

## EVALUATION OF RELATIONSHIP OF USE OF MOBILE PHONES AND ELECTRONIC DEVICES BY CHILDREN AND ADOLESCENTS WITH PARENT'S JOB, SOCIOCULTURAL LEVEL, SOCIOECONOMIC LEVEL AND USE OF MOBILE PHONE\*

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### ABSTRACT

Because electronic opportunities are increasing, we studied relationship of use of electronic devices (EDs) and mobile phones (MPs) by children/adolescents with parents' jobs, sociocultural level, socioeconomic level and their characteristics of use of MP.

A poll was carried out among children/adolescents aged between 06-18 years who consulted to Department of Pediatrics, NKU MF. In this form, we asked the characteristics of use of MPs by children/adolescents, parents' jobs, educational level, socioeconomic level and characteristics use of MP. Data of 50 people who use MP and 50 people who do not use MP was compared between groups. PASW 18 statistics for windows package program was used to compare data. Chi-square, independent sample t and Mann-Whitney u test were used to evaluate data.  $p \leq 0,05$  value was accepted as statistically significance limit.

Boy/girl ratio of MP (-) group was 1.00, and it was 0.92 in the MP (+) group. Mean age (months) was  $121.32 \pm 21.22$  in the MP (-) group, and it was  $147.34 \pm 24.63$  in the MP (+) group. Daily period of use of ED (minutes) was  $234.10 \pm 114.49$  in the MP(-) group, and it was  $286.70 \pm 116.32$  in the MP (+) group ( $p \leq 0,05$ ).

Job (+) mother ratio of MP (+) group was statistically significant ( $p \leq 0,01$ ), but job (+) father ratio was not statistically significant ( $p \geq 0,05$ ). Secondary school - high school (+) mothers and university-post-graduate (+) fathers had statistically significant high ratios in the MP(+) children group ( $p \leq 0,05$ ). Monthly income and monthly income per person in the family parameters were statistically significant higher ratios in MP(+) children ( $p \leq 0,01$ ). Ratio of use of MP, daily period of use of MP by the parents and how long they use MP were not statistically significant between MP (+) and MP (-) groups ( $p \geq 0,05$ ).

In our study, use of MP of children/adolescents was found to be closely related with parents' jobs, sociocultural and socioeconomic states, when it has no relationship with characteristics of use of MP by the parents.

**Key words:** Mobile phone, electronic device, parent, socioeconomic, socioeconomic status.

## ÇOCUK VE GENÇLERDE ELEKTRONİK AYGITLAR İLE CEP TELEFONU KULLANIMININ, EBEVEYNLERİNE AİT ÇALIŞMA DURUMLARI, SOSYOKÜLTÜREL DÜZEYLERİ, SOSYOEKONOMİK DÜZEYLERİ VE CEP TELEFONU KULLANIM ÖZELLİKLERİ İLE OLAN İLİŞKİLERİNİN DEĞERLENDİRİLMESİ\*

### ÖZET

Günümüzde elektronik teknoloji olanaklarının giderek artış göstermesi nedeniyle, çalışmamızda, elektronik aygıtlar (EA) ve cep telefonu (CT) kullanımının çocuk/gençlerin ebeveynlerine ait çalışma durumları, sosyokültürel düzeyleri, sosyoekonomik düzeyleri ve CT kullanım özellikleriyle olan ilişkileri araştırılmıştır.

NKÜ TF Çocuk Sağlığı ve Hastalıkları Polikliniği'ne başvuran 06-18 yaş arası çocuk/gençlerin anamnez ve fizik muayeneleri sonrasında, anket formu dolduruldu. Formda çocuk/gençlerin CT kullanımlarına ilişkin özellikler, anne-babaya ait çalışma, eğitim ve gelir durumları, anne-babalarının CT'larına ilişkin bilgiler sorgulandı. CT kullanan 50 ve kullanmayan 50 olguya ait veriler gruplar arasında karşılaştırıldı. Verilerin aktarımında PASW 18 statistics for windows paket programı kullanıldı. Verilerin değerlendirilmesinde kıkare, independent sample t ve mann-whitney u testi kullanıldı.  $p \leq 0,05$  değeri istatistiksel olarak anlamlı kabul edildi.

CT(-) grupta erkek/kız oranı: 1.00; CT(+) grupta ise 0.92 idi. Yaş ortalaması(ay) CT(-) grupta  $121.32 \pm 21.22$ ; CT(+) grupta ise  $147.34 \pm 24.63$  idi. Günlük EA kullanımı süresi dakika olarak CT(-) grupta  $234.10 \pm 114.49$ ; CT(+) grupta ise  $286.70 \pm 116.32$  idi( $p \leq 0,05$ ).

CT(+) gruptaki annelerdeki daha yüksek çalışma oranları istatistiksel açıdan anlamlılık gösterirken ( $p \leq 0,01$ ), baba çalışma durumlarında istatistiksel farklılık saptanmadı ( $p \geq 0,05$ ). Annelerde ortaokul-lise mezunları, babalardaysa üniversite-lisansüstü eğitimliler arasında, CT(+) grup lehine daha yüksek oranlar, istatistiksel olarak anlamlıydı ( $p \leq 0,05$ ). Aylık gelir ve kişi başı aylık gelir, CT(+) grupta, her iki gelir parametresi için de, istatistiksel olarak anlamlı yükseklik tespit edildi ( $p \leq 0,01$ ). CT(-) ve CT(+) gruplarda, anne-babaya ilişkin CT kullanım oranları, kaç yıldır kullandığı ve günlük kullanım süreleri değerlendirildiğinde, gruplar arasında istatistiksel farklılık saptanmadı ( $p \geq 0,05$ ).

Çalışmamızda, çocuk/gençlerin CT kullanımlarının, ebeveynlerin çalışma durumlarının, sosyokültürel ve sosyoekonomik durumlarıyla yakından ilişki olduğu saptanırken, ebeveynlerinin CT kullanım özellikleriyle ilgili herhangi bir ilişkiye rastlanılmamıştır.

**Anahtar kelimeler:** Cep telefonu, elektronik aygıt, ebeveyn, sosyoekonomik, sosyokültürel durum.

### 1. Introduction

Increase in the use of mobile phones (MPs) and electronic devices (EDs) among children/adolescents due to developing electronic technology opportunities results in significant changes in lifestyle. In our study, relationship of parents' jobs, sociocultural and socioeconomic levels and characteristics of use of MP with use of MP and ED by children/adolescents were researched.

### 2. Material and Method

Children aged between 06-18 who consulted in Departments of Pediatrics, NKU MF were randomly taken into study. After anamnesis, physical examination and planning of treatment, oral consent was taken from children/adolescents and signed consent was taken from the parents, then a questionnaire was filled.

In this form, we asked if children/adolescents use MP, for how many years they use MP, how much time they spend in a day with MPs and EDs, their period of playing and/or talking with MP, their daily period of watching TV and using computer in units of minutes, parents' jobs and educational level, if parents have MP, for how many years they use MP, how much time they spend in a day with MPs and EDs, total monthly income and total number of individuals in the family. NKU Ethical Committee for Non-invasive Clinical Research approved our study (27th March, 2014; No:2014/25/03/06).

Data of groups consisted of 50 cases who use MP, and 50 cases who does not use MP was compared. PASW 18 statistics for Windows package program was used to transfer data. Chi-square, independent sample t and Mann-Whitney u test were used to evaluate data.  $p \leq 0,05$  value was accepted as statistically significance limit.

### 3. Findings

Boy/girl ratio was 1.00 in MP (-) group, and it was 0,92 in MP(+) group. Mean age (months) was  $121.32 \pm 21.22$  in MP (-) group, and it was  $147.34 \pm 24.63$  in MP (+) group. Daily period (minutes) of use of EDs was  $234.10 \pm 114.49$  in MP (-) group, and it was  $286.70 \pm 116.32$  in MP (+) group ( $p \leq 0,05$ ). The difference was statistically significant among groups ( $p \leq 0,05$ ).

Job(+) mother ratio in MP (-) group was 18%, and it was 62% in the MP (+) group ( $p \leq 0,01$ ). Job(+) father ratio of MP (-) group was 96%, and it was 90% in MP (+) group ( $p \geq 0,05$ ). When job (+) mother ratio in the MP(+) group of children was statistically significantly higher ( $p \leq 0,01$ ), there was no statistical difference between groups for the fathers' job status ( $p \geq 0,05$ ).

Mothers' educational levels in MP(-) and MP (+) groups were, literate (-): 2%-0%, literate (+): 4%-4%, primary school: 52%-36%, secondary school: 8%-14%, high school: 22%-36%, university: 10%-10%, post-graduate: 2%-0%. Fathers' educational levels were literate (-): 0%-0%, literate (+): 2%-2%, primary school: 42%-32%, secondary school: 18%-20%, high school: 36%-22%, university: 2%-20%, post-graduate: 0%-4%. Secondary - high school (+) mothers and university - post graduate (+) fathers have statistically significant higher ratios in the MP(+) group of children ( $p \leq 0,05$ ).

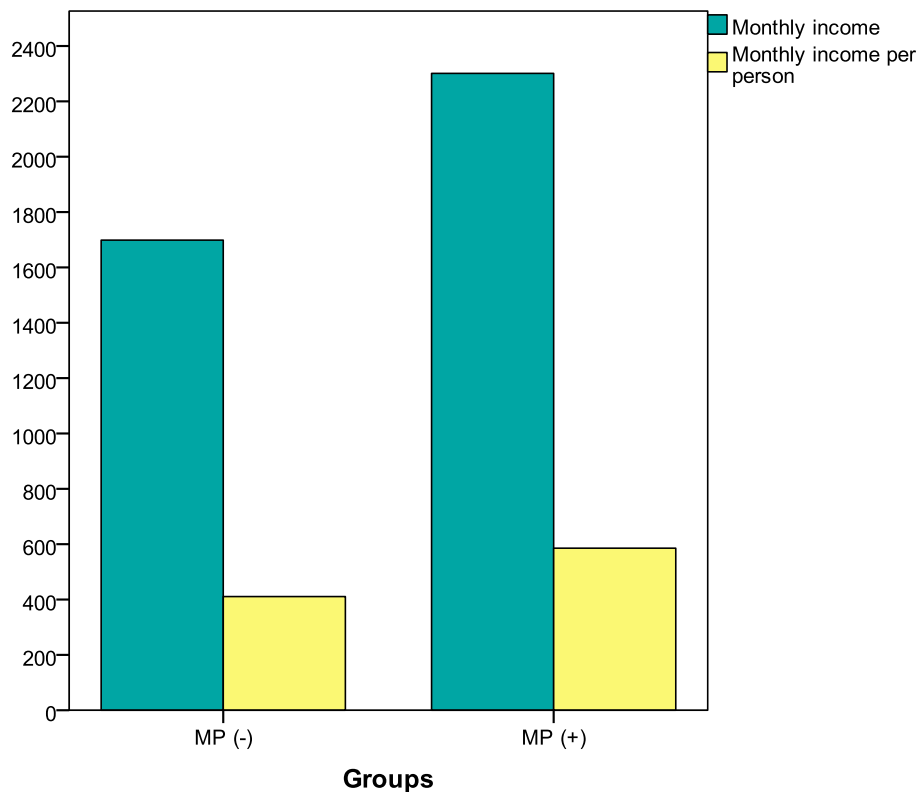
Monthly total income of family in currency of Turkish Liras was  $1705.96 \pm 844.75$  in MP (-) group, and it was  $2301.11 \pm 1152.00$  in the MP (+) group ( $p \leq 0,01$ ). Monthly income per person in the family was  $410.73 \pm 189.80$  in MP (-) group, and it was  $585.58 \pm 319.12$  in MP (+) group ( $p \leq 0,01$ ). Both income parameters had statistically significant differences among groups ( $p \leq 0,01$ ).

Ratio of use of MP of mothers was 94%, and that of fathers was 100% in the MP (-) group. Ratio of use of MP of mothers was 98%, and that of fathers was 96% in the MP (+) group. There was no statistically significant difference between groups ( $p \geq 0,05$ ).

Period (years) of use of MP of mothers was  $9.08 \pm 4.95$  in the MP (-) group, and it was  $9.31 \pm 4.31$  in the MP (+) group. Daily period (minutes) of use of MP of mothers was  $34.63 \pm 36.07$  in the MP (-) group, and it was  $42.04 \pm 37.04$  in the MP (+) group. There was no statistically significant difference between groups ( $p \geq 0,05$ ). Period (years) of use of MP of fathers was  $13.24 \pm 3.29$  in the MP (-) group, and it was  $12.21 \pm 3.73$  in the MP (+) group. Daily period (minutes) of use of MP of fathers was  $62.08 \pm 59.65$  in the MP (-) group, and it was  $62.72 \pm 50.71$  in the MP (+) group. There was no statistically significant difference between groups ( $p \geq 0,05$ ).

In our study, job (+) mothers and secondary and high school (+) mothers, and university and post-graduate (+) fathers had statistically significant higher ratios in the MP (+) group of children. Our study revealed that use of MP by the children/adolescents is closely related with parents' jobs and sociocultural level.

Electronic opportunities that make our life easier result in demand of MP by the children from their parents. In our study, monthly total income and monthly income per person in the family, in other words, socioeconomic level of MP (+) group of children were found higher than the MP (-) children. Our study revealed that use of MP by children/adolescents is related with the socioeconomic level of the family.



**Figure-1:** Distrubution of monthly income per person and monthly income levels in the MP(-) and MP(+) groups.

In our study, we found no relationship between use of MP by the children/adolescents and parents. Our study proposes that use of MP by the children/adolescents may be related with social circle of children/adolescents rather than the parents.

#### 4. Discussion

There is an increase in the use of ED and MP by the children and adolescents due to developing electronic opportunities. Use of EDs and MPs make the life easier but it also provide a basis for a sedantary life due to decrease in the active lifetime.

Use of ED and MP by the children results in significant changes in the life of them and this situation changes related with parents' jobs and socioeconomic states<sup>(1,2)</sup>. Recent studies reported similar findings<sup>(3,4)</sup>. In our study , job (+) mothers and secondary and high school (+) mothers, and university and post-graduate (+) fathers had statistically significant higher ratios in MP (+) group of children. Our study revealed that use of MP by the children/adolescents is closely related with parents' jobs and sociocultural level.

Electronic opportunities that make our life easier result in demand of MP by the children from their parents. Some studies that proposes socioeconomic level of family may be related with MP usage incidence and lifestyle of children/adolescents<sup>(5,6)</sup>. In our study, monthly total income and monthly income per person in the family, in other words, socioeconomic level of MP (+) children were found higher than the MP (-) children. Our study revealed that MP usage ratio of children/adolescents is related with socioeconomic level of the family.

The relationship of MP usage incidence of children/adolescents with MP usage frequency of the parents was researched as an indicator of lifestyle<sup>(3,7)</sup>. In our study, we found no relationship between use of MP by the children/adolescents and parents' characteristics of use of MP. Our study proposes that use of MP by the children/adolescents may be related with the social circle of children/adolescents rather than the parents.

Generally evaluating the study, children/adolescents' characteristics of use of MP is closely related with jobs and socioeconomic and sociocultural states of the parents, but it has no relationship with parents' characteristics of use of MP, and probably mostly the circle of friends of the children has a significant effect on this.

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