	**		
$M_{\rm tot}$.27			

To evaluate the status in the community it is important to know where the votes come from: a vote from centre counts more than one from the periphery. So, votes have a value, too. On the one hand, it depends on the number of votes received by the vote-giving group-mate. On the other hand, in case of mutuality the vote-value depends on the number of votes received by both parties. Accordingly, it contains a so-called not-own-value (NOV³) which comes from the matrix of mutual relations and the transformed sum of real and crossed mutual choices (see above MUCH).

This result may refer to the mutual respect of longhaired girls.

With regard to the mutual choices at Question 4 (Who do you think is your most popular class-mate?), long-haired girls differed significantly from both short-haired girls and boys. There was no difference between short-haired girls and boys in this regard (see table 10).

Table 10

Mutual choices at Question 4

-	М	Long-haired girls	Short-haired girls	Boys
Long-haired girls	.52		*	**
Short-haired girls	.29	*		
Boys	.14	**		
$M_{ m tot}$.28			

So the formula of standardised vote-value (SVV) is: SVV=SNOV+((TOTREV/SC)*21*MUCH), where SNOV is the standardised not-own-value⁴, TOTREV is the total of received votes, SC is the size of the class.

With regard to vote-value, long-haired girls differed significantly from both short-haired girls and boys. There was no difference between short-haired girls and boys in this regard (see table 11).

Table 11
Vote-value

	М	Long-haired girls	Short-haired girls	Boys
Long-haired girls	173.36		**	**
Short-haired girls	66.51	**		
Boys	55.08	**		
M_{tot}	89.74			

DISCUSSION

The results of sociometry clearly show that long-haired girls are really more successful. They have more friends, are more attractive and they are regarded more popular in the community than boys and short-haired girls.

 $^{^{3}}$ NOV = a1*q1+a2*q2+a3*q3+...+an*qn, where:

al is the number of votes given by the first person,

q1 is the number of votes received by person who gives a1;

a2 is the number of votes given by the second person,

q2 is the number of votes received by person who gives a2; and so on.

⁴ SNOV = (NOV/SC)*21

After all, there is no doubt: long hair is a sign of vitality, power, life-blood, active cheerfulness and success, although not in Samson's sense: long hair is evidently not the source of this features. On the other hand, long hair can hardly been regarded as a pure symbol which has nothing to do with the signed features. Long hair is hardly replaceable by other things like ear rings or sunglasses. Semantically, long hair is rather an icon bearing the same features it signs.

With regard to the sociobiological point of view, in the investigated communities short-haired girls had shiny, glamorous hair too and they were of course pathogens-free. If parents only want to keep their child's hair tidy they do not carer how long. It only has to look well-groomed and short hair costs less: it is easier to comb, it dries quicker after swimming, doesn't hang in the eyes, doesn't look shaggy, etc. So the difference between short- and longhaired girls may come from the parental investment. Because to take care of the long hair means at the same time to care for the person too. Some minutes hair attendance means additional time of attending to each other. And long hair affords more grooming activity and more time. This simple facts prove that long hair is a kind of social investment: the environment can afford even this costs. As above results make it probable the benefit may be a feedback process: the long hair increases confidence, develops capability to establish contacts, makes it easy to get in touch with others, suggests high demands and values, all in all rises the status.

Long hair has a distinguished role in child's world: not only in fairy tales and drawings, but also in everyday life. It is amazing that long hair correlates with high community status regardless of the age of the children. So, the question arises: how is it possible that a child is ready to let her hair cut and to give up a doubtless successful strategy? If long hair has been an important symbol of vitality for ages, how can we give a satisfactory explanation for the fact that there are short-haired girls at all?

Do children recognise the importance of long hair? Children's wishful thinking is shown by emotionally enlarged parts of drawings: usually the hair is out of proportion to the figure of the princess or the fairy. This disproportion suggests that children do recognise the importance and advantages of long hair. Moreover, this insight may give account for the fact that long hair's disproportion is the longest lasting feature of ideovisual representation. This is a good explanation of the difference between shortand long-haired girls. Of course, the princess fits the gender schema much better than her servant. But what is the explanation of the difference between long-haired girls and boys? In the framework of Bem's gender schema theory they both represent their gender schema equally if the other features remain constant. This fact can hardly be explained

in Bem's theory. A sociobiological explanation could be based on the quantity of investment which is equal if the hair is short no matter whether boys' or girls'. It could have been an interesting verification if we would have had long-haired boys in our sample. Bad luck. Nowadays boys' long hair is out of fashion.

The parental investment, what long hair's care means, could be in an analytical approach a kind of tie, that is, the child is bound for a longer time and stronger to the mother. But this last physical tie is easy to cut. In this sense hair cut may be the last weaning so the question arises: who makes this final cut? Anyway, more than forty percent of the girls were short-haired.

Why do adults let their daughter's hair cut if they hurt the gender schema they themselves offer to the child? Why do girls let their hair cut hurting their gender schema which is the basis of their self-concept? This is the topic of our next study.

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