Orijinal araştırma

# Türk Çocuklarının Uyku Alışkanlıkları

# 0-72 Ay Aralığındaki Türk Çocuklarının Uyku Alışkanlıkları

Zeynep Çetin <sup>1</sup>, İsmihan ARTAN <sup>1</sup>, Özcan DOĞAN<sup>1</sup>, Esra ACAR ŞENGÜL <sup>1</sup>, Çiğdem AYDIN <sup>1</sup>, Arzu YÜKSELEN <sup>2</sup>

<sup>1</sup>Hacettepe Üniversitesi Sağlık Bilimleri Fakültesi <sup>2</sup>İstanbul Medipol Üniversitesi

#### Özet

**Amaç:** Bu çalışma çocukların belirli uyku alışkanlıklarını inceleme amacı taşımaktadır. Araştırmaya, basit rastgele örnekleme yöntemiyle 0-72 ay arası 543 kız, 557 erkek çocuğun annesi katılmıştır.

Gereç Ve Yöntem: Veriler anne görüşmeleri ve kısa bir anket kullanılarak toplanmıştır.

**Bulgular:** Çalışmanın sonucunda, anne çalışma durumu ile çocukların belirli uyku saatine sahip olma durumu ve çocuğun odasında aydınlatma bulunması aralarında anlamlı bir ilişki olduğu görülürken, anne çalışma durumu ile çocuğun uykuya geçerken geçiş nesnesi kullanması, ebeveynle uyuması, gece uyanması ve gece anne-baba yanına gelmesi arasında anlamlı bir ilişki olmadığı görülmüştür. Bununla birlikte, anne eğitim durumu ile belirli uyku saati, geçiş nesnesi kullanımı ve aydınlatma kullanımı arasında anlamlı bir ilişki olmasına karşın, ebeveynle uyuma, gece uyanma ve gece anne-babanın yanına gelme gibi uyku alışkanlıklarının anne-eğitim düzeyi ile ilişkisi incelenmiş, yapılan analiz sonucunda bu alışkanlıklarla anne eğitim düzeyi arasında istatistiksel olarak anlamlı bir ilişki bulunamamıştır.

**Sonuç:** Sonuç olarak anne çalışma durumunun çocukların uyku için belirli bir saate sahip olmaları ve odalarında ışık bulundurmaları açısından etkili bir faktör olduğu söylenebilir. Anne eğitim durumu çocukların uyku alışkanlıkları ve uykuya geçiş nesnesi kullanımı açısından değerlendirildiğinde önemli bir etken olabilir.

Anahtar kelimler: Uyku, Çocukların uyku alışkanlıkları, Uyku problemleri

Original Research

Sleeping Habits of Turkish Children

### Sleeping Habits Of 0-72 Months Old Turkish Children

Zeynep Çetin <sup>1</sup>, İsmihan ARTAN <sup>1</sup> ,Özcan DOĞAN <sup>1</sup> , Esra ACAR ŞENGÜL <sup>1</sup> , Çiğdem AYDIN <sup>1</sup> , Arzu YÜKSELEN <sup>2</sup>

<sup>1</sup>Hacettepe Üniversitesi Sağlık Bilimleri Fakültesi <sup>2</sup>İstanbul Medipol Üniversitesi

#### Abstract

**Objective:** The purpose of the study is to analyze children's sleeping habits. The sample included randomly selected mothers of 543 girls and 557 boys between the ages of 0-72 months.

**Materials and Methods**: Data collected by means of interviews with mothers and a short questionnaire was used during the interviews.

**Results**: It was found out that there is a significant relationship between the mother's working condition and children's having a specific sleeping time and the lighting in the child's room. It was also realized that there is not a significant relationship between the mother's working conditions with the child's using a transitional object while falling to sleep, his sleeping with the parent, his waking up at night and coming to his parents' room. There was a significant relationship between the mother's education level and the specific time to sleep and the use of transitional object and lighting.

**Conclusion:** In conclusion, it could be speculated that mothers' working condition is an effective factor for their children's having specific time to sleep and need for lighting in their rooms. Mothers' educational level may be an effective factor for their children sleeping habits like having specific time to sleep, use of transitional objects..

Keywords: Sleep, Sleeping habits of children, Sleeping problem

**Corresponding Author**: (Esra ACAR ŞENGÜL, Hacettepe Üniversitesi Sağlık Bilimleri Fakültesi, Hacettepe Üniversitesi Sağlık Bilimleri Fakültesi, Çocuk Gelişimi Bölümü D Blok 6. Kat Altındağ/Ankara, 0 (312)305 1526-129, esraacar@hacettepe.edu.tr)

# Introduction

The neural system controlling sleeping and waking up develops gradually from infancy to early childhood. In the first two years of life, the duration of night's sleep increases and waking up occurs relatively more rarely and shortly (Louis et al., 1997). Common knowledge about this issue is that structural characteristics such as genetic aspects and maturation with environmental factors play an essential role in the development of sleeping habits during infancy and early childhood. (Fagioli et al., 2002).

In a study (Hayes et al., 2007) drew the conclusion that the regulations in the early childhood are related to the quantity and the manner of the stimuli deriving from the mother and the father during infancy. As they fall into sleep, the babies used to being cradled, fed and close to their parents can react to the changes in the routine behaviors, especially after they are nine months old.

Among the babies and the kids, the pattern of behavior in which they tend to cry very often, display tantrums during their bed time or wake up at night in a distressful manner in the development of sleeping habit could be observed. Problematic behaviors could only be avoided through the attention of parents. It has also been noticed that some of the problems concerning sleep can stretch, for example up to the age of 3 or 4. (Lam, 2003; Scher, 2000; Zuckerman, 1987).

In the second and third years of life, children start to perceive sleep in a different way. Moreover, this is a period during which the child struggles to get through darkness and loneliness. It has been found out that there is a significant relationship between the problems of mother—child relations and sleeping problems. (Scher & Mayseless, 2000). In the 10th and 12th months when concerns regarding separation arouse, problems concerning falling to sleep reach its highest level. Beginning from the 19th and 24th months, these problems decrease, but waking up at nights very often can be noticed.

The most frequent sleeping habit is the child's sleeping with his parents. When sleeping with the parents behavior was analyzed, it was found that this case is related to the child's waking up and crying at nights. Another widespread fact about falling into sleep is that the use of an object while falling into sleep during early childhood is a very common behavior (Cortesi, 2004; Madansky, 1990).

# **Material and Method**

The sample of the research constitutes randomly selected mothers having 0-72 month old children registered to three different Family Planning Centers in Ankara city center. All mothers are all birth mothers.

As the paradigm of the study was being chosen, 0-72 months old children were examined by dividing them into age ranges as 0-12, 13-36, 37-72, and the mothers of the children from each age range were interviewed, the number and the gender of these children were kept at similar numbers whenever possible. In the research, from the above mentioned Mother and Child Care centers, mothers of 543 girls and 557 boys with a total of 1100 mothers chosen by simple random sampling method from these centers constitute the research sample.

In the study, for the data collection, researchers interviewed mothers by using a standard interview form developed by the researchers. During interviews, information about children (age, sex, etc.) and mothers (age, working condition – if she works or not -, educational level etc.) were collected and questions about children's sleeping habits were asked. During interviews questions asked to determine if children have a specific time to sleep, use a transitional object to sleep, need a lightening in their room, wake up at night and come to the parents room during night. Mothers were requested to rate frequency of their children's sleep related behaviors as always (all days in a week), frequently (a least 3-6 days in a week), sometimes (1-2 days in a week) and never.

Data collection process was carried out by these following stages: A brief information about the study was given to the mothers by the interviewer at the beginning of the interview. Then the demographic information at the beginning of the form was filled and the mother was asked to answer the questions regarding the situations she experiences while her child was falling to sleep and while being asleep.

In the statistical analysis of data, the chi-square independence test was applied in order to determine the relationship between the educational level, working conditions of the mothers having 0-72 months old children with the age range of these children and the sleeping habits of the children in the sample group.

### **Results**

In this study, the relationship between the working conditions of the mothers in the sample group and the sleeping habits of the children was analyzed. In Table 1, it was seen that there is a significant relationship between the mother's working condition and children's having specific time to sleep, as well as the children's need for lighting in their room, whereas it was

observed that there is not a significant relationship between the mother's working conditions and the child's using a transitional object while falling into sleep, his sleeping with the parent, his waking up at night and coming to his parents' room.

**Table 1:** The comparison of the mother's working conditions and the sleeping habits of children

working leeping Condition         S         s         imes         otal           Working Leeping Condition         Habits         S	1		Alway Somet							
Condition Habits  s  es	others'	S		S				Never	otal	
es pecific 0 4,2	Working	leeping								
es pecific 0 4,2	Condition	Habits								
es pecific 0 4,2	S									
Time to   1   Time to   1   1   1   1   1   1   1   1   1	•	S								
o         Sleep         81         7,8         44         4,3         80         7,9         005           es         I         T         5         7,9         .2         7         8,9         5           o         Object         26         2,3         6         .6         53         5,1         005           es         se of 1 Lighting 00         9,8         5         .5         10         0,8         005           es         leeping 3 4,2         5         6,8         7         8,9         5           1 with the 0 1 1,0         0         9,8         5         .5         10         0,8         005           es         leeping 3 4,2         5         6,8         7         8,9         5         .2           o         parent 21         1,9         98         9,7         86         8,4         005           es         aking Up At night 94         9,2         40         3,8         71         7         005	es	pecific	0	4,2		,4		,4	5	
es ransition   T   5   7,9   2   7   8,9   5   1   1   1   1   1   1   1   1   1	1	Time to								00*
es ransition   T   5   7,9   2   7   8,9   5   1,1    o Object   26   2,3   6   6   53   5,1   005    es   U   7   0   1   1,6   7   8,4   5     Se of   Lighting   00   9,8   5   5   10   0,8   005    es   leeping   3   4,2   5   6,8   7   8,9   5     I with the   2   2   3,7   1   3,7   2   2,6   5     aking Up   At night   94   9,2   40   3,8   71   7   005      1     At night   94   9,2   40   3,8   71   7   005      1	o	Sleep	81	7,8	44	4,3	80	7,9	005	
es leeping 3 4,2 5 6,8 7 8,9 5    with the										
o Object 26 2,3 6 ,6 53 5,1 005  es	es		5	7,9		,2	7	8,9	5	
es	I	•								,1
es se of 1 Lighting 00 9,8 5 ,5 10 0,8 005  es leeping 3 4,2 5 6,8 7 8,9 5 1 with the	О	Object	26	2,3	6	,6	53	5,1	005	
es se of Lighting 00 9,8 5 ,5 10 0,8 005  es leeping 3 4,2 5 6,8 7 8,9 5 1 with the		U								
O Lighting 00 9,8 5 ,5 10 0,8 005  es leeping 3 4,2 5 6,8 7 8,9 5 1 with the	es		7	0	1	1,6	7	8,4	5	
o		•								05*
es leeping 3 4,2 5 6,8 7 8,9 5 1 with the	0		00	9,8	5	,5	10	0,8	005	
1 with the 0 parent 21 1,9 98 9,7 86 8,4 005  es										
o parent 21 1,9 98 9,7 86 8,4 005  es	es		3	4,2	5	6,8	7	8,9	5	
es	I									,2
es V 2 3,7 1 3,7 2 2,6 5  aking Up 1 At night 0 94 9,2 40 3,8 71 7 005	0	parent	21	1,9	98	9,7	86	8,4	005	
es aking Up 2 3,7 1 3,7 2 2,6 5  At night 94 9,2 40 3,8 71 7 005	,	v								
o At night 0,2 O 94 9,2 40 3,8 71 7 005	es		2	3,7	1	3,7	2	2,6	5	
o 94 9,2 40 3,8 71 7 005	I	•								,2
	0		94	9,2	40	3,8	71	7	005	
	,									
es oming to 2 3,2 2 4,2 1 2,6 5	es		2	3,2	2	4,2	1	2,6	5	
the										
parents'	I									,3
0 45 4,2 07 0,5 75 7,5 005		room at	43 4,2	67	6,5	95	9,3	005		
night *** of										

\*p≤.05

The reason why there was not a significant relationship between the mother's working condition and the lighting used in children's rooms may be the mother's not being at home in daytime, which makes one think that the child could fall into sleep by himself, and thus,

thinking his mother will also not be at home at night wants the lights to be on in order to feel safe at nights and to be away from the feelings of anxiety and fear stemming from the dark.

The reason why 84% of the children having working mothers do not have a regular sleeping time habit is that the life style of working mothers are more settled than that of ones who do not work, and since they have to do the households in a limited time span, it can be assumed that they make their children acquire habits in a systematic order as well. However, it should be taken into consideration that mothers who do not work act in a more easy going manner and let their children sleep whenever they want.

In addition to this, it was found out that there is no significant relationship between the child's sleeping with the parent and the mother's working conditions. According to this finding, we could propose that socio-cultural and socio-economic level are not related to the the child's coming to the parents' bed at night. Morever in the cross-cultural study (Morelli et al., 1992) it's found out that the children's sleeping orders cultures differ from each other from culture to culture.

In the study, which was carried out with 18 American children, it was realized that only 3 kids who are 0-3 months old sleep in their own rooms while the Mayan children participating in the study share the same bed with their parents. Besides all these data, in the study stated that people sleep better when they are alone in bed, and emphasized that, if the child sleeps alone, he can learn to be separated from his parents without any worries, which is an essential determiner. Moreover, sleeping without his parents is very crucial for the child's mental development (Ferber, 1985).

**Table 2:** The Comparison of Children's Sleeping Habits According To the Mother's Education Level

Mothers'	Sleeping	Always		2	Sometimes	
Education Level	Habits	N	%	N	%	N
Higher Education		42	77,8	7	13	5
Secondary School	Specific Time to Sleep	412	78,3	46	8,7	68
Elementary School		37	59	98	18,8	115
Higher Education		32	59,3	1	1,9	21
Secondary School	Transition Object	275	52,3	14	2,7	237
Elementary School		274	52,7	14	2,7	232
Higher Education		32	59,3	8	14,8	14
Secondary School	Use of Lighting	330	62,7	44	8,4	152
Elementary School		195	37,5	54	10,4	271
Higher Education		14	25,9	15	27,8	25
Secondary School	Sleeping with the Parent	153	29,1	167	31,7	206
Elementary School		117	34	151	29	192
Higher Education		19	35,2	24	44,4	11
Secondary School	Waking Up At Night	213	40,5	238	45,2	75
Elementary School		194	37,3	229	44	97
Higher Education		10	18,5	23	42,6	21
Secondary School	Coming To the Parent's Room at Night	122	23,2	203	38,6	201
Elementary School	, and the second	133	25,6	183	35,2	204

\*p≤.05

In this study, the relationship between the mother's education level and the children's sleeping habits in the sample group was analyzed; as a conclusion, it was found out that there

is a significant relation between the mother's education level and specific time to sleep, use of transitional object and lighting. According to these findings, the children having mothers who have secondary school and higher education level have a more regular sleeping routine than the ones with mothers having a primary school education level. Moreover, it was observed that the children with mothers were having a higher education level use transitional object to fall into sleep, and the ones with mothers having a secondary or primary school education level use lighting more often. The reason why children have a regular sleeping routine is that mothers exhibit an attitude which is more conscious and tend to behave more consistently towards their children as their education level increases. However, this makes one think that, when they act in more conscious way, children try to calm themselves down and sleep on their own; therefore, the kids might prefer using lamps as well. Besides this, in the study, the relationship between sleeping habits like sleeping with the parent, waking up at night and coming to the parent's room and the education level of the mother was analysed, and as a result, no relationship was found between these habits and the mother's education level. However, in the study carried out by Sadeh & Anders (1993), they stated that socio-economic level and socio-cultural factors play a minimal role in the sleeping behaviours of the children.

**Table 3:** The comparison of sleeping habits of children according to their age ranges

Age	Sleeping	Alv	vays		Sometimes		Never
Ranges	Habits	N	%	N	%	N	%
0- 12 months		164	62,1	37	14	63	23
13- 36 months	Specific Time to Sleep	271	69,7	58	14,9	60	15
37- 72 months		326	72,9	56	12,5	65	14
0- 12 months		133	50,4	5	1,9	126	47
13- 36 months	Transition Object	211	54,2	5	1,3	173	44
37- 72 months		237	53	19	4,3	191	42
0- 12 months		144	54,5	19	7,2	101	38
13- 36 months	Use of Lighting	190	48,8	37	9,5	162	41
37- 72 months		223	49,9	50	11,2	174	38
0- 12 months		111	42	50	18,9	103	3!
13- 36 months	Sleeping with the parent	149	38,3	124	31,9	116	29
37- 72 months		84	18,8	154	35,6	204	45
0- 12 months		197	74,6	51	19,3	16	6,
13- 36 months	Waking up at night	153	39,3	188	48,3	48	12
37- 72 months		76	17	252	56,4	119	26
0- 12 months		77	29,2	44	16,7	143	54
13- 36 months	Coming to the parent's room	112	28,8	157	40,4	120	30
37- 72 months		76	17	208	46,5	163	36
*n< (	0.5						

In this study, the relationship between the children's ages and their sleeping habits in the sample group was examined; as a conclusion, it was found out that there was a significant relationship between 0-12 months, 13-36 months and 37-72 months age groups for their sleeping habits. With regards to this result, it was determined that 37-72 months old children have the most regular sleeping time and it is the group which use the transitional object the most. The use of transitional object is regarded as a commitment to soft toys like blanket or similar ones and a subset of the transition phenomenon, which is a broad category. (Passman, 1987).

#### Discussion

It can be assumed that the purpose of sleep might change when babies get older. The reason why 36-72 months old babies use objects more than the younger ones is that these babies are more conscious and thus, they do not feel safe when they are not close to their mothers. Therefore, they might prefer using transitional object while falling into sleep more often. In their study, Passman & Halonen (1979) emphasized that the use of transitional object is less frequent among babies and soft objects are used instead.

In our research, it was realized that children belonging to 0-12 and 13-36 months old group prefer sleeping with their parents and coming to their room at night more often. On the other hand, in their study, Goodlin et al. (2001) pointed out that 4-6 months old babies, even until the end of their first year, fall into sleep themselves.

In the research, the fact that the habit of waking up at night is observed among 0-12 months old children stands out. However, it is observed among 32-72 months old children that the habit of waking up at night decreases. It can be presumed that, in our culture, bearing in mind that mothers continue breastfeeding their babies at night with the concern that they should get hungry during the night, and thus, the babies are woken up often. Parallel to this study, Sadeh et al. (1983) found out in their study carried out with 5006 parents that waking up at night decreases as they get older. In the same study, Sadeh et al. (1983) pointed out that, while the percentage of 2-month old children who sleep in their own bed is 24%, it goes up to 70% when the age reaches 1. The findings showed that the increased amount of waking up at night is related to breastfeeding, feeding the baby with a nursing bottle, bringing the baby to the parents' room and irregular sleeping routines.

In contrast to the results of this study, Hayes, Parker, Sallinen & Davare stated in their study that age is not very influential among 13-36 months old babies; in addition, the ones

sleeping with their parents have less regular sleeping routines, difficulty in falling into sleep, wake up more often at night and look for their parents when they wake up.

In our study, it was found that there is not a significant relationship between the age groups and the use of lighting while falling into sleep. In the study of Sadeh et al. (1983), it was pointed out that duration of sleep is related to the child's age while the length of night's sleep depends on the environmental factors such as sharing the bed and using a night light and a transitional object as well.

In their study Burnham al.(2002) examined the sleep-wake cycle, factors affecting sleeping order and the use of an object to calm down the baby. 80 babies were included in the research. In the results of this study, it was found that sleeping period increases among 1-3 months old babies and it remains stable among 3-12 months old babies.

#### Conclusion

Sleeping has an essential role among children in terms of their both physical and mental development. In general it could be said that when their children's sleeping habits are regular, the mother's, father's and child's life quality improves, this improvement will also contribute to the development and growing up of the child. For this reason in this study, children's sleeping habits were investigated by considering some factors such as children's ages, mother's working conditions, educational levels. As a result, it was seen that mother's working condition and educational level could be an effective factors for their children's such sleeping habits as having a specific time to sleep, need for lightening in their room, need for transitional object. As a conclusion, it could be speculated that mothers with lower educational level may need counseling to help their children get more positive sleeping habits.

### References

- Burnham, M., Goodlin-Jones, L.B., Gaylor, E.E., Anders, F.T. (2002). Nighttime sleep-wake patterns and self-soothing from birth to one year of age: a longitudinal intervention study, Journal of Child Psychology and psychiatry, 43, 713-725.
- Cortesi, F.L., Giannotti, F. L., Sebastiani, T. and Vagnoni, C. (2004). Cosleeping and sleep behavior in Italian school- aged children. Journal of Developmental and Behavioral Pediatrics, 25, 28-33.
- Fagioli, I., Ficca, G. and Salzarulo, P. (2002). In P. Salzarulo & G. Ficca (Eds), Awakening and sleep-wake cycle across development (pp. 95-114). Amsterdam, Netherlands: Benjamins.
- Ferber, R. (1985). Sleep, sleeplessness, and sleep disruptions in infants and young children. Annals of Clinical Research, 17, 227-234.
- Goodlin-Jones, B.L., Burnham, M. M., Gaylor, E.E., Anders, T.F. (2001) Night-waking, sleep-wake organization and self-soothing in the first year of life. Journal of Developmental and Behavioral Pediatrics, 22, 226-233.
- Hayes, M.J., Fukumizu, M, Troese, M., Sallinen, B.A. and Gilles, A.A. (2007). Social experiences in infancy and early childhood co-sleeping. Infant and Child Development Special Issue on Co-Slepping, 16, 403-416.
- Hayes M, J., Parker, K, G., Sallinen B., & Davare, A, A. (2001). Bedsharing, Temperament, and Sleep Disturbance in Early Childhood. Pediatric Sleep, 24, 657-662.
- Lam. P, Hiscock, H and Wake, M. (2003). Outcomes of infant sleep problems: A longitudinal study of sleep, behavior and maternal well-being. Pediatrics, 111, 203-207.
- Louis, J., Cannard, C., Bastuji, H. and Challamel, M. (1997). Sleep ontogenesis revisited: A longitudinal 24 hour home polygraphic study on 15 normal infants during the first two years of life. Sleep, 20, 323-333.
- Madansky, D. & Edelbrock, C. (1990). Cosleeping in a community sample of 2 and 3 year-old children. Pediatrics, 86, 197-203.
- Morelli, G.A., Rogoff, B., Oppenheim, D. and Goldsmith, D. (1992). Cultural Variation in infant's sleeping Arrangement Questions of independence Developmental Psychology, 28, 604-613.
- Passman, R. H. (1987). Attachment to Inanimate Objects: Are Children Who Have Security Blankets Insecure? Journal of Consulting and Clinical Psychology, 55, 825-830.
- Passman, R.J., & Halonen, J.S. (1979). A developmental survey of young children's attachments to inanimate objects, Journal of Genetic Psychology:Research and Theory on Human Development, 134, 165-178.
- Sadeh A. & Anders, T. F. (1993). Infant sleep problems; Origins. Assessment, interventions. Infant Mental Health Journal, 14, 17-34.
- Scher, A, and Mayseless, O (2000). Mother of anxious/ambivalent infants: Maternal characteristics and child- care context. Child Development, 71, 1629-1639.
- Zuckerman, B. Stevenson, J. and Bailey, V (1987). Sleep problems in early childhood; Continuities, predictive factors& behavioral correlates. Pediatrics, 80, 664-671.