BİLGİ TEKNOLOJİLERİ VE İLETİŞİM KURUMU

ÇOCUK VE BİLGİ GÜVENLİĞİ DERNEĞİ

ANKARA ÜNİVERSİTESİ 1946

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April 11–13, 2018 – Ankara, TURKEY

Uluslararası Çocuk ve Bilgi Güvenliği Kongresi "Dijital Oyunlar"

11-13 Nisan 2018, Ankara, TÜRKİYE

digital games

T.C. Aile ve Sosyal Politikalar Bakanlığı

T.C. MİLLİ EĞİTİM BAKANLIĞI

T.C. Ulaştırma Denizcilik ve Haberleşme Bakanlığı

Düzenleme kurulu

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Ömer Fatih SAYAN

Üyeler

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Aile ve Sosyal Politikalar Bakanlığı

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Değerli katılımcılar,

Çocukların çevrimiçi ve dijital ortamlarda güvenliğini sağlayacak bilgi birikimini edinmek ve bu bilgileri hayata geçirebilmek amacıyla yaptığımız çalışmaların devamı olmak üzere 2018 Uluslararası Çocuk ve Bilgi Güvenliği Kongresini gerçekleştirmekten büyük mutluluk duyuyoruz.

9-11 Ekim 2017 tarihlerinde Ankara'da Dijital Oyunlar teması ile gerçekleştirdiğimiz Uluslararası Çocuk ve Bilgi Güvenliği Etkinlikleri kapsamında Milli Eğitim Bakanlığı, Aile ve Sosyal Politikalar Bakanlığı, Gençlik ve Spor Bakanlığı, akademi ve sektörden katılımcıların katkıları ile çocuk-aile eğitimleri, beş farklı çalıştay ve bir sempozyum düzenledik. Kongreyi de, tüm bu etkinliklerden edindiğimiz bilgilerle, var olan sorunları ve gereksinimleri dikkate alarak yine "Dijital Oyunlar" teması ile gerçekleştirdik.

Ankara Üniversitesi, Bilgi Teknolojileri İletişim Kurumu ve Çocuk ve Bilgi Güvenliği Derneği işbirliğinde Ankara'da düzenlediğimiz kongreye yurt içi ve yurt dışından bilim insanları, ilgili bakanlıklar, sektör ve sivil toplum kuruluşlarından uzmanlar bildiriler sunmuş, görüş alışverişinde bulunmuş ve eldeki bilgilerini etkin şekilde paylaşarak bu alandaki bilimsel gelişmelere katkılarda bulunmuştur.

Kongremizde elde ettiğimiz etkili ve verimli akademik paylaşımların daha sonraki çalışmalara ışık tutması ve rehber olmasını dileriz.

Saygılarımızla,

Kongre Başkanları

Dr. Ömer Fatih Sayan
Bilgi Teknolojileri ve İletişim Kurumu
Başkanı

Prof. Dr. Betül Ulukol
Ankara Üniversitesi Tıp Fakültesi
Çocuk Sağlığı ve Hastalıkları Anabilim Dalı

PROGRAM

11 Nisan 2018, Çarşamba

Saat	BÜYÜK KONFERANS SALONU	KÜÇÜK KONFERANS SALONU
8:30 – 9:30	KAYIT	
9:30-11:00	AÇILIŞ	
11:00-11:30	Kahve arası	
11:30-12:30	KONFERANS Santeri Koivisto	
12:30-13:30	Yemek	
13:30-15:00	PANEL 1 DİJİTAL OYUNLARIN ÇOCUK GELİŞİMİ ÜZERİNE DESTEKLEYİCİ ETKİLERİ Panel başkanı: Prof. Dr. Kürşat Çağıltay *"Dijital Oyunlara Yin-Yang Felsefesi İle Bakmak"* Panel sunumu – I Eyüp Yılmaz (*9 – 11 Yaş Çocukların Oynadıkları Oyun Türü ile Sosyal Problem-Çözme Becerileri Arasındaki İlişki (İngiltere Örneği)*) Panel sunumu – II Tülin Haşlaman (*Sınıf Öğretmenlerin Dijital Oyunların Geliştirilmesine İlişkin Önerileri*) Panel sunumu – III Zeynal Yasacı (*Okul Öncesi Çocukların Dijital Oyun Oynama Alışkanlığının Olumlu Etkilerinin Araştırılması*) Panel sunumu – IV Berrak Yıldırım Aksakal (*Dijital Teknolojinin Çocuk Gelişimindeki Yansımalarının Değerlendirilmesi*)	PANEL 2 DİJİTAL EBEVEYNLİK Panel başkanı: Prof. Dr. Ferhan Odabaşı *"Çocuğum Oynuyor, İçim Rahat"* Panel sunumu – I Başak Karakete (*Ebeveynler Oyun ve Videolara Karşı*) Panel sunumu – II Şenay Ozan Leymun (*Ailede Yeni Dijital Sendrom: Paylaşan Ebeveynler*) Panel sunumu – III Mehmet Özkaya (*Erken Çocukluk Döneminde Çocukların Dijital Oyunlara Eğilimi, Dijital Oyunların Çocukların Gelişimine Uygunluğu, Güvenliği ve Sakıncaları Konusunda Ebeveynlerin Farkındalıkları*) Panel sunumu – IV Çelebi Uluyol (*Dijital Oyunlarla İlgili Aile Görüşlerinin İncelenmesi*)
15:00-15:30	Kahve arası	
15:30-17:00	PANEL 3 – "Prof. Dr. Ufuk Beyazova onuruna" DİJİTAL OYUNLARIN ÇOCUK SAĞLIĞI ÜZERİNE ETKİLERİ Panel başkanı: Prof. Dr. Gülbin Gökçay Panel sunumu – I Beril Aydın (*6-8 Yaş Arası Çocukların Ekran Zamanı ve Video Oyunu Oynama Alışkanlıklarının Araştırılması*) Panel sunumu – II Ayşe Tolunay Oflu (*Okul öncesi çocukların ekran zamanı ve dijital oyunu oynama alışkanlıklarının çok merkezli olarak araştırılması*) Panel sunumu – III Zeynal Yasacı (*Bebeklik Dönemi Çocukların Teknolojik Cihaz Maruziyeti ve Uyku Durumlarının Değerlendirilmesi*) Panel sunumu – IV Süleyman Daşdağ (*Cep Telefonlarının Yaydığı Radyasyonların Beyin Üzerine Etkileri*)	PANEL 4 DİJİTAL OYUNLARIN SOSYAL MEDYADAKİ YANSIMALARI Panel başkanları: Prof. Dr. Selçuk Hünerli *"Sosyal Medya, Çevrimiçi Oyunlar ve Çocuk"* Yrd. Doç. Dr. Yusuf Levent Şahin Panel sunumu – I Serhat Altıok (*Çocuk YouTuberlar Tarafından Paylaşılan Dijital Oyunlara Yönelik Videoların İçerik ve Aldıkları Geri Bildirimler (Yorumlar) Açısından İncelenmesi "Merhaba! YouTube Kanalıma Hoş Geldiniz."*) Panel sunumu – II Işıl Erdemli (*Çevrimiçi Oyunlarda Çocuğa Karşı Şiddetle Mücadele: Ortaklık Ağı Örneği*) Panel sunumu – III Ergin Şafak Dikmen (*Dijital Oyunların Gelişimi ve Sosyal Medya Uzantıları*) Panel sunumu – IV Filiz Aydoğan Boschele (*Tekno-Meta Olarak Oyun ve Çocuk*)
	Açılış Kokteyli	

12 Nisan 2018, Perşembe

Saat	BÜYÜK KONFERANS SALONU	KÜÇÜK KONFERANS SALONU
9:00 – 10:15	**PANEL 5** **ÖZEL GEREKSİNİMİ OLAN GRUPLAR VE DİJİTAL OYUNLAR** **Panel başkanı : Prof. Dr. Mukaddes Erdem** *"...Fırsat Mı, Tehdit Mi?"* **Panel sunumu – I** Eda Çiftçi (*Digital Games-Based Learning For Special Educational Needed Children)* **Panel sunumu – II** Seda Özer Şanal (*Disleksili Çocuklar ve Dijital Oyunlar: Alanyazın İncelemesi*) **Panel sunumu – III** Murat Kılıç (*İşitme Engelli Çocukların Eğitiminde Bilişim Teknolojileri ve Oyunlar)*	**PANEL 6** **DİJİTAL OYUN ENDÜSTRİSİ** **Panel başkanı: Dr. Ergin Şafak Dikmen** *"Küresel Dijital Oyun Endüstrisi"* **Panel sunumu – I** Zafer Kaya (*Scratch ile Besin Zinciri Oyunu Tasarımı ve Uygulaması)* **Panel sunumu – II** Abdullah Bal (*Sanal Gerçeklik ile Doğa Keşfi)* **Panel sunumu – III** Tansu Kendirli (*Dijital Oyun Endüstrisi Eğitimi ve Kariyer Yönetiminde Gelecek Vizyonu)*
10:15 – 11:15	**KONFERANS** **Hannah Marstone** "The experience of flow/immersion/health etc."	
11:15 – 11:30	**Kahve arası**	
11:30 – 12:30	**PANEL 7** **DİJİTAL OYUNLARIN GELECEĞİ** **Panel Başkanı: Prof. Dr. Hakan Tüzün** *"Çirkin Olsa Bile"* **Panel sunumu – I** Tuba Şenocak (*An Investigation of Current Trends in Digital Gaming Markets and Recommendations for Turkey)* **Panel sunumu – II** Musa Selman Kunduracı (*Siber Güvenlik ve Sosyal Medya Etiği Konularında Çocuklara Yönelik Eğitsel Dijital Oyun Tasarımı)*	**PANEL 8** **E-SPOR VE DİJİTAL OYUN ALIŞKANLIKLARI** **Panel başkanı: Yrd. Doç. Dr. Yavuz Samur** **Panel sunumu – I** Zeynep Dereli (*E sport in school & Dijital Teknoloji Kaşiflerinden, Yerlilerine Geçişte Okullarda E-Spor Etkinliklerinin Faydaları ve Dijital Zeka)* **Panel sunumu – II** İbrahim Baş (*Dijital Oyunlar Kapsamında Elektronik Spor Turizmi)*
12:30 – 13:30	**Yemek**	
13:00 – 13:20	**Uydu Sunumu – Crytek** Oğuz Orkun Doma (*Gençlik Gelişim Mekanları Olarak Dijital Oyunlar)*	
13:30 – 14:30	**KONFERANS** **Lars Konzack**	
14:30 – 15:00	**Kahve arası**	
15:00 – 16:30	**PANEL 9** **DİJİTAL OYUN VE EĞİTİM** **Panel başkanı: Prof. Dr. Selçuk Özdemir** *"Teknoloji: İki Yanı Keskin Bıçak"* **Panel sunumu – I** Sevil Akaygun (*Planning stage of a gamified educational tablet application covering primary science topics)* **Panel sunumu – II** Vildan Özeke (*Okulöncesi Çocuklar İçin Hazırlanmış Eğitsel Mobil Uygulamaların Değerlendirilmesinde Kullanılabilecek Rubriğin Türkçe'ye Uyarlanması)* **Panel sunumu – III** Bilal Atasoy (*Farklı Başarı Yönelimlerine Sahip Öğretmen Adaylarının Dijital Oyun Oynama Alışkanlıklarının İncelenmesi)* **Panel sunumu – IV** İsmail Dönmez (*Ortaokul Öğrencilerinin Oyun Kodlama Becerilerinin İncelenmesi (Oyunumu Kodluyorum Yarışması Örneği))*	**PANEL 10** **KALIP YARGILAR VE ŞİDDET ALGISI** **Panel başkanı: Prof. Dr. S. Sadi Seferoğlu** **Panel sunumu – I** Seda Topçu (*Lise Öğrencilerinin Dijital Oyun Oynama Durumlarının Değerlendirilmesi)* **Panel sunumu – II** Ebru Bulut (*Ortaokul Öğrencilerinin, Öğretmenlerin ve Velilerin Sanal Zorbalık Farkındalık Düzeylerinin Çeşitli Değişkenlere Göre İncelenmesi)* **Panel sunumu – III** Necmi Özen (*Öğretmenlerin ve Öğrencilerin Gözünden Sanal Oyunlar)* **Panel sunumu – IV** Nursel Yalçın (*Mavi Balina Oyununun Çocuklar ve Gençler Üzerindeki Etkilerinin İncelenmesi*)

	BÜYÜK KONFERANS SALONU	KÜÇÜK KONFERANS SALONU	BÜYÜK TOPLANTI ODASI	KÜÇÜK TOPLANTI ODASI
16:30 – 17:30	**Bildiri Sunumları (S1 – S9)** **Oturum Başkanı:** **Prof. Dr. Songül Yalçın**	**Bildiri Sunumları (S10 – S18)** **Oturum Başkanı:** **Yrd. Doç. Dr. Türkan K. Yılmaz**	**Bildiri Sunumları (S19 – S27)** **Oturum Başkanı:** **Ali Yazıcı, MSc.**	**Bildiri Sunumları (S28 – S36)** **Oturum Başkanı:** **Prof. Dr. S. Sadi Seferoğlu**
	Sosyal Program			

13 Nisan 2018, Cuma

Saat	BÜYÜK KONFERANS SALONU	KÜÇÜK KONFERANS SALONU
9:00 – 10:15	**PANEL 11** **DİJİTAL OYUN BAĞIMLILIĞI** **Panel başkanı: Doç. Dr. Mehmet Barış Horzum** **Panel Sunumu – I** Tuğra Karademir *(Okul Öncesi Öğretmen Adayları Penceresinden Dijital Oyun Bağımlılığı)* **Panel sunumu – II** Türkan Karakuş Yılmaz *(Bir Bağımlılık Faktörü olarak Kaptırma Hissinin Farklı Oyun Oynama Durumlarına göre İncelenmesi)* **Panel sunumu – III** Melike Baş *(Ergenlerde Dijital Oyun Bağımlılığı ile Psikolojik ve Davranışsal Bulgular Arasındaki İlişkinin İncelenmesi)*	**PANEL 12** **DİJİTAL OYUNLAR VE HUKUK** **Panel başkanı: Av. Çağatay Cengiz** *"Dijital Oyunlar ve Hukuk"* **Panel sunumu – I** Karar Sunumu 1 - Av. Bilal Aslan **Panel sunumu – II** Karar Sunumu 2 - Av. Caner Gücüyener **Panel sunumu – III** Karar Sunumu 3 - Av. Derya Tecim **Panel sunumu – IV** Karar Sunumu 4 - Av. Aslı Han **Panel sunumu – V** Karar Sunumu 5 - Av. Nursena Çınar **Panel sunumu – VI** Tansu Kendirli *(Fikri Mülkiyet Kavramı ve Dijital Oyun Endüstrisi İlişkisi. Çocuk Oyun Animasyon Karakterleri ve Marka İlişkisi)*
10:15 – 11:15	KONFERANS **Lauri Järvilehto**	
11:15 – 11:30	**Kahve arası**	
11:30 – 12:30	**PANEL 13** **DİJİTAL OYUNLARIN SAĞLIK ALANINDA KULLANILMASI** **Panel başkanı: Yrd. Doç. Dr. Elif Sürer** *"Ciddi Oyunlar ve Rehabilitasyonda Kullanımları: Felç ve İhmal Sendromu Örnek Uygulamaları"* **Panel sunumu – I** Ayşe Oktay *(Sanal Gerçeklik Oyunları ile El Rehabilitasyonu: Fizyosoft™ LeapBall)* **Panel sunumu – II** Nevin Uslu *(Diyabetli Çocukların Hastalık Özyönetiminde Dijital Oyunların Kullanımı)*	**PANEL 14** **DİJİTAL OYUNLAR ALANINDA ULUSLARARASI VE ULUSAL DÜZENLEME VE POLİTİKALAR (OYUNLARIN DERECELENDİRMESİ)** **Panel başkanları: Prof. Dr. Haşmet Gürçay** **Yrd. Doç. Dr. Murat Yılmaz** *"Oyunların Ulusal ve Uluslararası Araştırma Projelerindeki Yeri ve Önemi(NATA; TÜBİTAK ve AB çalışmalarımız)"* **Panel sunumu – I** Merve Yıldız *(Mobil Oyunların Sınıflandırılmasına Yönelik Bir Öneri)* **Panel sunumu – II** Aras Şenyüz *(Oyunların Derecelendirilmesi ile İlgili Global Deneyimler ve Uygulama Önerileri)*
12:30 – 13:30	**Yemek**	
13:00 – 13:20	Uydu Sunumu – **Netmarble** Ezgi Temir *(Pozitif Bilimlerde Oyunlar)*	
13:30 – 14:30	KONFERANS **Mark Griffits** *Do online addiction really exist?*	
14:30 - 14:45	**Kahve arası**	
14:45 – 16:15	**İNTERAKTİF PANEL** Listening to Z Generations: Being Young in Cyber Life: Cyber Future with the Lens of Z Generation **Panel Başkanları: Prof. Dr. Türksel Kaya Bensghir** **Prof. Dr. Şeref Sağıroğlu**	**Panelistler** Buğra Ayan Kayode Hadilou Adje Ahmet Kapkiç Ahmet Aydın Arda Mavi M. Emir Çakıcı Ömer Faruk Uçar
16:15 – 17:00	**KAPANIŞ** **Kongre Sonuç Raporunun Sunumu** **Dilek ve Temenniler**	

PANEL KONUŞMALARI

ÖZETLER

PANEL 1

DİJİTAL OYUNLARIN ÇOCUK GELİŞİMİ ÜZERİNE DESTEKLEYİCİ ETKİLERİ

Panel başkanı: Prof. Dr. Kürşat Çağıltay

"Dijital Oyunlara Yin-Yang Felsefesi İle Bakmak"

Panel sunumu – I

Panel sunumu – II

Tülin Haşlaman (*Sınıf Öğretmenlerin Dijital Oyunların Geliştirilmesine İlişkin Önerileri)*

Panel sunumu – III

Zeynal Yasacı (*Okul Öncesi Çocukların Dijital Oyun Oynama Alışkanlığının Olumlu Etkilerinin Araştırılması)*

Panel sunumu – IV

Berrak Yıldırım Aksakal (*Dijital Teknolojinin Çocuk Gelişimindeki Yansımalarının Değerlendirilmesi)*

Elementary School Teachers' Suggestions on Development of Digital Games

Tülin Haşlaman

Nowadays, digital games are used as educational tools to improve learning and teaching processes. Digital games increase motivation towards learning and enrich individualized learning experiences. It also contributes to the development of problem-solving skills, knowing that learners can apply what they learn in one context in other contexts.

As digital games provides an in-depth engagement to the targeted subject, it also strengthens the functioning of working memory that works with long-term memory.

It also supports learners' critical thinking skills in their decision-making processes by developing high-level thinking skills through real-time brainstorming. In other words, effective and well-designed digital game-based learning environments contribute to the development of learners' goal setting, planning, problem solving and critical thinking skills. Taking all these benefits into consideration, it is envisaged that the effectiveness of learning environments can be supported by integrating digital games with learning and teaching processes.

It was seen that researches on the use of digital games in learning and teaching process are not enough. In this context, it is important to take the views of the teachers firstly in determining the qualities of digital games to be used in learning environments. For this reason, in this study, it was aimed to take the views of elementary school teachers on the use of digital games in learning environments. In this direction, the following questions were asked to the participants:

- How and where do you find digital games that you use in your lessons?
- By which criteria do you choose digital games that you use in your lessons?
- For which purposes do you use digital games in your courses?
- What are your expectations from digital games?

In this study, the view's of elementary school teachers regarding the use of digital games have been examined. How and where to find digital games, what criteria they choose, what goals they use, and expectations from digital games are taken with the use of open-ended questions.

226 elementary school teachers who are working on different primary schools in Ankara, Istanbul and Izmir, participated in this study. 64% of the participants were male (n = 144) and 36% (n = 82) were females. The data was collected via Google forms editors.

Elemantary school teachers' views about how and where they found the digital games are examined. Some of their responses; EBA and similar web sites, forum environments, internet, virtual stores, MEB approved web sites, teacher friends suggestions.

Elemantary school teachers' views about according to which criteria, they choose digital games when they use in their lessons are examined. Some of their responses: to be creative, to be safe, to develop social relations, to help students, to improve attitudes, to develop mind and attention, to be fun and useful, to be readiness level, to be appropriate to the course content, to avoid violence, to support engagement, to improve thinking fast and the ability to make the right decision, to related with everyday life, to support learning.

Elemantary school teachers' views about purposes of the using digital games in their courses was examined. Some of their responses: to support individualized education, to rainforce the learning subjects, to have enjoyable lesson, to support permenant learning, to realize achievements, to create different expectations, active participation, to encourage the engagement of the lesson, creating a more permanent and effective learning environment, to make sense of concepts, to evaluate free activity times, to contribute the socializing through brainstorming and collaboration with friends, to increase attention and focusing level, to diversify in-class activities as the classes are crowded, to help to learn coding.

Some responses of the participants about expectations from digital games are: to be fun, to use exploring methods in the learning process, being engaging, supporting course objectives, increasing attention and focus, to increase mathematical thinking skills to make synthesis, to use technology, to increase the motivation, to support the strategic thinking, to develop the knowledge and skills, not to be addictive, to force thinking, to acquire software skills, to encourage finding alternative solutions to the pending problems.

As a result, classroom teachers also express that the effective learning experiences and academic achievements will be more effectively supported by the effective integration of digital games into the learning and teaching process.

Benefits Of The Digital Technology Use In Preschool Children

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Abstract

The post modern period has changed many habits and life styles of social life, and has made electronic devices and computers that produce, use and store information an indispensable part of everyday lif. Nowadays, children who can reach the information very fast and effectively through the internet, also enjoy the convenience of reaching digital games in the same way. According to the data in 2017 the number of mobile phone subscribers in Turkey 78 million, while the number of internet subscribers is about 68 million. The study was conducted between January 15 and March 4, 2018, based on the views of 101 parents who are children in the 0-6 age group. Online questionnaire software (Google Documents) was utilised to design the online survey and to collect data. This was consistent with the methodology of previous research. The online survey firstly asked basic demographic questions such as age, gender and occupation. A questionnaire prepared by the researchers asked parents 14 possible benefits of playing their children's digital games. Responses given by the parents to the questions were recorded and analyzed. The average age of the parents participating in the study was 32.7 ± 6.9 years. It was determined that 20,6% of the parents' education levels were graduate, 42,3% were undergraduate and 14,4% were high school. According to parents, the benefits of children's digital gaming habits are already right; 61.4% used children's games as educational material, 60.2% created opportunities to learn new things, 44.8% wanted to explore and learn new things, 39.1% 32.8% contribute to foreign language learning and development, 30.7% help to develop mental skills, 28.2% contribute to hand-eye co-ordination, 18% 7% contribute to motivation and leisure, 16.6% contribute to the development of creativity, 14.1% contribute to the development of fine and coarse motor skills, and 12% improve the writing and communication skills , 11,2% allow the development of problem-solving, reasoning, analysis and decision-making skills, 9,5% of children are socialized, and 6,2% they said they gave the opinion that they are hanging. Parents participating in the study reported that children played digital games on many platforms (tablet, computer, smartphone, etc.). According to the findings of the study, it was reported that children who play digital games use these games as educational material, increase their desire to discover and learn new things,

help children to stay calm while eating and at home or abroad, and to contribute to foreign language learning and development. It has been proved that video games with educational content have positive effects on children. These games make learning fun. Surveys have found that all video games, including violent games, encourage children to think about the ways and means to reach their goals. This teaches them the ability to make plans and deal with complex situations. Video games are interactive games that your child must constantly practice to be the best. Despite the usefulness of digital gaming, we think that parents should be careful about the length of the time and the dependence of the child on playing digital games.

Key words: Technological device, Child, Language development

Evaluation of Reflections of Digital Technology on Child Development

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Abstract: Leisure habits of children have considerably changed with the spread of digital technologies into the family homes (1). Even though the undesirable consequences of digital games that are in the scope of digital technology and nowadays commonly used by children are more concerned, the positive sides contributing to the development of social, emotional, cognitive and personal perceptions on children should not be overlooked. The fact that all these positive and negative effects may vary according to age groups in children is also an issue in many studies. Digital games are the most widely used area in digital technology between the ages of 2-14 years. It has been determined that while children around 6 years old play digital games on computer, children around 10 years old play digital games mostly on mobile phones. Studies have shown that young people who live in geographical areas where playing digital game is common play an average of 10000 hours of online gaming by the age of 21 (2). While digital games in generally have positive contribution about such as personal development of children, treatment and/or therapy of some specific illnesses (physiological stammering, social phobia etc.), learning and development of foreign languages, developing strategy and ability to make quick decision, providing hand-eye and mind coordination, development of motor skills in children, motivation and using as a leisure time tool and enhancing technological knowledge and skill, digital games' negative effects leading to digital games come into agenda are risks that they emerge at the social level. Usage times up to the degree of dependence on children can cause adverse effects such as obesity, physical and pathological disturbances. Furthermore, it causes disruption and retardation in language development, to develop postponement behaviour, difficulties in emotion control and personality disorders, sociopathy, to decrease in intra-family communication, difficulty in distinguishing the difference between virtual and reality, development of aggressive feelings, thoughts and behaviours due to its elements of violence, major health problems such as carpal tunnel syndrome and attention deficit, to

disrupt language development of children and also causes children to become vulnerable to online threats. It affects adversely academic and personal achievement due to reducing studying, reading and participating in physical activities times as well (3, 4). The scientific studies that emphasize the positive and negative effects of digital games on children were evaluated from a holistic point of view in the study. In this study it is aimed to form solution proposals by evaluating the studies examining effects of digital games on physical, cognitive and psychosocial development of children with positive and negative aspects. In the statistics published by Turkish Statistical Institute in 2013, it was determined that among the reasons for the use of computers of children, digital games are considered to be a priority place and digital games are also preferred choice for mobile phone use (5). There are many studies addressing the harms of digital games and they generally refer to the negative side of digital games. However, there are also studies indicating that the results of digital games will be positive if quality of the digital game, time spent playing the digital game and appropriateness of playing the right game at the right age areproper.
In addition, studies have shown that digital games contribute to the development of attention, concentration, correct decision making, problem solving, group work, creative thinking skills. Digital games helping children to develop basic mathematics, reading and language skills, are both more fun and more effective for children compared to traditional training methods about education issue. There are studies focusing on the fact that digital games contribute to the development of children's social skills in treatment and therapy of autism and there are studies focusing on the psychological aspects of games that have therapeutic effects on children. In the elimination of the lack of attention frequently encountered in children, positive effects were shown in the field of education, especially social life, thanks to digital games (6, 7). Digital games can also be thought of as an important educational and entertainment tool in acquiring skills such as planning, goal setting, strategy formulation and critical thinking. The existing disadvantages can be turned into advantages as long as the right time, the right ratio, the appropriate age and the specific purpose criteria are met in digital games.

Key words: Digital games, child development, digital technology

PANEL 2

DİJİTAL EBEVEYNLİK

Panel başkanı: Prof. Dr. Ferhan Odabaşı

Panel sunumu – I

Başak Karakete (*Ebeveynler Oyun ve Videolara Karşı)*

Panel sunumu – II

Şenay Ozan Leymun *(Ailede Yeni Dijital Sendrom: Paylaşan Ebeveynler)*

Panel sunumu – III

Mehmet Özkaya *(Erken Çocukluk Döneminde Çocukların Dijital Oyunlara Eğilimi, Dijital Oyunların Çocukların Gelişimine Uygunluğu, Güvenliği ve Sakıncaları Konusunda Ebeveynlerin Farkındalıkları)*

Panel sunumu – IV

Çelebi Uluyol *(Dijital Oyunlarla İlgili Aile Görüşlerinin İncelenmesi)*

Panel Başkanının Sunumu

Relax, your child is playing digital games... (Çocuğum Oynuyor, İçim Rahat)

Prof. Dr. Ferhan Odabaşı
Anadolu University

We may think of our kids' online, mobile, and technological activities as "digital life," but to them, it's just life. Our kids use their computers, not only to do their homework, but they also use them to socialize. Parents have the full responsibility for their children until they reach a certain age , however, considering the speed of technological transformations, information flow and regarding the era , Post-truth ,we live in, it is not an easy task to control a child sensibly. It is therefore that parents are desperate to find an e fficient approach to solve childrens digital problems and that as result children are sufferin g today from too much adult control . The tension in the parent-child relation should be eased by giving the clues about the era, evidence based research findings regarding their hesitations, whether they be about playing digital games or any other digital practice...

Parents Versus Games and Videos

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Introduction

Technological tools become cheaper with technological development have surrounded our environment and technology use age has dropped rapidly. Especially with the development of the game industry, children have begun to use technology in their daily life, and this has posed new risks that involve physical, mental and social risks to impact children' life in the near future. Parents are of undoubtedly people who protect children from these risks in the kindergarten. Children aged 0-6 years spend most of the time with their parents. In this term, parents are responsible for many issues such as children' personality development, social maturity, and physical structure. At this point, parents competency about proper use of technology become crucial to train children and protect them against harms of technology, so determine of parents. First, Parents must know more about their children technology use behaviour and take precaution accordingly. Starting from this point, in this study, it is investigated parents' awareness regarding their children technology use and categorized parents' awareness based on different variables.

Method

The research was conducted with 50 parents who have child/ren at age 0-6. Data were obtained from the survey developed within this research. The survey was structured by four domain expert. The survey consists of 21 multiple choice question and 6 open-ended questions. While open-ended questions were analyzed, it was benefited from Invivo coding and structure coding. During coding, it was studied with four expert and inter-coder reliability was calculated. Finally, multiple choice questions on survey and themes obtained after coding were subjected to cluster analysis by gathering. At the cluster analysis, children age to start technology use, technology use period, and technology use purposes have been determined as primary themes.

Findings and Results

As a result of research, it is determined that parents establish some rules concerning their child/ren technology use. The rules repeated most are the time limitation, permission not to watch some content, and safety measure. Parents, also, stated that they impose impactions to their child/ren when they do not follow the rules parents establish. Impactions mentioned most by parents are deprivation from technology, turn of the internet, and limitation of technology use time. Some of the parents keep videos and games played and watched by child/ren under control. For instances, some of the parents take cognizance of suitable videos and games played and watched by child/ren for age, some of the parents pay attention not to contain violence. The rules shared by all parents are suitability for age and educational content. Besides, parents expressed that their child/ren get excited, are detached from real life, show tendency to violence, get angry while watching a video or playing games. The large part of parents expressed that their child/ren are impressed by games they play and imitate the character/avatar on games. Most of the parents keep children company while their child/ren use technology.

As a result of cluster analysis were reached different classifications. For instance, children who meet the technology under 2 years merged into the first cluster. According to the first cluster, Children under 2 use technology daily to watch the video, also their parents keep them company while they use technology. Also, Cluster 2 applies to children of 2-3 age. According to cluster 2, children of 2-3 age use technology every day only 0-30 minute to play the game, and their parents keep them company while they use technology. In addition to these two cluster, in this research, five different cluster were also produced.

Suggestions

In the future research, parents technology awareness profile would be determined and training programme to correct their incorrect behaviour concerning technology use and public service announcements to raise awareness of parents would be planned. Besides, research about parents roles in their child/ren risky/problematic internet use behaviour could gain acceleration.

Keyword: Early Childhood, Parents, Game Addiction, cluster

A New Syndrome in Families: Sharenting

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Today, with the rapid development of technology, the responsibilities and duties of parents have transformed. Protection of their children in this environment and being a role model for the use of technology is also added to responsibilities. However, parents, who never hesitated to protect their children in everyday life, have become competing with each other in publishing their digital footprints through social networks. This has led to the emergence of a new concept of 'sharenting'. This concept, which first appeared in the Wall Street Journal in 2013, is a combination of the words 'share' and 'parenting'. This concept, which is defined as parent's sharing's news, photos, etc. about their children in social media and presenting themselves as a parent, also is used as over sharenting in literature. This concept emerges in Turkish as a mixture of extreme sharing and parenting. This concept, which is used also as social media parenting, multi-sharing parent or share-loving parents, is a way of sharing much information on the internet without permission of the children, in other words, sharing too much information about their children as photos, videos and visuals in online environments.

In today's world where so many parents are sharing, the reason why parents with a higher education graduation exhibit behaviour as sharing their children's information in digital environment has been researched. The research data were collected by semi-structured interviews. The participants of the research consisted of five parents who are graduates of a from high school, had children, and share information about their children in social media. The semi-structured interview form, which was developed by the researchers used as data collection tool in the research, and content analysis technique were used to analyse the data. As a result of the analysis, four themes have been reached. These themes are: in which cases the parents share, in which cases they do not share, the emotions that initiate sharing, and the emotions that hinders their sharing.

When in which cases they share is examined it is seen that; parents share their children's special events such as birthdays, new developments in their children's lives, the holidays they went with their children, the activities their children doing, the planned activities they went, the activities they have done with their children. Parents generally stated that, they shared these six different situations in social media.

When in which cases they do not share is examined, it is seen that; there are four different situations. One of these situations is the one that which could hurt the child. Parents indicated that they did not share the child's naked photographs or personal information. Other situations in which parents do not share about the child are; the child's illness, the situations in which the child may feel uncomfortable in the future, and the memories their children have defined very specifically.

When parents' feelings that initiatives sharing about their children are examined, is seen six different senses are given to explain sharing. These feelings are; sharing happiness, saving the moment in the online environment, sharing good feelings; showing off to relatives and to remind people of themselves. Parents have expressed that they are directed to share by these impulses.

The feelings of the parents that hinders sharing their experiences were examined; it is found that they gave up sharing when they felt six different emotions. These feelings that prevent parents from sharing are; empathy, evil eye, repulsion, sadness, discomfort and protection. It was seen that parents gave up sharing when they empathized with non-children families. Also, they expressed that they do not share when they think that will be repulsive by other users when the number of shares is high. At the same time, they expressed that they do not share; when they thought that evil eye would touch their children, when they thought that their children would feel uncomfortable in the future and felt the feeling of protecting the child. In addition to these, parents did not share when they were sad. It is seen that parents who share about their children in social media are, very little aware of the hazards and take some precautions according to them. The precautions that they take are; set the privacy settings of their accounts, sharing in small groups, and not sharing when they think it can be harmful. However, it was seen that parents did not realize that these precautions were not enough for not printing their digital footprint. Nevertheless, parents were not aware that they violated their children's rights.

My Digital Games and Me: Determining Digital Game Preferences from Children's Drawings (Ages 4-6)

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The preschool period includes a time when the development is the fastest, the fundamentals of the personality are created, the child is affected from his environment at a great deal and he is open to all kinds of learning. In this period, the child goes through in effort and activity by interacting with or observing with his or her peers, teachers, siblings, parents or other adults around him. There is no doubt that one of the most important activity of the child is the playing games. Game; although it seems to be an occupation of the child, it has also become an important interest in philosophers, educators and researchers. Various thoughts have been put forward at every stage of history related to games. Platon, an Ancient Age philosopher; stated that between the ages of 3 and 7 as a transition to the child's play and fairy tale, since it suggests that the child be trained physically and spiritually. Plato's student Aritotales also emphasized that the child must be engaged with games and other activities until the age of five (fairy tales, stories, imitation plays, etc.). Among the ancient Roman thinkers, Çiçero and Quintilianus; it was recommended that education should begin in the more childhood phase and play games that enable children to good manner. Islamic educator Abu Hamid Ghazali; defined the game as giving the learner the strength that the student lost in the learning activities, the energy by refreshing his memory and prevents tired of studying. According to Ghazali, the play increases both the learning capacity and giving rest to child. When game and child relations are examined in the development history of mankind, the play-child pair has become an important field in the last century. The play has an effective role on all the developmental areas of the child; It is also seen as the second important spiritual need that comes after the love. From this point of view, when it is difficult to eliminate the problems that a child devoid of love who suffers problems both the early and the adulthood, a child who is not engaged with the game will have difficulties in resolving problems. The children who are busy playing games sharpen their senses, increasing their abilities and skills. Because the child develops his mind, muscles, imagination and social skills through play, he also has the opportunity to try and reinforce what he sees and hears. Innovation and change brought by the 21st century is seen in the works of all kinds of professions and in the role of people in social life. This change and development has made it possible for computer technology to shrink and enter the pockets and increase the influence on children's games. The concept of the game, which has a history that goes back to untouched histories, has succeeded in maintaining its existence and significance by updating itself or revealing the innovations according to the time. Computers which have almost penetrated every aspect of human life, have become a new platform for all ages of the game concept. Because it is a growing sector in the digital environment, 'digital games' have managed to attract the attention of both parents and educational researchers. Many researches have revealed that educational digital games have made significant contributions to children's

learning. What is important here is that learning with digital games has a positive impact on the child, supporting its development and not directing it to harmful habits and negative feelings. The purpose of this study is to describe the digital games played by preschoolers through pictures they have drawn. A total of 194 children, 87 in the 4-5 age and 107 in the 5-6 age, participated in the study. The data of the study, which was carried out using scanning model of descriptive research methods, was collected through draw-and-tell technique and during the collection of the data, the children attending the study were asked to draw a picture related to digital games and to explain the picture they draw. Their explanations of the pictures were recorded on the activity paper by the researcher. When the data obtained from the study were analyzed, it was found out that that they usually play on tablets and the phone, they play different games such as sports, racing, strategy and mission.

Keywords: Preschool, Digital Game, Digital Game Drawings, Digital Gaming Environments, Digital Game Categories.

An Examination of Parents Opinions Related to Digital Games

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Abstract

In recent years, digital games have appeared in a variety of forms such as console games, computer games and online games. The families are often encountering these games in their daily lives. Because of the dizzying growth in capacity and speed of tablet computers and personal digital assistants, these games are more common in our daily lives nowadays. There are also many positive and negative aspects of widespread use of digital games. Digital games which are used extensively by children lead to transformation by changing the interaction and communication within the family. Institutions and scientists are studying the use of digital games by realizing their importance in our country. Academic studies and reports are published using different variables to determine the effects of the digital games on the people and family. The purpose of this study is to investigate the opinions of parents about digital games.

The study was conducted with 78 parents whose children were studying in a private school providing primary, secondary and high school education in the Ankara province. A questionnaire including demographic information based on the literature was developed by researchers in order to collect the data. The questionnaire, based on expert opinions, was tested on 20 students with a pilot study. Relevant corrections were made after the feedback and the questionnaire was ready for collecting data.

45 of the participants are male and 33 are female. 60% of these participants are university graduates, 18% are high school, 18% are middle school and 4% are primary school graduates. 89% of the parents have computers at home and 84% allow the child to play digital games at home. 11% of the parents stated that the child started to play digital games at 0-5 years old, 82% at 6-10 years old and 7% of them at 11 years old and above. The digital games played vary from traditional to educational, strategy, racing and adventure games. The parents have ranked the reasons for playing digital games as the most time-consuming, learning/educational and loneliness. 68% of the parents stated that digital games partially affected the child's success, 17% had a positive effect, and 15% had a negative effect. While 73% of the parents set the playing time by putting rules on the child, 29% allow the child to play by raising awareness about the digital games. The rate of those who did not respond to the child was 6%. Other significant findings about the effects of digital games on children can be listed as follows:

- 33% indicate that the child is not working on his/her lessons when playing a digital game, and 38% do not agree.

- 37% stated that the child playing digital games negatively affect other activities such as sports, reading books, entertainment, and 36% do not agree.
- 39% are undecided about the fact that digital games have improved their children's knowledge and skills.
- 52% stated that digital games were addictive on children.
- 65% stated that they were wasting time with digital games
- 35% stated that digital games had adverse effects on their children's health, while 33% did not.
- 27% stated that children were affected by the digital games, while 45% did not.
- 75% stated that the child imitated the character in the digital game.
- 45% stated that their child was peaceful after playing digital games.
- 43% stated that the child's mind stayed in the digital game after playing it.

Research findings indicate that digital games are significant roles in the lives of families and children. Digital games partially affect the academic success of the child based on the research findings. One of the important findings was the multiplicity of families who believed that the game was addictive to children. It is very important to make awareness raising activities systematically in such a way as to prevent digital game addiction. In this context, various examples that present examples of proper usage of technology to families are very important.

Keywords: Digital games, parents' opinions, addiction, children

PANEL 3 – "Prof. Dr. Ufuk Beyazova onuruna"

DİJİTAL OYUNLARIN ÇOCUK SAĞLIĞI ÜZERİNE ETKİLERİ

Panel başkanı: Prof. Dr. Gülbin Gökçay

Panel sunumu – I

Beril Aydın (*6-8 Yaş Arası Çocukların Ekran Zamanı ve Video Oyunu Oynama Alışkanlıklarının Araştırılması)*

Panel sunumu – II

Ayşe Tolunay Oflu *(Okul öncesi çocukların ekran zamanı ve dijital oyunu oynama alışkanlıklarının çok merkezli olarak araştırılması)*

Panel sunumu – III

Zeynal Yasacı *(Bebeklik Dönemi Çocukların Teknolojik Cihaz Maruziyeti ve Uyku Durumlarının Değerlendirilmesi)*

Panel sunumu – IV

Süleyman Daşdağ *(Cep Telefonlarının Yaydığı Radyasyonların Beyin Üzerine Etkileri)*

Screening Time and Video Game Playing Use Among Children Aged 6-8 Years

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Abstract

Aim: Due to the widespread use of computers and video games, the positive and negative effects of computers on children and young people have begun to be questioned. On the other hand, violent video games have been reported to cause aggressive behaviors in children and adolescents. Also, it has been reported that long-term use of the computer can cause psycho-social problems, obesity, physiological problems, musculoskeletal system problems, adversities in social development and internet addiction. The aim of the research is to determine the habits of children at school education and their families and to evaluate certain beliefs and attitudes of parents about children's media use.

Material and Methods: The study was conducted between 1 to 28 February 2018 with the permission of the school children and their families. The study group was consisted of 6-8 year old school-age children (n = 100) and their families who applied to Baskent Hospital in Ankara. The questionnaire which was a form developed by the researchers was used in order to reach demographic information and computer usage habits of the child and their family,
Results: In this study the mean age of the children was 83.3 ± 8.6 months and 50% of them are boys. The age at which girls started using the screen was 10.4 ± 4.2 months, and for boys it was 10.5 ± 4.3 months (p = 0.852). 40% of the girls and 34% of the boys used more than 2 hours of screen (p = 0.534). 68% of the children were playing video games. 48% of the girls and 88% of the boys were playing video games (p <0.001). The rate of playing video games more than two hours was 14% for girls and 40% for boys. The age at which girls began using video was 33.6 ± 14.4 months, and that of boys was 27.6 ± 12.0 months (p = 0.091). There was no correlation between the screen time and body mass index z score. In the study, 69% of the children were living with a person who played video games in their home. The percentage of children playing video games varied according to the playing status of another person at home (75.4% in playing video games at home, 51.6% in non-playing, p = 0.019). There was also a significant relationship between parents' habits of playing video games and their children (p <0.05). The frequency of using video and using social media was not affected by the parents working, the educational status, the place where the family lived, the number of children family haved, index child's birth order and the family structure (p> 0.05). There was no significant relationship between the use of social media by the parents

and the children (p> 0.05). The limitations on the use of the screen for children by their family were 34.4% in cases with screen time <30 minutes, 60.9% for 1 hour, 61.1% for 1-2 hours and 37% for >2 hours. Overall, 37.3% of the children prefered another social activities instead of playing video. 29% of the children felt positive, 19% of the children felt negative and 52% of the children felt as if inside when they were playing video. 41% of the children used the computer in their own room and 12% of the children used it outside the home.

Conclusions: The important finding in this study was onset age of playing video game had come down to preschool period. More than one third (39.7%) of the children who played video games performed more than two hours. The families should consider that the duration of playing computer games would be possibly prolonged in the older age group. In the study, it was determined that the behavior of children playing video games increased according to the situation of parents playing video games. It was also determined that boys were more likely to play computer games than girls. The interests of parents were directly influencing children's computer use rates. It could be explained that children were searching for a role model pattern in this period. Technological developments were seemed to affect the habits of playing video games in children. For this reason, parents should help their children to get the right play habits during this period. The information and counseling on selection of computer games, duration of computer use and playing computer games should be provided for the families.

Key words: Child, computer games, video games, social media use

Multi-centered investigation of pre-school children's screen time and digital game playing habits

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Abstract

Aim

Early childhood is a critical period for the acquisition of healthy habits. The American Academy of Pediatrics revised screen-media recommendations to emphasize the critical role of parents on children's use of technology that is part of everyday life. In this period, parents are advised to limit children's screen (television, video, computer, video game) time, help them to choose the right media and monitor their children. With the widespread use of the Internet, the use of digital games between children and young people is increasing day by day. The useful and harmful effects of playing video games, especially on children and adolescents, are being discussed. The purpose of our study is to investigate the screen time and playing video game habits of children aged between 2 and 5 years and to examine the attitudes of parents in this area.

Material-Methods

Our study was designed as a cross-sectional descriptive study. Our work was approved by Hacettepe University Faculty of Medicine Ethics Commission (02.01.2018). The study was carried out in 6 centers in 3 provinces; between 10/01/2018 and 10/03/2018. Parents who applied to these centers and had children between the ages of 2 and 5 were included in the study.

Results

In study, 674 pre-school children and their parents were recruited. The mean (SD) ages of the children were 3.6 (1.0) years and 51.6% were male. The rates of availability in the households are 99% for smartphone, 74.6% for computer and / or tablet and 6.8% for the gaming console. 89.2% of the households had internet connection.

In a limited number of families (6.1%), neither mother nor father had social media connections.

The mean (SD) age at which children started to use screen were 17.8 (9.9) months, but only three of them had no screen contact. 19.7% of the children were using screens for over four hours.

27.2% of the children were playing digital games. The rate of playing digital games in boys was 30.0% while it was 24.2% in girls ($p = 0.095$). The age at which children begin to play digital games is 2.7 (1.0) years. There was a positive correlation between the age at which the children started to contact with screen and the age at which they started to play digital games ($r = 0.22$, $p = 0.003$).

Conculusion

In our study, it was determined that the screen usage was very frequent in pre-school period, and this age group seems to carry risks in terms of adverse effects of screen contact in large scale. The early age of the first screen contact causes the earlier age of digital gaming. This relationship between digital gaming and screening should not be overlooked in the approach to risk. It has been determined that the rate of playing digital games is higher in boys in preschool period as in other age groups, and the neurological, biological and psychosocial factors that make up this difference need to be elucidated.

Key Words: Pre-school, screen, digital games, video games

Assessment of Exposure to Technological Equipment and Sleep Status of Infants and Toddlers

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Abstract

It has been reported that in the early childhood period, the sleeping time decreased with the increase of the habit of keeping the television, computer, tablet or phone in the bedroom. Sleeping time of 6-12 months infants who were exposed to television in the evening hours were significantly reduced when compared to those who were not exposed. Children who use social media or sleep with technological devices in the bedroom have been found to be at increased risk for sleep disturbances. From this point of view, the 0-2 age range has a great prospect for child development. The need for open air and sleep during this period are some of the basic physiological requirements of children. The period of healthy sleep that is accepted for the development of children in this period is 13-15 hours. Meeting these requirements in the first two years is crucial for the child to feel safe and at peace.

The aim of our study was to determine the effects of 0-2 age group on children's exposure to technological devices and their sleep states. The survey was conducted between November 10, 2017 and February 28, 2018, with the views of 40 parents who were 0-2 years old. Online questionnaire software (Google Documents) was utilised to design the online survey and to collect data. This was consistent with the methodology of previous research. The online survey firstly asked basic demographic questions such as age, gender and occupation. In the questionnaire prepared by the researchers, the parents were asked about their children's habits of using the device and their sleep status. 58% of the children participating in the study were male. It was found that the use time of the technological device during the day was 148.4 ± 123.8 minutes. During the day, it was found that the duration of television viewing was 47,6 ± 44,7 minutes, that of phone was 34,5 ± 52,1 minutes and that of tablet was 19,5 ± 51,3 minutes. 42.5% of the parents who participated in the study reported that their children had a technological device (television, mobile phone, etc.) in the bedroom. It was reported that the duration of device use was 9.2 ± 12.1 and the duration of sleeping dive was 22.9 ± 14.1 minutes before children were allowed to sleep. It was determined that the daily sleeping period was 9.5 ± 2.7 hours. According to 58% of parents, technological use of children is decreasing their sleeping times and 42.8% of children reported sleeping problems such as sleeping, late sleeping, late waking and nightmares. Forty-five percent of parents reported that they allowed their children to eat at home, or use technological

devices to stay calm at home or abroad. They also reported that 27.5% of parents never let their children out, while 22.5% said it was less than 30 minutes. It was observed that 0-2 age group children were exposed to technological devices within 2.5 hours during the day. Nearly half of the families participating in the study reported that their children had at least one technological device in the bedroom. As a result, we think that sleep duration is longer and children sleep less than children in the same age group. It was also observed that half of the parents who participated in the study were encouraging their children to use technological devices and that their children were taking them out for less than half an hour or never. Today, children are growing up in the experience of using highly personalized technology; Therefore, parents should make efforts to ensure that children can apply and benefit from principles such as quality sleep and positive social interaction for healthy growth and development of children by making plans according to their age, health status, character and level of development. However, parents should be aware of their duties and responsibilities in order to balance the time of technology and other activities with the technology.

Key words: technology, sleeping time, television, baby, device, bedroom

Radiofrequency Radiation Emitted From Mobile Phones on Brain

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Abstract

Since 1995, cell phones which are widely used in our country are now indispensable for daily life. This habit has come so far that human beings have met with a new "Fear": Nomophobia (No Mobile Phone Phobia). We are afraid today loos our mobile phones in anywhere. However, the health effects of wireless communication technologies were always ignored while enhancing the comfort of life. The sad thing in our country is to be the first in the European Countries in terms of mobile phone and wireless communication usage, which is announced by the Information Technologies Authority (BTK) every quarter of the year. The worst of all is that children are under ten year's old use of smart mobile phones frequently. Mobile phones or other wireless communication devices produce both "Radiofrequency radiation (RFR)" and "Extremely Low Frequency magnetic field (ELFMF)" in the environment when they are working. However, these two physical factors were already accepted as "Possible carcinogen" and classified as "2B" by the World Health Organization (WHO). Studies on the relationship between ELFMFs and childhood cancers have been made towards the end of the 1970s, and the issue has been addressed. However, the studies on the health effects of RFRs used in wireless communications were initially focused on the brain and followed by other organs. Epidemiological studies provided supportive evidence of increased risk for head and brain tumors. Therefore, the most important reason of the classifications of RFRs as 2B by WHO is high population of the studies that state relation between brain tumors and RFRs emitted from mobile phones or other wireless equipment. The animal and human studies we are still pursuing demonstrate that RFR and ELFMF are not as innocent as they seem. On the other hand, one of the eye-catching topics is the screen time of children. Due to the fact that researches on the screen time have been linked to various diseases, developed countries brought new legal regulations for the prohibition of the

interaction of the children under the age of two. Relevant institutions recommend that screen time should not exceed two hours / day for children and adolescents (until the age of 18). In our country, these subjects are still not even discussed sufficiently. The attention of the public opinion to this issue is essential, and danger bells are stealing for our children. The attention of the public to this issue is essential, and danger bells are ringing for our children.

Keywords: Mobile phones, wireless communication, brain, screen time, diseases

PANEL 4

DİJİTAL OYUNLARIN SOSYAL MEDYADAKİ YANSIMALARI

Panel başkanları: Prof. Dr. Selçuk Hünerli

Yrd. Doç. Dr. Yusuf Levent Şahin

Panel sunumu – I

Serhat Altıok *(Çocuk YouTuberlar Tarafından Paylaşılan Dijital Oyunlara Yönelik Videoların İçerik ve Aldıkları Geri Bildirimler (Yorumlar) Açısından İncelenmesi "Merhaba! YouTube Kanalıma Hoş Geldiniz.")*

Panel sunumu – II

Işıl Erdemli *(Çevrimiçi Oyunlarda Çocuğa Karşı Şiddetle Mücadele: Ortaklık Ağı Örneği)*

Panel sunumu – III

Ergin Şafak Dikmen *(Dijital Oyunların Gelişimi ve Sosyal Medya Uzantıları)*

Panel sunumu – IV

Filiz Aydoğan Boschele *(Tekno-Meta Olarak Oyun ve Çocuk)*

Çocuk YouTuberlar Tarafından Paylaşılan Dijital Oyunlara Yönelik Videoların İçerik ve Aldıkları Geri Bildirimler (Yorumlar) Açısından İncelenmesi "Merhaba! YouTube Kanalıma Hoş Geldiniz."

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ÖZET

Bu araştırma, çocuk youtuberlar tarafından paylaşılan dijital oyunlara yönelik videoların içerik ve özellikleri, sahiplerinin karakteristikleri ve gelen geribildirimlerin (yorumlar) incelenmesi amacıyla gerçekleştirilmiştir. Bu amaç doğrultusunda çalışmanın evreni, Youtube üzerinde yer alan dijital oyunlarla ilgili tüm videolar olarak belirlenmesine rağmen, maliyet ve zaman sınırlılıkları neticesinde ulusal ve uluslararası kaynaklı ve yoğun talep gördüğü tespit edilen beş farklı dijital oyun (League of Legends-LOL, Zula, Counter-Strike: Global Offensive-CS: GO, Minecraft ve Wolfteam) için çocuklar tarafından oluşturulmuş olan videoları barındıran kanallar araştırma kapsamına dâhil edilmiştir. Bu nedenle, YouTube üzerinde "LOL" veya "Zula" veya "CS:GO" veya "Minecraft" veya "Wolfteam" anahtar kelime bloğu ile tarama yapılmış ve ulaşılan 1210 sonucun video (1130), kanal (49) ve oynatma listelerinden (31) oluştuğu tespit edilmiştir. Araştırma kapsamında, 49 kanal arasından çocuk youtuberlar tarafından video paylaşımı yapıldığı belirlenen 20 kanal içerik analizine tabi tutulmuştur. Gerçekleştirilen içerik analizinde kanal sahiplerinin karakteristik özelliklerinin yanı sıra, video içerikleri ve videolara gelen geribildirim/tepki/yorumlar iki ayrı kodlayıcı tarafından incelenmiştir. Elde edilen bulgular, betimsel istatistiklerin yanı sıra oluşturulan çeşitli grafikler yoluyla raporlanmıştır. Gerçekleştirilen araştırma sonucunda, çocuk youtuberların paylaştıkları içerikler, bu içeriklerde gösterdikleri olumlu ve olumsuz davranışları, maruz kaldıkları tepkiler ile olası sorun ve problemler belirlenmiş olup, araştırmacı, eğitmen ve ailelere yönelik çeşitli öneriler getirilmiştir.

Anahtar Kelimeler: Dijital Oyun, YouTube, Çocuk YouTuber, İçerik Analizi

Fight Against Violence Against Children in Digital Games: An Example from the Partnership Network

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International Children's Center

Although there has been an increase in internet use and in risks on digital platforms faced by both adults and children, it may be difficult to say that this is a new phenomenon. However, rapid transformation of digital tools and platforms requires us to transform as well our understanding of human/child rights and our evaluation of potential risks on these rights. Researches in the field shows that children are increasingly using digital tools and platforms to learn, communicate, participate, play, study and for creative work. This situation leads to the need for civil society organizations (CSOs) such as Partnership Network for Preventing Violence Against Children to rapidly identify a given problem, conduct analysis and act.

The work of the Partnership Network focuses on monitoring, reporting violence against children and develop, advocate for recommendations for the betterment of the child protection system. While the Network works on specific settings such as institutions (care, detention, justice, etc), family and school settings, workplace and public spaces; violence against children online has been mostly addressed by the member CSOs individually.

When, on December 2017, a member raised concerns about an awarded Youtube video that contained sexist curse words and elements of violence against children, the process of expanding the work field of the Network has begun. Following such notification made by the member, the Network was able to get organized around a common issue at an unfamiliar speed, achieve a tangible result in the short run and initiate a work that could be used in the long run.

This whole process can be described as having two components with short and long-term goals. The short-term goal was to raise awareness of the content creator, his followers, awarding organization and of the society in general on the potential negative effects of such content and on the need to avoid awarding such videos. The long-term goal on the other hand was to create a tool that would facilitate rapid and consistent future actions of the Network in similar situations by strengthening its knowledge-base.

The internal discussion of the Network on this matter placed emphasis on not contradicting with freedom of expression and avoiding actions that would breed into a censoring culture.

In this context, Network members have communicated both with the content creator and with representatives of the awarding organization and expressed their concerns with a constructive language rather than a complaint-oriented approach. As a result, content creator chose to discontinue the video and the organization withdrew the award.

The objective of the study envisaged for the long term was to develop a strategy paper that would be used to identify and prevent various types of risks and forms of violence in the

"New Media", which consists of digital tools and platforms such as Youtube, Facebook, Reddit, Twitter and Instagram. Issue tackled by this paper was on how to address the content that includes elements of violence against children created by individuals on new media. One of the debates that shaped the paper was about the lack of quality research in the area that leads to emotive assumptions of harmful effects of the internet overtaking the public debate on the issue. However, digital tools can also have quite positive effects on children. It was agreed that the prohibition based approach would not be favored, as it would be in contradiction with children's freedoms.

All these decisions and consultation process mentioned above were in line with the Partnership Network's work culture, inspired by the Participatory Action Research / Learning (PAR/L) method. Cooperation, systematic learning and impact-oriented-approach is at the core of PAR/L. In this context, the problem was identified together and the steps to be taken by the Network were decided in a participatory way in line with the self-assessment of weakness and strengths of the Network itself, and finally the knowledge-base needed for future actions was constructed jointly. All these steps have been evaluated while taking them, always in view of creating an impact.

Assessing this entire process and results as a whole by the taking into consideration all other forms of violence against children that exists online (sexual abuse and exploitation, bullying, hate speech etc) and all actors, institutions, organizations who exercise violence and who fail to protect children from violence online; the importance of self criticism becomes more evident than ever.

Social Media Strategies of Digital Game Companies: Gamers Surrounded by Fragmented and Modular Contents

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Abstract: Since the beginning of 2000; the development of computing and internet technologies, led the tremendous growth of the digital game industry which become a key player in the new media ecosystem. In the era of Web 3.0, digital game companies sell their games through online markets; while story and characters remediation in social media platforms enlarge their market share. The efforts of companies point the professional value of social media for connecting games and its players. The aim of this study is to examine mobile games social media platforms; in order to expose and map the complex networked new media strategies of game companies. To explore this online game environment; games from Google Playstore in the category of "under 5 age" were examined using web-harvesting technique along with content analyzing methodology. Within this context, 32 free online games from 19 different game companies were analyzed in terms of company ownership, platform statistics and their social media contents. As the social media is one of the primary influence of the purchasing decision; viral marketing strategies from these platforms reach the absolute beginner gamers and potentially their parents or other caregivers. Results reveal that game companies remediate new game content on online network. This strategy creates a new ecosystem; where gamers are surrounded by fragmented and modular game contents from different social media platforms.
Key Words: Digital Game, Social Media, Game Industry, New Media Strategies

Children and Game as Techno-Commodity

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Abstract

With the help of the new digital technologies, which included traditional media like radio, television, and cinema, gaming has been shaped by global leisure time industry in an ever-increasing scale for the whole society including children. With these developments, all individuals spend their times on new media. In our present day where an "*Internet Generation*", which is highly dependent on computers, has emerged, children see the computer as a part of life, even as their friends in their homes, and spend most of their time by playing games on the computer.

Along with these developments, children are watching less television compare to the past and spending more time on the computer. This new generation of children uses computers to learn, to have fun, to shop, to communicate and to play games. In other words, for today's children, new media circles for this internet generation are seen as playgrounds, and even these areas where children become children. However, of course, it is not right to agree with this view that new media circles have made the internet as a playground for children. The leisure time including the games has been industrialized since the XX. century. Specialized leisure-time industries, such as digital games, are creating entertainment as a commodity to sell. Moreover, with these developments, playing game has become cheaper and so many people can access it without much effort. These also transformed the place, hardware, clothes and activities required for the game into a more desired manner, making it a commodity where children can find children at a certain price in the market.

Douglas Kellner describes the present age we are living in as the "techno-capitalism" age of knowledge, information, computerizing and automation in cooperation among each other. In techno-capitalism age, technology is a crucial importance. Indeed, since the 1980, knowledge, information, education, and entertainment have started to be commodified, and have been subjected to capitalist profit and controlling. This turned out to be a shift of computer information services into libraries as an information source; commodification of education programms that can be purchased by money and the replacement of paid television by "free" televisions. In other words, information on computers has been replaced the library, and the knowledge and information has become a commodity and has gone under the control of computer programs. In this respect, Kellner claimed that all technological products worked with the change value of information, knowledge and entertainment and were transformed into "techno-commodity". Based on this approach of Kellner, the present paper considers the game as a techno-commodity.

For this reason, this paper will firstly deal with the techno-commodity concept, which defines the conversion of the game in techno-capitalism era and the techno-capitalism

concept in which new communication technologies have the primary importance. Then, the meaning of game as a techno-commodity and its effects on children will be discussed with a theoritical and critical perspective.

Keywords: children, game, new media, leisure, techno-meta

PANEL 5

ÖZEL GEREKSİNİMİ OLAN GRUPLAR VE DİJİTAL OYUNLAR

Panel başkanı : Prof. Dr. Mukaddes Erdem

"…Fırsat Mı, Tehdit Mi?"

Panel sunumu – I

Eda Çiftçi (*Digital Games-Based Learning For Special Educational Needed Children)*

Panel sunumu – II

Seda Özer Şanal (*Disleksili Çocuklar ve Dijital Oyunlar: Alanyazın İncelemesi*)

Panel sunumu – III

Murat Kılıç *(İşitme Engelli Çocukların Eğitiminde Bilişim Teknolojileri ve Oyunlar)*

Digital Games-Based Learning For Special Educational Needed Children

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INTRODUCTION

The special educatıon needed children such as dyslexia, autısm spectrum disorder (ASD), asberger sendrom(AS) can be learn in diffrent methods; such as watching, playing, listening, drawing, playing and repeating. Dyslexia is a learning difficulty. Autism spectrum disorders (ASD) are developmental disorders that affect individuals to different degrees. The core symptoms include impairments in communication and social interactions, with deficits in social emotion reciprocity, in non-verbal communication and in developing and maintaining relationships In both sıtuation there is a failure in learning and improving social skills and social interactions. Social skills are verbal (e.g. speech intonation, clarity of speech) and also non-verbal behaviours (e.g. eye-contact, facial expression, gestures) that enable a person to achieve social competence. Internatıonal Communication Technologies(ICT) supplies many functıonal e-learning strategies to these children. Because these children usually need virtual envoriments and enjoy playing video games. Many diffrent strategies can be use on ICT like Digital games-based learning (DGBL) DGBL boosted the children's engagement with the learning activities and social ineraction. Usually **"serious games**" are used for DGBL. **Serious games** can be described as digital games equipment with a agenda of edcatıonal design entertainment. They facilitate to start social interactions and realize emotions, normalize failure and strenhthening chidren's self-esteem. They also served an intro-individual function of the children. For this reason they are used for cognitial therapies..The main chracterictics of serious games are; -none were exhaustive (they are just target on training-never support the feeling of anger, agressiveness and hostility) -by daily playing routine they start social interaction -all of them are playable on computer, notebooks, robots and mats.The special needed learning problem children are usually recognized by a school nurse ar pediatric nurse due to routine health control. Rarely the families can't determine their children's problem until this time. Because of this they can't find the solution of the problem. At this point pedatric nurses can highlighted the parent's way by giving digital solutions.

OBJECTIVE

In this study it's aimed to review the digital games- serious games that faciliate learning and social interaction of specıal educatıonal needed chıldren.

METHOD

The search was done by reviewing literature screening at Medline,Science Direct, Pub Med and ACM Digital Library.

RESULTS

The serious games are usually targeting on emotıon recgnition and production. This games consist of incremental learning, linearity, attention span, scaffolding, transfer of learned skills, interaction, learner control, practice and drill, intermittent feedback, reward, situated and authentic learning, accommodating the learner. The practioner is aimed to improve empaty, problem solving, enhance collobrative skills, joint attention, symbol use, enhance collobrative skills, improve collobrative skills, improvesocail skills, train social skills through a multiplayer, social and emotional skills of language art, language development, adaptive skills, cognitive skills, mathematics, teach social understanding, teach imitation and joint attention during a cooperative task. The mechanism of games are; game narratives, video games, virtual moving chracters in 3D, games in 3D with real scenarios, games in 3D with real scenarios and avatars, cartoon with avatar in 3D, photos, drawings. The most popular serious games names are found as below. Emotions , Copy Me, The Junıor Detective Training Program , Emotion Trainers, Face Say 2, Let's Face İt, Mind Reading, Smile Maze, Virtual Reality In Second Life, Join In Suite, Kid Talk, Raketeer, SIDES, Story Table, Teachtown, Junk Yard, Music Hall, Mail Room, Bike Shed, Bridge.

CONCLUSION

Digital games-based learning (DGBL) involving **"serious games**" can be usef for digital based learning and improving social interaction for specıal educatıonal needed chıldren.

KEY WORDS

Disylexia,Autism spectrum disorder, Digital based learning, Serious games.

Dyslexic Children and Digital Games: Literature Review

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Abstract

There is a period in which digital games are now being discussed as a learning material, beyond having fun or spending time. Digital games as a learning material; design, development, use of education and its effects are subject to different studies. Digital games in the learning process of children with dyslexia have a critical place in this context. Dyslexia is a reading difficulty (Hultquist, 2006) that is classified as a subcategory of specific learning disability under special education categories (Güzel-Özmen, 2015: 341). Dyslexic children are taught to improve their literacy and literacy competencies if they are trained through privatized programs. Therefore, development of learning environments and methods appropriate to the characteristics of children with dyslexia is an important field of study. Digital games, on the other hand, are one of the most discussed issues in terms of the effects on the learning of children with dyslexia, considering the attractive interaction processes they offer to children. Some of these researches with the subject of dyslexic children and digital games have been examined here to obtain data on the power of digital games to meet the educational needs of children with dyslexia.

A document analysis has been carried out with the criteria determined in line with the aim of this study. Web of Science and Science Direct databases were searched. A total of 37 articles have been reached. Findings; "dyslexia and digital game" have been on the rise in recent years. While in studies, some of the games are being developed by researchers, some games are existing. The researchers; education, cognition, special education, psychology, communication, neuropsychology, neuropsychiatry, engineering and pediatrics, and many studies have been observed to be multidisciplinary. In studies, it has been reported that digital games are effective for dyslexic individuals, and the dependent variables examined are supported on the positive side. When the teaching strategies used in the games are examined, it is noted that they focus on some strategies.

Keywords: dyslexia, digital game, special education, literature review

Information Technologies and Games in the Education of Hearing Impaired Children

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Acquiring speaking due to partial or complete inadequacy of the hearing, negatively affecting the individual's educational performance and social cohesion due to language use and communication difficulties is defined as hearing impairment. Hearing impaired communication skills negatively affect language and speech development, as well as affecting the entire development of the individual in the negative. Today, the developments in the field of technology have also shown itself in hearing aids. Thus, hearing impaired people, depending on the degree of hearing impairment they have and the ability to choose a variety of devices offered. On the other hand, it is very important to provide the hearing aid with the appropriate hearing aid for children with hearing impairment, but it is important to be able to respond to the special needs of supporting the learning process of these children with technological applications during the information age. Hearing impaired children have difficulties in motor development, balance and coordination compared to their normal hearing peers due to the type and grade of hearing loss. In addition, cognitive retardation due to low auditory experience causes negativity in social, psychological and academic fields due to negativities in language development. These drawbacks lead to the shaping of educational environments according to the needs of children with hearing impairments. Hearing impaired children can not vocalize their voices as they should because they can not hear speech voices as needed. Therefore, depending on the hearing impairment, the vocabulary of these children develops more slowly than their peers with normal development. Information and Communication Technologies (ICT) is also fully engaged here and offers a wide range of tools and application possibilities for the education of children with hearing impairments. These tools range from multimedia applications that address many senses to smartphone and smart board applications. The inclusion of ICT in the education and training process has increased the knowledge and skills of hearing-impaired children on motivation, comprehensibility, academic achievement, and technology use. The use of ICT in the teaching process affects the academic achievement positively in terms of ease of presentation, making classes more enjoyable for teachers and students as it increases the diversity of activities, increasing the attention and information of the students, The ease of finding and displaying the visuals of words that students do not know during the teaching process facilitates communication and interaction with hearing impaired people in terms of time and communication. Increasing students' learning, bringing the visuals of places far away from the social sciences lessons into the classroom environment, motivating

the lessons and increasing creativity are benefits of ICT use. The use of ICT in lectures makes it easier for students to learn how to use these technologies and the fact that hearing-impaired children feel themselves more successful and successful because they provide a fast and effective way of expression by positively influencing reading and writing shows how important ICT use is in the classroom. Private instruction software is collected in five groups. These; training and repetition software, simulation software, self-teaching software, educational game software and problem solving software. In the private education centers, while the computer is being processed with the courses, educational software is widely used among training softwares. The reason for the choice of practice and repetition software is due to the need to repeat very often after learning a topic for hearing-impaired children's hearing-impaired peers. These software provide students with the ability to use their preliminary knowledge and practice, as well as the role of motivating the competition. Educational gaming software is used as a reward for students at the end of the lesson or to ensure that distracted students focus their attention on the lesson and to help students learn lesson topics or develop problem solving skills by making use of their willingness and desire to play games. When choosing educational gaming softwares, the criteria of attractiveness of gaming devices and activities, educational value of the software, compliance with the physical abilities of the students, and low intensity and aggression items must be considered. Educational gaming software can be an effective teaching material when it is appropriately selected at the time or when it is designed according to the desired qualities. The games that are used to spend time with the computer in order to evaluate the leisure time of the students are outside this grouping. The learning achievements of students benefiting from information technology are increasing compared to the students who are educated with classical education. The problem of attention dis- tribution can be neglected as the information technologies increase the interest of the students with hearing impairment to the lessons and become fun to learn. By contributing to the written expression skills of the students with hearing impairment, students who have hearing impairments can use the past, present and future times correctly and have a positive influence on written expression skills by contributing to written expression skills such as building sentences and using correct times correctly.

Keywords: Hearing Impaired Children, Special Education, Information Technologies and Games

PANEL 6

DİJİTAL OYUN ENDÜSTRİSİ

Panel başkanı: Dr. Ergin Şafak Dikmen

"Küresel Dijital Oyun Endüstrisi"

Panel sunumu – I

Zafer Kaya *(Scratch ile Besin Zinciri Oyunu Tasarımı ve Uygulaması)*

Panel sunumu – II

Abdullah Bal *(Sanal Gerçeklik ile Doğa Keşfi)*

Panel sunumu – III

Tansu Kendirli *(Dijital Oyun Endüstrisi Eğitimi ve Kariyer Yönetiminde Gelecek Vizyonu)*

Design and Application of Food Chain Game with Scratch

Zafer Kaya, Durmus Ozdemir, Doğan Aydın
Dumlupınar University

Recently artificial intelligent (AI) and coding lesson has been getting importance all over the world. A lot of tech companies invest money on AI and coding. Many applications, software, coding, and AI should accompany to modern education. Ministry of National Education (M.E.B) put the coding lesson in Social Studies and Science High School's curriculum. Also Ministry of National Education (M.E.B) and YEGİTEK support all the school with technological devices like interactive boards, tablets and also educational software E.B.A. MEB is also trying to give importance to STEM. In this kind of education a lot of different branches are used together and precede the usage of the technology in education. On the other hand according to PISA, what has been taught in the schools was useless in Turkey because in the schools just information has been tried to convey to students but it is very easy to find and get the information with technology. So the important thing is not to get the information but how to use it.

540.000 students from 72 countries and 5 economic regions take part in PISA examination. In 2015 Turkish students are under the average in all branches, Maths, Science and Language and became 50th in 72 countries. With the help of FATİH project technological devices are started to be used in classrooms, however suitable software for the interactive boards aren't be available now. For example it is observed that material used at smart boards aren't interactive, just pdf. formats are presented to students that is not away the old classical methods.

Along the coding lessons in the schools also there are many extra courses on the coding in many schools. The education would be more effective, permanent and entertaining if the teaching can be carried out for different kinds of intelligent and emotions. A game can be done this. Many researches proof that games has an important role in teaching. Educational games have been shown to contribute to learning positively because they support multimedia and have many stimulating objects. Also, thanks to the games, the students are able to learn by amusing and to keep their attention for a longer time.

The world has many kinds of energy in itself. Energy always changes such as light was captured in chemical in the plants and this accumulation was transformed into vitality energy (ATP) or this vitality energy may be transformed into psychical energy. In this project, one of the objectives of science lesson; food chain is aimed to be combined with coding lesson. On M-Block platform, food chain one of the subtopic of living creatures and vitality energy unit is set as a game by a programing language "Scratch". As for coding lesson, the objectives of in 6th grade ICT (information and communication technologies) lesson are being taught.

This project is a levelled game. The objective of the game is to teach what the living creatures consume or not. The player of the game learns the circles of the food chain at the end. When the player chooses the right nutrients for the living creatures, he gets a point. But if the player chooses the wrong nutrient, he loses a point. The source of energy the sun is always on stages with the player. When the level completed, each nutrients has a grave itself. All the living things belongs to that grave work out like decomposing mushrooms and everything is recycled to the nature.

In the game, the energy resources of the living things and the adventure of the energy cycle are taught. The game consists of five levels. Each level is moving through the types of energy that the creatures can or cannot use. In the transitions between the levels, the objectives are reinforced with multiple choice, short answer, and matching questions about the food chain and its components. This study contains a concrete example of the use of educational games.

It is envisaged that many abstract and difficult subjects will be transferred through game, facilitating narration and learning. The objectives involved in the unit in this study have been transferred through the game.

The students in the study are divided into two groups as experiment and control group. The subject was taught through the educational game designed for the students in the experiment group. In the control group, the subject was taught through presentation using traditional methods. The information of the students in both groups related to the food chain before and after the study was measured by pre- and post-tests.

It was observed that the learning level of the students in the experiment group participating in the course with the food chain game was statistically significant. As a result, it was observed the students had more fun and learned more efficiently by means of the game.

The study can be made more comprehensive by the development of applications for the different courses or different units in the same course.

Key words: Food Chain Game, Game Design with Scratch, Digital Games.

Nature Discovery with Virtual Reality

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Abstract

Industrial and commercial developments have led people to urban life from rural areas. Especially in developed and big cities, people live a life away from nature. Green areas are transformed into urban areas in order to meet the increasing population needs of housing. This transformation alienates urban people and especially children against nature. Children can only know the potted flowers grown at home and the plants in the park nearest the area where they live, many plants can only be seen in the pictures. For these children who do not know whether their favorite fruit grows in a tree or a seedling, the related activities in their schools are not enough. Increasing agricultural activities in the greenhouses in our country and importing of various foods cause the children to be confused about knowing which fruits and vegetables they are growing in which season. Technology can be used to help solve these issues.

In order to make life easier, advanced technology devices are developed and offered to our service. These devices, which are integrated with software technologies, are now called "smart". Virtual reality glasses from these devices are integrated with other devices such as smart phones and have software support. Applications developed for smartphones that can now be found in every home can be used for both entertainment and education. Especially, it is possible through virtual reality applications that the training activities which can not be done due to the high cost, the preparation of the necessary environmental conditions and the difficulties like security. The combination of entertainment and education is important for attracting children. Virtual reality technology can also be used to help children who are growing up in city life to better understand nature.

The virtual reality application in this study has offered the opportunity to make virtual nature trips that allow people to meet plants in different species such as trees, mushrooms and flowers. Informations such as the types, leaf forms and fruits of trees seen during the trip are given visually. Informations such as fruit-giving periods and regions commonly seen in our country are given as audibly. With this application, it is possible to learn the names of flowers as well as health-related information such as how to distinguish edible and poisonous plants such as mushrooms. It will be very helpful to know this information especially on real trips with children.

In order to increase the interest of the children to application and to keep their motivation at a high level, tasks have been placed where they can play games while performing. Children can travel in a virtual forest we model for this purpose. They try to do a mission at the same time during the trip. When the trip is completed, they may encounter puzzles that they can solve using the information they have learned. This makes it possible to make information more permanent.

Children will learn the names and species of these plants in the easiest and fun way, by modeling the nature in the virtual environment, in the scout clubs, nature trip clubs, schools and even at home. The information obtained in a fun way will increase children's interest in nature. As a result, children can realize that life is not just about the city, because they are interested in activities such as scouting, camping activities, nature observation teams, etc. which can be intertwined with nature. In further studies, we can further improve the virtual forest environment and enrich it with different applications so that children with disabilities who are unable to leave the home environment can do nature explorations.

Keywords: Virtual Reality, digital game, game software development, nature discovery

PANEL 7

DİJİTAL OYUNLARIN GELECEĞİ

Panel Başkanı: Prof. Dr. Hakan Tüzün

"Çirkin Olsa Bile"

Panel sunumu – I

Panel sunumu – II

Musa Selman Kunduracı *(Siber Güvenlik ve Sosyal Medya Etiği Konularında Çocuklara Yönelik Eğitsel Dijital Oyun Tasarımı)*

Educational Digital Gaming Design For Children On Siber Security And Social Media Ethics

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ABSTRACT

The game is called activities that individuals do to have fun and have a good time. Computer games have become widespread especially in educational activities after the 90's. Computer games are very important for social and mental development. According to the researches conducted, it was observed that primary, secondary and high school students spend a lot of time during the day playing games on digital platforms. The concept of the game to the kids before the 2000s, the establishment of social relationships, competitive and based on the relationship established in the virtual world to the real relayed around the world a fun time passing vehicle while today's children, it was determined that perceived spend a fun time. The rapid development of digital games and the increase in the number of games developed are investigating the effects of games on human behavior and social relationships. As a result of the collaborations of trainers and software developers, a lot of tutorial software applications are being designed. When the relevant games are examined, it is seen that gaming softwares have been developed especially to increase the cognitive levels of kindergarten and primary school children. However, it has been found that the victimization of children in the virtual world is caused by the inadequacy of cognitive information on the basis of information security and social media ethics. For this reason, a game design has been developed in order to create information security and social media awareness in the work. The aim of the game is to teach children how to protect themselves from the dangers of the virtual world. With the developed game, primary, middle and high school level individuals will have the opportunity to learn about cyber security and social media ethics as well as having fun while playing the developed game. Three levels were developed to improve cognitive levels in cyber security and social media ethics in game design. Each level will be attempted to achieve a concrete recovery from the various issues in this area (malicious software such as Trojan, Worm, Spam, Malware, Virus, malicious behavior types, social engineering attacks, cyberbullying etc.). Based on the role-playing game (RPG) method, the named avatar named "GüvenCan" was created and the responses and responses given to the questions about the concepts of cyber security, information security and social media ethics were realized and the learning process was realized. The feedback given in the vote is positive reinforcement, ensuring that the learner is permanent. The characters and graphic objects used in the design of the game are prepared in 2D in Photoshop program. Design is realized by providing the integration of Unity and MonoDevelop in the Visual Studio platform and the code created in C # programming language. Designed with Unity, the game will not only be available on the computer but also on mobile platforms (mobile phones, tablets, etc.). On desktop platforms only the keyboard can be played through the touch screen on mobile platforms. In order to prevent children from distracting during play, the game progression stages are short and using moving objects that require focus. Topics covered in the game content are designed taking into consideration the main topics

included in the source named "Awareness Raising" on the official website of Information Technologies and Communication Agency. It is envisaged that users will be aware of cyber security, information security and social media ethics with this game. Especially, it is considered that the game designed at the point of efficient and effective use of the tablets distributed in the FATIH project in our country will contribute. The designed game will contribute to the issues of harmful software, ethical values, digital citizenship, confidentiality and security issues and technologies to be used in the scope of the 5th and 6th class "Information Technologies and Software Course" given in the secondary education institutions affiliated to the Ministry of National Education . It is also envisaged that Vocational and Technical Anatolian High Schools will contribute to the understanding of the topics of harmful software covered in "The Basics of Information Technologies" given to 10th grade students.

Keywords: Cyber Security Awareness, Social Media Ethics, Digital Game Design

PANEL 8

E-SPOR VE DİJİTAL OYUN ALIŞKANLIKLARI

Panel başkanı: Yrd. Doç. Dr. Yavuz Samur

Panel sunumu – I

Panel sunumu – II

PANEL 9

DİJİTAL OYUN VE EĞİTİM

Panel başkanı: Prof. Dr. Selçuk Özdemir

"Teknoloji: İki Yanı Keskin Bıçak"

Panel sunumu – I

Sevil Akaygun *(Planning stage of a gamified educational tablet application covering primary science topics)*

Panel sunumu – II

Vildan Özeke *(Okulöncesi Çocuklar İçin Hazırlanmış Eğitsel Mobil Uygulamaların Değerlendirilmesinde Kullanılabilecek Rubriğin Türkçe'ye Uyarlanması)*

Panel sunumu – III

Bilal Atasoy *(Farklı Başarı Yönelimlerine Sahip Öğretmen Adaylarının Dijital Oyun Oynama Alışkanlıklarının İncelenmesi)*

Panel sunumu – IV

İsmail Dönmez *(Ortaokul Öğrencilerinin Oyun Kodlama Becerilerinin İncelenmesi (Oyunumu Kodluyorum Yarışması Örneği))*

Planning stage of a gamified educational tablet application covering primary science topics

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Boğaziçi University

This work outlines the preliminary steps of a project that covers the design, development implementation and evaluation of an educational tablet application planned for primary school students in science classes. The outline includes the design of the application unit and evaluation criteria for examining students' understanding during and following their interaction with the app. The application is designed to cover primary school science topics on; 1) living things and life, 2) nature of matter, 3) physical events, and 4) earth and universe. Each topic is planned to proceed from elementary level competencies (currently specified for 3rd grade) towards more advanced levels as the students move through progressive levels of the application. At present, elementary level competencies on living things and the nature of matter are being designed. The design includes a number of game elements and dynamics in an attempt to improve student engagement during the learning process. As such the game environment consists of a succession of islands in which the students are required to complete a series of puzzles that resemble scavenger hunt games. Each island represents a different setting (eg. farm, seaside, cave, castle, forest etc.) from which the students are expected to collect a number of items enclosed in the puzzles. In order to move on to the next island, the students must complete all the puzzles and use some items from these puzzles to create a meaningful tool that they may need during their journey between islands. The evaluation criteria are based on two main dimensions: 1) cognitive demand of each puzzle in the application (the degree of cognitive load each puzzle imposes on the information processing system) and 2) visual representation of the settings defining each island in the application (real-life vs. game-like representation). Each dimension is examined to understand how students with diverse characteristics interact with, engage in, and learn from the application. The cognitive demand of puzzles is to be assessed in terms of the number of items (sum of correct, incorrect and irrelevant responses) included in each puzzle. Visual representation of the settings defining each island will be classified into two categories depending on whether it represents a real or fantasy setting in terms of the game like visuals (castles, pirates, palaces, ruins, caves etc.) included in the representation of each setting. Learning gains will be assessed in terms student scores obtained from the closing puzzles included application. Student engagement will be assessed in terms of the number of puzzles the students are willing to complete during a single free-time session. An in-depth observation is planned to take place following the addition of each new stage (a new island setting) to the game environment. Both quantitative and qualitative data will be used to examine how different student groups enjoy, benefit and interact with the application. Such a cross examination between student and application characteristics is

expected to provide valuable information on how cognitive load and visual aspects defining unique screens in an application might guide and shape our decisions during the design process.

Turkish Adaptation of REVEAC: Rubric for The Evaluation of Educational Apps for Preschool Children

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The ages of today's children are getting smaller in terms of meeting with the digital screens. The parents presenting smartphones and tablets as a new era toy. The software industry also claims that they are developing applications to use these devices in a supportive way of learning by producing content in this context. In online app stores, the users are rating the application, even it is very subjective, it still gives an idea about the application to new users. Sometimes people consider these rating scores, users' comments and/or the number of how many times the app was downloaded plays decisive role on new users to install/buy that app. There is a need for valid and reliable multidimensional assessment tools, that examine the application in terms of its' content, design and pedagogical aspects. The aim of this study is to translate an educational mobile application evaluation tool which was developed as a rubric.

The original abbreviation of REVEAC (given in the title) will be shortened as ÇEMUDER in Turkish version. ÇEMUDER has four-point rating as; "1: Unsatisfactory/Poor", "2: Needs improvement", "3: Good quality", and "4: Exemplary". ÇEMUDER evaluates the app in terms of four categories/domains as follows; educational content, design, functionality, and technical characteristics. Under of the educational content category, there are following criteria: "knowledge package appropriateness", "learning provision", "levelling", "motivation/ engagement", "error correction/ feedback provision", "progress monitoring/ sharing", and "bias free". Under the design category, there are "graphics", "sounds", "layout/scenery", and "app/menu design" criteria. Under the functionality domain there are, "child-friendliness", "autonomy", "instructions existence", and "configuration ability" criteria. And under the technical characteristics category, there are "performance and reliability", "advertisements/electronic transactions", and "social interactions". An example can be given from "progress monitoring/ sharing" criteria which is under educational content as follows: "**1:** Child progress monitoring does not exist. **2:** Child progress monitoring is not sufficient. Does not provide adequate evidence of its progress. Does not retain progress history. **3:** Monitoring is usually adequate and can provide an indication of child learning progress. Keeps child progress history. **4:** Complete child progress monitoring and analysis. Keeps child progress history.". The minimum score to be achieved with this rubric is 18, the maximum score is 72.

The evaluation tool has been translated into Turkish by the researcher. It was then sent to three field specialists who were at a good level in English and they were asked to rate the appropriateness of the translation and correct the inappropriate expressions. After the

adaptation process, the tool will be used to evaluate various applications to be selected for pre-school children. In original version the tool has .72 internal consistency level, and .79 for inter-rater reliability. The both scores will be calculate for Turkish version of the evaluation tool. As a second coder, an expert from pre-school teaching will be reached.

When the applications under the education and family categories are examined in the app store, in the description area of each application, the skills that the children will gain with that application are listed. The rubrics, such as ÇEMUDER, it may be possible to objectively assess whether the mobile application is truly capable of delivering these targeted goals. How much of these "digital candies", which we give to children without thinking, have the ability to support their cognitive and affective development? How much of the application's download count or app rating score is in line with the actual value of the app? What are the responsibilities of application developers while the number of content uploaded on the app store grows rapidly? Can standards be created for educational application developers and can sanctions be applied for applications that do not meet these standards cannot upload to app stores? It is possible to increase the number of questions, but we need the answers without wasting time. The most important responsibility of academicians and researchers working in the field of education is to produce and share reference resources in this regard, and to inform the parents about choosing the mobile applications consciously.

Keywords: educational mobile app, preschool children, rubric, mobile app evaluation

An Examination of Digital Game Playing Habits of Teacher Candidates with Different Achievement Goal Orientations

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ABSTRACT

The purpose of this study is to examine the differences in the perspectives of digital games using teacher candidates with divergent achievement goal orientations and demographic characteristics. The individual's achievement goal orientation is an important concept influencing the dynamics that motivate them and their behavior in the learning process. There are two types of achievement goal orientations, learning orientation and performance orientation. Learning goal oriented learners interested in self-improvement. They learn for curiosity, enjoy the learning process itself, and they eager to effort and to continue learning without giving up even if they make mistakes. Performance oriented learners focused on the result of the learning. They evaluate their success and/or failure by comparing themselves with others. They also tend to avoid performing on challenging tasks due to anxiety about failure. Additionally, these two orientations are divided into approach and avoidance. Avoidance is related with urge to preventing failure, while approach is related with the urge to achieve success. Even though learning and performance orientations may seem to represent opposite values, they may coexist. In other words, an individuals may have a high performance and learning orientation at the same time.

Individuals' achievement goal orientations are thought to cause differences in their views of the game as they change their motivation for success. For example, it is conceivable that individuals with high performance orientation may be more interested in challenging games. For this reason, it is important to examine the thoughts and approaches of the different individuals in terms of their achievement goal orientations. Digital games are an important means of entertainment and learning that have succeeded in attracting individuals of all ages and gender.

Worldwide gaming market sales prices have been estimated at $116 billion for 2017 and forecast for 2020 will be around $143 billion. Nowadays, this budget has been around about $50 billion of mobile games and this rate increases every day. The reasons for this increase is estimated that as increase number of mobile device, hardware and software capacities, while as the price of these devices getting cheaper. One of the reasons for the widespread use of digital games is that it is used in many areas such as entertainment, business, engineering, medicine and education. The appeal to such a large interest is because the games contain components such as entertainment, socialization, competition, mystery and reward. Because of the potential games have, they are also considered by the education field, and is used for the education of a wide range of people from preschool to adult

working in the business world. Educational games developed to provide direct support to the teaching process, as well as informal learning resulting from different experiences in games developed for entertainment, are remarkable for the education. Some examples are information from games such as contests information with word games, knowledge about geographical structures/regions/cities with car racing, social or language skills during interaction in multi-user games etc. It is important to reveal the point of view of the teacher candidates who will teach z-generation to the digital games that have the potential to contribute in different forms of education. In addition, it is critical to examine the effects of different individual characteristics in the perspective of teacher candidates.

In this study, two data collection tools will be utilized. First tool is "Achievement Goal Orientations Scale" developed by Akın (2006). Five-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). It includes 26 items and 4 factors that named learning-approach, learning-avoidance, performance-approach and performance-avoidance. Factor loadings ranged from .41 to .98. The internal consistencies of subscales ranged between .92 and .97, and test-retest reliability coefficients ranged between .77 and .86. Second data collection tool will be developed by researchers to capture teacher candidates' opinions about digital games. The collected data will be analyzed with descriptive analysis and the teachers' perspectives of digital games will be revealed.

Keywords: digital games, achievement goal orientation, teacher candidates, digital game playing habits

Investigation Of Game Coding Skills Of Middle School Students

İsmail Dönmez[1], Murat Tekçe[2], Hasan Beder[2], Hikmet Kalfa[2]

1 Şehit Hüseyin Gültekin Bilim ve Sanat Merkezi
2 Cebeci Ortaokulu

Games could provide a better learning experience for students. Today's students are already using their advanced mobile devices for personal purposes, such as searching for information on the Internet and accessing course materials (Güleroğlu, 2015). French sociologist Roger Caillois (1957) defined it as a volunteer activity with the awareness that is the diffrent from the real life. These volunteer activities have been carried to the interior spaces of the streets with the help of today's computer and internet technologies (Pala ve Erdem, 2011). Research has shown that 30 million people play the game in Turkey, this figure reached 2 billion in the world where it is stated that the market reached $ 64 billion. The purpose of this study is to examine various variables of games participating in the contest "I am coding the game", aiming at middle school students to use 21st century skills, as a technology tool, to promote the development of the producing individuals, to open the front of the entrepreneurial individuals, to develop the writing skills and to bring the students living in advantageous and disadvantaged areas together at the same opportunity. A coding game contest was organized for the first time in Ankara with the name "I am coding the game" between the months of February and May 2017. In the contest organized for middle school students, the students are asked to select the computer program and the theme that they want to build. The competition has been supported by EBA, TUBITAK, Stemandmakers Lab, HAVELSAN and ROKETSAN. As a method, qualitative research models were used in the research. A document review covers the analysis of written materials that contain information about the phenomena or phenomena intended to be investigated (Yıldırım and Şimşek, 2011). Game evaluation form developed by researchers was used as data collection tool. The games applying for the competition constitute the data of this work. The data were analyzed by 3 independent observers. 92 games were submitted to the competition in overall Turkey. 28 works were applied from outside Ankara. The number of works applying from Ankara province is 64. These works come from 36 different schools. 136 students applied for the competition. 104 (76%) of these students were male and 32 (24%) were female. 58 (93%) of the central districts and 6 (7%) of the central districts were involved in the contest. 47 (73%) from public schools, 14 (21%) from private schools and 3 (6%) from science and art centers applied for competition. 95% of the games made in scratch, 4% are in Code, 1% game made in in GameMakerStudio program. According to independent observer's opinion games were divided three categories; basic level (f = 47), intermediate level (f = 14) and advanced level (f = 3). On the other hand, it is seen that 52 (81%) of the works submitted to the competition participated in the Turkish name and 12

(9%) participated in the English name competition. In the 21st century, the importance of coding related works has increased; it has been seen that middle school students generally use simple programs and simple commands when coding games. The importance of the coding education to the students starting to the basic level is understood in Turkey. It is thought that it is important to give coding education to the students starting from the basic level. Despite the fact that the competition was applied in groups, it is seen that male students are more interested in game coding. This conclusion suggests that girls' participation in encodings should be increased or encouraged. It is also necessary to take some precautions for the low involvement of schools in remote locations.

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Keywords: *Coding, Competition, Game Coding*

PANEL 10

KALIP YARGILAR VE ŞİDDET ALGISI

Panel başkanı: Prof. Dr. S. Sadi Seferoğlu

Panel sunumu – I

Seda Topçu (*Lise Öğrencilerinin Dijital Oyun Oynama Durumlarının Değerlendirilmesi)*

Panel sunumu – II

Ebru Bulut (*Ortaokul Öğrencilerinin, Öğretmenlerin ve Velilerin Sanal Zorbalık Farkındalık Düzeylerinin Çeşitli Değişkenlere Göre İncelenmesi)*

Panel sunumu – III

Necmi Özen *(Öğretmenlerin ve Öğrencilerin Gözünden Sanal Oyunlar)*

Panel sunumu – IV

Nursel Yalçın *(Mavi Balina Oyununun Çocuklar ve Gençler Üzerindeki Etkilerinin İncelenmesi*)

Assessment of Digital Game Playing Situations of High School Students

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Aim: Digital games improve the visual and attention skills of adolescents, while unconscious and excessive gaming behavior causes serious problems (1). Our aim is to assess the frequency of computer and internet use and digital game addiction in high school adolescents.

Method: 495 adolescents regarding in 9th, 10th, 11th and 12th grades in two separate high schools in the districts of the middle socioeconomic level of Ankara were included in this study. A questionnaire consisting of 54 questions related to some sociodemographic characteristics, computer and internet usage and digital game play situations was applied face to face.

Results: Four quadrants of the adolescents participating in the research are girls and three quadrants are male and the average age is 16.1 years. 92.7% of the children said that they have mobile phones and 88.1% of them said that they can connect to internet on mobile phones. 73.5% of the children said that they have computers, 70.1% had internet, and 36.8% said that they use the computer to play digital games. Nearly half of the children stated that their internet usage was restricted and prohibited by their families, but they were connected to the Internet for 2-3 hours a day. 57.8% of the children said that they played digital games and 49.7% said that they played these games online. The most frequently played games are shown in Table 1. 42.4% of the children said that they played violent games and 73.3% did not fit the classification of games. The longest average time they played without stopping at the time of their basic needs (toilet, food, etc.) is 5.3 hours (min: 30 minutes, max: 48 hours). According to the digital gaming addiction scale, 6.5% of the children are considered as digital game addicts.

Conclusion: The frequency of digital game addiction in our research is unimaginable. In the literature, the frequency of digital game addiction varies between 2-15% (2,3). In Turkey it is estimated to be increasing the frequency, but can not reveal the size of the problems encountered wide data. The most striking finding in our research is that children spend a long time playing without interruption and half play violent games. In addition, three quadrants of the children stated that they did not obey the classifications of games. This suggests that the use of new media and new technologies in our country should be supported and encouraged to become a conscious user.

Keywords: digital games, high-school students, gaming addiction

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Table 1. The most frequently played digital games by adolescents

Digital game	ESRB classification	Violence	Playing Frequency (%)
Counter Strike: Global Offensive	M (Mature 17+)	Blood, Intense Violence	38,8
PES	E (Everyone)	-	31,5
Clash of Clans	unclassified	-	26,3
Grand Theft Auto	M (Mature 17+)	Blood, Strong Language, Violence	23,8
FIFA	E (Everyone)	-	23,8
Call of Duty	unclassified	-	23,4
League of Legends	T (teen)	Blood, Fantasy Violence, Mild Suggestive Themes, Use of Alcohol and Tobacco	20,6
Need for Speed	T (teen)	Language, Mild Suggestive Themes, Mild Violence	20

Ortaokul Öğrencilerinin, Öğretmenlerin ve Velilerin Sanal Zorbalık Farkındalık Düzeylerinin Çeşitli Değişkenlere Göre İncelenmesi

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Özet

Son yıllarda İnternet kullanımının giderek yaygınlaşması, sınırsız, denetimsiz bir şekilde her türlü bilgiye erişimin kolaylaşması sonucunu doğurmuştur. Bu süreçte bilgiye erişimin kolaylaşmasının olumlu sonuçları olmuştur. Özellikle öğrenme-öğretme süreçlerinde bunun olumlu yansımaları gözlenmiştir. Ancak bu gelişmelerin bazı olumsuz sonuçları da olmuştur. Örneğin okullarımızda yıllardır gözlenen geleneksel zorbalık e-ortamda farklı bir formda bireyleri rahatsız etmeye başlamıştır. Çevrim-içi ortamları kullanan bireyleri rahatsız eden bu olumsuz durumlara isimsiz çağrılar, göndericisi belirsiz ya da zararlı e-postalar, hakaret ve tehdit içeren mesajlar ile gönderilen ses, görüntü ve metinler örnek olarak verilebilir.

Bilgi ve iletişim teknolojilerinin (BİT) çocuklar ve gençler tarafından yaygın olarak kullanılmasıyla birlikte çevrim-içi ortamları kullanan öğrenciler arasında, farkında olunarak veya olunmayarak gerçekleştirilen birtakım zorbalık davranışları gözlenmeye başlanmıştır. Alanyazın incelendiğinde bilgi ve iletişim teknolojileri araçlarının kötü amaçlar için kullanılması sonucu ortaya çıkan bu durumun siber zorbalık, sanal zorbalık, çevrim içi zorbalık, internet zorbalığı, dijital zorbalık gibi farklı şekillerde isimlendirildiği görülmektedir. Siber zorbalık davranışları, internet, cep telefonu, kamera, sosyal ağlar, vb. gibi bilgi ve iletişim teknolojilerini kullanarak, başkalarına zarar vermek amacıyla yapılan ve sürekli olarak tekrarlanan davranışlardır. Bu zarar verme, BİT araçlarını kullanarak hakaret etmek, kişi hakkında doğru olmayan ve istenmedik bilgiler yaymak, biriyle ilgili utandırıcı web sayfaları hazırlamak, birine ait kişisel bilgi veya görüntüleri izinsiz olarak yayınlamak, sanal ortamlarda dışlamak gibi biçimlerde ortaya çıkabilmektedir.

Siber zorbalıkla ilgili araştırmalara göre, genel olarak bu konudaki duyarlılığın ülkemizde düşük olduğu görülmektedir. Örneğin ebeveynler BİT kullanımı konusundaki yetersizlikleri nedeniyle konuya ilgisiz kalabilmektedirler. Okullarımızın da bu tür tehdit ve tehlikelere karşı çocuklarımızı ve gençlerimizi korumak için yeteri kadar önlem alamadıkları anlaşılmaktadır. Okulların bu konuyla ilgili alabilecekleri önlemlerin yanında anne babalara

da önemli görev ve sorumluluklar düşmektedir. Bu bağlamda bu çalışmanın amacı, ortaokul öğrencilerinin sanal zorbalık farkındalık düzeylerini incelemektir. Çalışmada ayrıca öğretmen ve velilerin ortaokul öğrencilerinin sanal zorbalık farkındalık düzeyleri hakkındaki görüşleri incelenmiştir.

Araştırmanın çalışma grubunu ortaokul öğrencileri, öğretmenler ve veliler oluşturmaktadır. Çalışma grubu 10 ilden toplam 512 ortaokul öğrencisi, 45 ilde görev yapan toplam 350 öğretmen ve 27 farklı ilde yaşayan 216 veliden oluşmaktadır. Veriler, 2015-2016 eğitim-öğretim yılında araştırmacılar tarafından geliştirilen "Kişisel Bilgi Formu" ve "Sanal Zorbalık Davranışları Farkındalık Anketi" başlıklı veri toplama araçlarıyla çevrim-içi ortamda toplanmıştır. Verilerin analizi için frekans ve yüzdeler, hesaplanmış, T-Testi ve Anova Testi uygulanmıştır.

Araştırma bulguları ortaokul öğrencilerinin sanal zorbalık farkındalık düzeylerinin yüksek olduğunu göstermektedir. Araştırmanın diğer bulguları, öğretmenlerin ve velilerin algılarına göre ortaokul öğrencilerinin sanal zorbalık farkındalıklarının da yüksek olduğu şeklindedir. Bulgulara göre ortaokul öğrencilerinin cinsiyeti, bilgisayar/internet kullanım süreleri ve ailelerinin gelir düzeyleri sanal zorbalık farkındalıklarını etkilemektedir. Araştırmada elde edilen bulgulara göre öğrencilerin en fazla zaman geçirdikleri ortamlar aynı zamanda en fazla sanal zorbalık davranışlarıyla karşılaştıkları ortamlardır.

Bu çalışmada verilerin toplandığı grup sosyal ve ekonomik açıdan benzer ilçelerde ve okullarda bulunmaktadır. Araştırma sonuçlarına göre sosyal ve ekonomik değişkenlerin, internet erişim yerleri farklılığının, sanal zorbalık farkındalık düzeylerinde etkisinin olmadığı görülmüştür. Bu nedenle daha geniş bir örneklemle ve farklı sosyoekonomik düzeye sahip öğrenci, öğretmen ve velilerle farklı sonuçlara ulaşılabilir.

Anahtar Sözcükler: Sanal zorbalık, sanal zorbalık farkındalığı, okul yönetimi, öğretmenler, veliler

Öğretmenlerin ve Öğrencilerin Gözünden Sanal Oyunlar

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Eskişehir ilinde 2014 yılından beri çocuk ihmalini ve istismarını önleme konusunda düzenli ve planlı bir dizi çalışmalar yapılmaktadır. Bu çalışmalar; çalıştaylar, eğitimler, araştırmalar, bilinçlendirme çalışmaları, atölyeler, kurumlar arası koordinasyon toplantıları, araştırmalar şeklinde yapılmaktadır. 2014 yılında Eskişehir İl Milli Eğitim Müdürlüğü bünyesinde Çocuk İhmalini ve İstismarını Önleme Komisyonu kurulmuştur. Komisyon İl Milli Eğitim Müdürüne Bağlı olup, müdür yardımcısı, şube müdürü, psikolojik danışmanlar ve bölüm şefinden oluşmaktadır. Komisyon her yıl çocuk alanından bir konuyu belirleyip il düzeyindeki tüm ilgili kurumların katıldığı bir çalıştay planlayıp gerçekleştirmektedir. 2016 yılında Sanal Ortamda Çocuk İstismarı konusu ele alınmış ve çalıştay kapsamında bir çocuk oturumu yapılmıştır. Çalıştaya katılan çocuklar, yetişkinler bizim için çalışma yaparken bizden fikir alsınlar, bize sorsunlar şeklinde görüş bildirmiştir. Bu çalıştaydan sonra çocuklar ile ilgili yapılan çalışmalara yön vermek için görüşlerini almak amacıyla çalışmalar planlanmıştır. Çalışma alanına göre veri toplamak için bu ve benzeri anketler uygulanıp değerlendirilmekte ve bu sonuçlar yapılacak çalışmaların planlanmasına yön vermektedir.

Çalışmamızda temel ve orta öğretim düzeyinde öğretim gören öğrencilerin sanal ortamlarla ilgili alışkanlıklarını, oynadıkları oyunları belirlemek; öğretmenlerin öğrencilerin sanal ortamlara ilişkin alışkanlıklarını ve oynadıkları oyunları tanıma düzeylerini belirlemek amaçlanmıştır. Çalışmada öğrenci ve öğretmen bakış açılarında farklılıklar olması, öğretmenlerin öğrencilerin oynadığı oyunlardan kimilerini tanımamaları ya da kullandıkları sosyal paylaşım sitelerinden kimilerini duymadıkları öngörülmüştür.

Çalışma tarama yönteminde tasarlanmış, veri toplama aracı olarak öğretmen ve öğrenci formu olmak üzere iki anket formu kullanılmıştır. Çalışmada öğrencilerin görüşlerini almak için bir öğrenci anket formu hazırlanmış ve uygulanmıştır. Öğrenci anketinin bulgularına göre bir öğretmen anket formu hazırlanmış ve aynı okuldaki aynı sınıflarda derse giren öğretmenlere uygulanmıştır. Uygulamalar öğrenci ve öğretmenlere okul rehber öğretmenleri tarafından yüzyüze uygulanmıştır.

Okulların başarı düzeyleri orta düzey olup Eskişehir ili merkez ilçelerinde bulunmaktadır. Çalışma 8 ve 12. Sınıflar düşünülerek hazırlanmıştır fakat sınav stresi ve ders çalışma oranlarındaki artış nedeniyle elde edilecek sonuçların çok gerçekçi olmayacağı düşünülerek bir alt sınıfa inilmiş ve 7 ile 11. Sınıflara uygulanmıştır. 7. Sınıf 52, 11. Sınıf 53 öğrenciye sanal oyunlar ile ilgili anket formu uygulanmıştır. Ankette açık uçlu ve çoktan seçmeli olmak üzere 16 madde kullanılmıştır. Aynı sınıflara derse giren öğretmenlere de anket uygulanmış ve

değerlendirme aşamasındadır. Çalışmada öğrencilerin sınıf düzeyi, cinsiyeti, başarı durumları (not ortalamaları) değişken olarak ele alınmıştır. Bir sonraki aşamada öğretmenlere öğretmenlerin yanıtlarına göre form hazırlanmış ve uygulanmıştır. Bu uygulama çalışmada öğretmen ve öğrenci görüşlerini de karşılaştırma şansı tanımaktadır.

Öğrencilerin anket maddelerine verdikleri cevapları incelediğimizde öğrencilerin %3'ü cep telefonu olmadığını belirtirken, %82'si 1-5 yıl arası cep telefonu kullandığını belirtmiştir. Öğrencilerin %96'sı cep telefonundan internete bağlandığını söylemiştir. 4 saat ve üzeri sanal ortamlarda vakit geçirme oranı %30 iken; öğrencilerin %80'i bir çocuğun günde en fazla 3 saat sanal ortamlarda oyun oynaması gerektiğini belirtmiştir. Öğrencilerin en çok oyun oynadıkları saatler 12.00 ile 24.00 arası olarak belirlenmiştir. Öğrenciler sanal ortamlarda en çok, sosyal paylaşım sitelerinde, sinema, dizi ya da film izleyerek ve oyun oynayarak vakit geçirdiklerini belirtmiştir.

En çok kullandıkları sosyal paylaşım siteleri, youtube, instagram ve facebook iken öğrencilerin %60'ı online oyun oynadığını belirtmiştir. En çok tercih edilen oyun türleri macera, aksiyon ve simülasyon oyunları iken öğrencilerin % 16'sı oyun oynamadığını belirtmiştir. Seçtikleri oyunları çok gerçekçi bulduklarını, eğlenceli ve geliştirici bulduklarını bu nedenle oynadıklarını belirtmişlerdir. En çok oynanan oyunlar; Zula, Counter Strike, Cofc ve Leougue of Legends olarak ifade edilmiştir. Öğrenciler genelde vakit geçirmek ve eğlenmek için oyun oynadıklarını ifade etmişlerdir.

Çalışmada öğrencilerin okul dışı vakitlerinin çoğunu sanal ortamlarda, online oyun oynayarak, sosyal paylaşım sitelerinde veya sinema, dizi izleyerek geçirdikleri ortaya çıkmıştır. Sanal ortamlar çocukların yaşam ortamı haline geldiği görülmektedir. Çocuklara verilmek istenen mesajların bu ortamlardan verilmesi ya da bu ortamların da eğitim müfredatlarına ders araç gereci olarak entegre edilmesinin etkili olacağı düşünülmektedir

An Analysis of the Effects of the Blue Whale Game on Children and Young People

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Abstract

Today, with the development of the internet world, there is a big increase in the number of games played on the internet. Over 18 million players have been observed on the gaming platforms instantly. A lot of the games seem to have a nice time for the intended people, but not all of them have a good result. In this study, with the effect of popularity of social network, it is aimed to examine the effects of the Blue Whale game on the children and young people, which is a digital game which spreads off the social network differently from classical games and can reach suicide level. It is known that the Blue Whale game was developed by a psychology student in Russia in 2013. The report of suicide is 130 in the games for a short period of time shows how dangerous the game is. In this study in which the reasons of joining to the game, the effects and consequences of the game are analyzed, it has been determined that the children play this game because of their curiosity, the feeling of challenging and the threats of the creators. Spreading the game over the social network and gaining reputation are due to given special duties to the participants and the way of reaching the result hiddenly. It can be said that there are generally four processes in the game progress and these processes are induction, habituation, preparation and final. All the sections until the final appear to be psychological processes that have been designed to prepare participants for the finals. It has been mentioned in the study that how the game controls the children and young people In order to manipulate the psychological conditions of the participants, they were tasked with duties reducing their fear of death and raising physical pain thresholds. Within the game dynamics, the presence of a motivational program involving the use of fear psychology and self-transcendence attrack the attention. This motivation program is also used to mentally prepare the victim for ultimate suicide. The findings of the research revealed that there were many reports from Russia, Europe and India. As a result of examining the reported cases, the complex upbringing, negative life experiences individuals tend to be more likely to be targets. It is noted there are children who survive with the help of their surroundings, but children and adults who have left the blue whale game may still be at risk because of their ability to commit suicide. All of these dangerous consequences, the blue whale game are ultimately described as a health risk for the adolescent, young adults, and psychologically vulnerable individuals in the world. Many countries, especially those with high suicide numbers, have published a to do and not to do

list of precautions to be taken by children and their neighborhoods. Information and Communication Technologies Authority in Turkey on September 16, 2017 has been warning about the subject in a press release. Unlike the classic digital games, blue whale game not working on an address, not having a standard address and playing the game by sharing the special link by curators make to take precauitions difficult. Precauitions taken from various countries and international organizations have also been detailed in the study. In this context, to cover children to be exposed to such traps through social media and the internet and to avoid distressing events, it once again revealed the importance of parents in monitoring their children's Internet habits, determining the length of time spent at games and on the internet, and especially suspicious approaches to unknown people on the internet. Qualitative research method was used when the research was being prepared. The research is in the descriptive scanning model and the collected data is collected through the document review. The sample of the research for the sub-objectives to be searched for is the documents related to the blue whale game. There is not much scientific work on the fact that the time of the emergence of the blue whale game is new and the events taking place are in the near future. It is also observed that blue whale-style games will be anticipated in the coming days under different names. For this reason, it is important to study this area and determine the methods of prevention. For this reason, it is thought that research will shed light on future researches about blue whale game.

Keywords: Blue Whale, Game, Suicide

PANEL 11

DİJİTAL OYUN BAĞIMLILIĞI

Panel başkanı: Doç. Dr. Mehmet Barış Horzum

"Review of the Methodological Trends of Theses on Game Addiction in Turkey "

Panel Sunumu – I

Tuğra Karademir *(Okul Öncesi Öğretmen Adayları Penceresinden Dijital Oyun Bağımlılığı)*

Panel sunumu – II

Türkan Karakuş Yılmaz *(Bir Bağımlılık Faktörü olarak Kaptırma Hissinin Farklı Oyun Oynama Durumlarına göre İncelenmesi)*

Panel sunumu – III

Panel Başkanının Sunumu

Review of the Methodological Trends of Theses on Game Addiction in Turkey

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Abstract

Game addiction is the subject of research and is addressed in master's and doctoral studies in Turkey as well as all over the world. The purpose of this research is to uncover the existing methodological trends in thesis on game addiction published in Turkey. A total of 18 theses, which are open to access in the national thesis database of the Higher Education Council (YÖK), have been examined in line with this purpose. The theses were analyzed with descriptive content analysis technique. In the analysis procedure, an instrument, which is developed by the researcher by adapting the "Distance Learning Theses Review Form" to game addiction, was employed. As a result of this research, it has been observed that master theses on game addiction outnumber doctoral theses and an increase has occurred since 2013 and reached its highest in terms of number in 2015-2016. Although the number of the theses on game addiction is found to be relatively higher in the social sciences institutes, the theses conducted in institutes of educational sciences are forefront.

In terms of the methodological design, the quantitative method has been found to be used more frequently in thesis studies. Survey research has been identified as the most used method in the 15 theses based on quantitative research methodology, and 1 thesis has been found to follow a mixed-method research design. The majority of the theses on which the quantitative research methodology is based have been determined that the sampling method is not expressed. Yet, in those theses, convenience sampling and purposive sampling have been found to be widely conducted. When the sample size of the theses was examined, the most studied sample size in the research methodologies was high school and undergraduate students. It has been determined that the most used data collection tools are scales. With regard to statistical methods, it has been determined that basic statistical methods are generally used. As a result of the study, the necessity of writing more theses on game addiction and carrying out preventive researches has been concluded.

Keywords

Game addiction, Theses on game addiction, Methodological Trends, Thematic review.

Digital Game Addiction From Early Childhood Preservice Teachers Perspective

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The rapid spread of technology has made it easier for children to access technology such as computers, phones and tablets and has made possible them to use these technologies frequently. When the games, which has advanced visual and auditory features are considered, overtime technology has become a dominant tool for children. Children who spend time constantly with technology find themselves in playing games more. With some other factors, this causes some risky situations. Game addiction is at the top of these risks. In consideration of latest findings on game addiction, World Health Organization declared game addiction as a disorder. Especially early age children carry more risks on game addiction and effected more from consequences. In this respect, to gain information about how to prevent game addiction and get children restrained habit of playing games, one of the biggest responsibility belongs to early childhood teachers. To increase early childhood teachers' awareness about games and game addiction, they need to be informed before graduation.

This study aims to reveal the perceptions of early childhood teachers about the reasons for game addiction and to investigate the relationships among the reasons. Phenomenology was used as research design. 55 pre-service teachers who are in the first grade in Department of Early Childhood Education in a public university were participated in study. Data were collected via open-ended questions on an online form. Content analysis was used to analyze data. In coding process, first in vivo coding was used and then axial coding performed. Two different researchers carried out the coding process independently. In order to ensure the validity and reliability of the research findings, the findings obtained by the researchers were compared and the inter-researcher consistency was examined. In addition, findings were supported with quotations, and relationships between findings descripted in detail.

As result of the analysis, findings gather in four themes. These themes are child, parent, environment and game. The sub-themes of the child theme are finding the imaginary world, age characteristics, enjoyment, lack of socialization and lack of self-confidence. Being a bad role model, technology as a saver, lack of knowledge, lack of control and carelessness are sub-themes of parent. While bad urbanization, insecurity in the streets and digital world are sub-themes of environment theme, there are two sub-themes in game theme such as attractiveness of the games and physiological effect. After the themes and sub-themes were determined, the relations between the themes and sub-themes were tried to be revealed according to pre-service teachers' opinions. These relations were examined in eight different aspects. These aspects are parent, child, game, parent and child, parent and environment,

parent and game, child and game and child and environment. The most emphasized aspects of the relations by pre-service teachers were parent, parent and child, child and game respectively. In parent aspect, parents' carelessness for their children was one of the most pointed out behavior that lead to game addiction. Addition to this, if the parents who are careless for their children are also don't have enough knowledge about creating environments for their children's development may cause game addiction. According to pre-service teachers' opinions on parent and child aspect, children's lack of socialization lead them to play digital games. This behavior occurs because of parents who are careless and see technology as a saver. Parents are also being a bad role model to their children by using technology often. Early-aged children learn by imitations and curiosity, thus children who see their parents using technology all the time spend most of their time to use technology. This may cause game addiction. The most remarkable finding in child and game aspect is that the attractiveness of games are related to the age characteristic of children. According to pre-service teachers, early-age children are curios and at game age. Games which have attractive features both visual and auditory lead students to play. In this situation, children may come up with game addiction risk.

In literature, game addiction is discussed with different aspects. In this study, findings were discussed according to literature and suggestions are presented. In particular, it can be said that the early-age children at 0-7 age should be educated about game addiction by both parent and early childhood teachers in a controlled way. In this context, it is suggested that early childhood education curriculums should involve contents related to game addiction.

Keywords: Game addiction, early childhood, pre-service teachers, digital games

Invesitgating Sense of Immersion as an Addiction Factor in Different Game Play Cases

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The game industry always aims to provide players with the best experience and entertainment. For this purpose, the industry develops many strategies to attract players for the game. Thanks to these strategies, games have the potential to take people from their daily lives and take a break from thinking about the troubles of everyday life and dragging them into a different world. It is called "immersion" when people move away from the real world while they are playing, forgetting themselves, and not being aware of what is happening around them. Many studies have shown that the sense of immersion is a positive relationship to game addiction.

There are studies on how the sense of immersion is influenced by many factors such as personality traits, graphics in the game, the way the game is played, and even the eye-view (first person view, third person view). Two different case studies have been presented in this study. One of the focus is on the effect of game control equipment (keyboard, joystick, movement-based Kinect) on the sense of immersion, while the other one focuses on the type of game (strategy and fighting) and the way of play (individual, two people on the same keyboard with two people on the internet).

Study 1

In Study 1, the difference in sense of immersion according to the features of the game played and the type of play. In Erzurum, 74 (48 females and 26 males) middle school students participated in study. The students randomly played different games in different ways on different days. As they are asy to reach from the network of MoNE, causal games such as Fire and Water, Fire and Water 2 (better graphics version) and Regular Show Fight (fighting game) have been chosen. After each play, the students filled an immersion scale originally prepared by Jennet and colleagues and adapted to Turkish by the authors. Analyzes showed that there was no difference between the level of immersion resulting from the interaction of the game and the type of play. However, there is a significant difference at the $p < .05$ level in terms of the game played when the type of play is fixed. Students who play Regular Show Fighting, a very fast-paced platform game, have a higher level of sense of immersion while there is no difference between games with the same gameplay but graphically different (Fire and Water - Fire and Water 2). According to the different playing situations of Fire and Water games, it has been revealed that the students playing individually have a higher level of immersion than the players who play together on the internet. In the other two games, there was no difference in the type of playing.

Study 2

The second study was carried out based on the hypothesis that as the control mechanisms increased the interaction, the sense of immersion might also increase With the participation of 60 university students selected via convenient sample selection, the effect of the game controllers on the sense of immersion was investigated. The sample was randomly divided into 3 groups, each group played with the keyboard, joystick and Kinect (motion-based control) of the SkiRanger game, with a different controller. It was found that the group played with Kinect ($M = 57.7$) had a higher score than other two controls at $p < .01$ level. The groups played with joystick ($M = 49.1$) and keyboard ($M = 48$) did not show any difference.

Discussion and Conclusion

The results show that both game characteristic and the type of play can affect the sense of immersion. The speed, flow, simplicity of the game make it easier for people to enter the game world. On the other hand, results show that individual play has a sense of immersion more than other types of play. It may be recommended to choose the games that need to make more decisions, and because it is thought of as an addiction factor, it is advisable to carefully choose the platform games that children often play. Moreover, it can be predicted that when playing with different friends over the same computer, it can prevent addiction by creating a more social environment.

The results of Study 2 show that the more the interaction with the game world, the more the sense of immersion. However, even though a motion-based control can provide a sense of immersion in a short time, it can be said that physical fatigue will not increase the playing time compared to other hand-played games. On the other hand, it should not be forgotten that increasing the interaction without lifting the player from the place can also increase the sense of immersion and lead to a tendency to addiction.

PANEL 13

DİJİTAL OYUNLARIN SAĞLIK ALANINDA KULLANILMASI

Panel başkanı: Yrd. Doç. Dr. Elif Sürer

"Ciddi Oyunlar ve Rehabilitasyonda Kullanımları: Felç ve İhmal Sendromu Örnek Uygulamaları"

Panel sunumu – I

Ayşe Oktay (*Sanal Gerçeklik Oyunları ile El Rehabilitasyonu: Fizyosoft™ LeapBall)*

Panel sunumu – II

Nevin Uslu (*Diyabetli Çocukların Hastalık Özyönetiminde Dijital Oyunların Kullanımı)*

Hand Rehabilitation with Virtual Reality Games: Fizyosoft™ LeapBall

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ABSTRACT

Virtual reality is defined as simulating the real world with computer technologies. A three-dimensional (3D) computer generated environment provides exploration and interaction of user with the objects by giving the sense of being in a real world. Virtual reality based digital games are very popular because of ensuring rich media to the users. Today, physical rehabilitation applications based on virtual reality games have gained importance. The scientific and clinical studies state that those games have positive effects on the patients. At classical physical rehabilitation in clinic, the patient must repeat the same exercises many times and this process becomes annoying especially for pediatric patients. However, the patient does his physical exercises while playing games at digital game based rehabilitation. Patients needing rehabilitation are high motivated and have fun during the games. Besides, the measurements recorded during the game are stored in the computer and the results are reported. By the way, the recorded data is analyzed later and the change of the patient with respect to time is presented in an objective manner.

This study presents a new virtual reality hand rehabilitation game named Fizyosoft™ LeapBall. The game is played with the developed software and a Leap Motion Controller. The Leap Motion Controller models the right and left hands in 3 dimensions and determines the position and orientation the fingers and joints. Data gathered with Leap Motion controller is transmitted to the computer and the user can see his hand on screen in real time. When the user puts his hand above the sensor, the 3D positions and orientations of each joint are determined and the hand is shown on the monitor. The user can see his hand and the movements of hand simultaneously on the monitor.

The purpose of the game is grasping a ball and putting it in the colored baskets according to the given voice instructions. The position of the hand is important for playing the game and the hands should be placed 20-30 cm above the Leap Motion controller. When the game starts, voice instructions like "grasp the blue ball" or "put the blue ball in the yellow basket"

are automatically given. When the pediatric patient makes the grasping action with the sufficient flexion joint movement, he simultaneously sees the grasping process on the monitor and feedback is given by highlighting the color of the ball. In the game, the number and color of the baskets are determined with different levels. After the patient grasps the ball, he should put it to the right basket that is defined with the voice instructions. When he brings the ball on the basket, he should open his hand and the ball falls into the basket. If the duration determined by the expert ends the game ends. The game is user-specific where the duration and difficulty of the game can be set by the physiotherapist according to each patient's condition. Data gathered through the game are stored in the database. Information like the time and duration of the game period, the maximum joint movement angles and the game scores are stored for future analysis. By this way, the play of each user at different times can be reported and the changes during the hand rehabilitation process are objectively analyzed by experts. Rehabilitation with Fizyosoft™ LeapBall presents a new, motivating, functionality based and patient-specific treatment for the physiotherapy experts.

Keywords: Rehabilitative game, virtual reality, hand rehabilitation, Leap motion

Use of Digital Games in Disease Self-Management of Diabetic Children

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Abstract

Aim
The purpose of this presentation is to draw attention to the effects of digital games on the use of diabetic children in their self-management and routine health care.

Method
In this review, the key words "diabetic child, self-management, digital games" were scanned in Turkish-English from the databases "Google Academic", "PubMed" and "SAGE Journals Online". The review includes games used in both Type 1 and Type 2 diabetes management.

Results
Digital games are games played on any digital device, ranging from personal computers to game consoles, tablets or mobile phones. Games are mostly used for entertainment purposes. Nowadays, there are games that are used for non-entertainment purposes and are called 'serious games'. These games differ from fun games, learning and training. Serious digital games are an educational and entertaining type of intervention. Its use in health is also increasing. The disease self-management of diabetic children is one of these areas. Diabetes is one of the most common chronic diseases in children around the world. With different types, children usually have Type 1 Diabetes, but the incidence of Type 2 Diabetes has also increased in recent times. Regardless of the type, diabetes requires the use of technology such as diet, exercise, insulin / drug, blood glucose monitoring, the use of glaucoma, dealing with complications such as hypo / hyperglycaemia, and diabetes self-management education. This lifelong process requires that the diabetic child be managed and changed behavior. In order for children with diabetes to change behavior, self-management education for children and families should be done. Diabetes self education training; is a collaborative process in which diabetic individuals acquire the knowledge and skills needed to successfully manage disease and disease-related situations and to change behavior. In this process, digital games are important interventions to improve self-management in diabetic children. Twenty-four games (Packy and Marlon, Captain Novolin, Tantei, Tamagoya, Buildup Blocks, INSULOT, Escape from Diab, Nanoswarm, Glucoboy, Bayer DIDGET, Testing for Hypoglycemia While Driving, The Magi and The Sleeping Star, Starbright Life Adventure Series CD-ROM, HealthSeeker, GRIP, Glymetrix Diabetes Game, The Diabetic

Dog, Dbaza's Diabetes Education for Kids, Diabetic mario, MySugr/MySugr Junio, Carb Counting with Lenny, MonsterManor, L 'AffaireBerman, Koodak-e-Tavana) related to diabetes management have been reached in the literature. These games are mostly based on prizes / reinforcements, social cognitive theory and social learning theories. It motivates children with diabetes and offers playable techniques such as grading to provide diabetic children with a risk-free space, alternative, fun and interesting way of finding and solving different scenarios for the management of the disease. In games, children are learning about basic diabetes knowledge such as diet, carbohydrate count and intake, exercise, blood glucose monitoring, insulin use for diabetes self-management, how insulin and foods affect blood glucose, eating healthy foods and using blood glucose to balance blood glucose. Children use decision making and problem solving to keep their blood glucose levels within the normal range. Children with diabetes play these games through computers, websites, mobile and wearable technologies. Those who play the game during the studies stated that the games are easy to use, enjoyable, fun, motivating, useful and should be recommended to others. In addition to these, it has been found that the level of knowledge of diabetes self-management in games increases and that stress levels decrease.

Conclusion

While the use of digital gaming in diabetic children is promising to develop diverse aspects of self-management, the majority of the work has been done in small samples, often assessing usability and satisfaction. In future studies, multidisciplinary collaboration should be undertaken to establish evidence-based studies demonstrating that the larger samples have positive effects on behaviors and clinical outcomes of digital games in diabetic children.

Key words: diabetic child, digital games, self-management,

PANEL 14

DİJİTAL OYUNLAR ALANINDA ULUSLARARASI VE ULUSAL DÜZENLEME VE POLİTİKALAR (OYUNLARIN DERECELENDİRMESİ)

Panel başkanları: Prof. Dr. Haşmet Gürçay

Yrd. Doç. Dr. Murat Yılmaz

"Oyunların Ulusal ve Uluslararası Araştırma Projelerindeki Yeri ve Önemi(NATA; TÜBİTAK ve AB çalışmalarımız)"

Panel sunumu – I

Merve Yıldız (*Mobil Oyunların Sınıflandırılmasına Yönelik Bir Öneri)*

Panel sunumu – II

Aras Şenyüz (*Oyunların Derecelendirilmesi ile İlgili Global Deneyimler ve Uygulama Önerileri)*

Panel Başkanının Sunumu

The place and importance of games in national and international project: Our NATO, TÜBİTAK AND EU Projects in a nutshell

Yrd. Doç. Dr. Murat YILMAZ

This talk emphasizes the place and importance of games in national and international software development projects. It starts with the theory of games from a scientific perspective and continues with potential usage of games in data collecting, training and education. In later part of this talk, I will show the usage of games in computer science projects. Firstly, I will share experiences for Erasmus+ (EU) project and discuss about the usage of game for improving skills of engineers. Secondly, I will argue about the benefits of games and show results of a TUBİTAK project for haptic and locomotion feedback system design. Thirdly, I will briefly summarize a NATO project regarding modular game architectures that aims to build a cloud-based modular service-on-demand game framework. In addition, I will share three graduation projects that my students conducted and ultimately awarded by TUBITAK 2209-B. Finally, I will show the impression of a Masters thesis study, i.e. a game-based learning project that was on the traditional media titled as "Educational Game-Based Learning Framework About Laws Of The Game For Football Referees.

A Suggestion for Classification of Mobile Games

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Abstract

Developments in science and technology have changed the concept of play, which has a cultural structure. In the process of this change, people have played face to face and usually on the street, left the place of software played in online platforms called digital games. Particularly progress in computer technology digital games designed for entertainment has been made a market. This has turned into an exciting adventure for digital gaming enthusiasts. The increase in computer ownership, the ability to store data, the speed of internet connection, the diversity of portable devices and social media have helped the digital game industry to grow. The widespread use of mobile devices has made it possible to reach digital games anytime, anywhere. It is stated that during the last 30 years, children have increased significantly in their time spent on computer games, while the primary and secondary school students have changed their weekly 4 to 13 hours of spending on digital games [1]. In a study had been stated that university students used smartphones, a mobile device commonly used today, for playing games the most [2]. In another study, % 72.5 of middle school students said that they played digital games for free-time activities. Same group emphasized that supporting both free and in-app purchases, offering online playing options and being able to play both on the mobile platform and on the computer are important features of digital games [3]. These findings show that mobile games are popular among today's children and young people, who are called digital natives.

From here in this research aimed to present a structural framework for the classification of games played on mobile platforms. For this purpose, the digital game taxonomies in the literature are analyzed descriptively. According to initial findings, there was no study on the classification of mobile games. In the studies, it has been seen that various approaches such as psychology and rehabilitation are comprehensive taxonomies as well as different types of games such as gambling games, business games, and serios games. The themes highlighted in these classifications are the graphical interface of the game, the progress of the game, the number of players, the duration of the game, the time the story passes, the prizes, the game type and the option to save the game. However, it is necessary to take into consideration for a mobile game that the online and offline playing status of the game, the physical interaction (touch, drag and drop, etc.) of the game, and the ability to reload and replay the game when the device is changed. Because these features are determinants of both the characteristics that should be games for game designers and the reasons for the players to prefer that

game. In addition, age restriction (PEGI, ESRB, etc.), which allows the evaluation of inappropriate content, is considered to be an important component in the classification of mobile games in terms of protection of children and young people who do not drop the phone by hand. For this reason, it is considered necessary to create a taxonomy specific to mobile games, and such a study is thought to contribute to the literature. It is expected, however, that the classification that will emerge at the end of the study will lead to mobile game developers, provide a framework for game evaluators and allow for different researches.

Keywords: mobile games, classification, taxonomy

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SÖZLÜ SUNUMLAR

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"Çevrimiçi Oyun Bağımlılığı İle Akran Zorbalığı Arasındaki İlişki"

S2 Ceyda Tuna Kırsaçlıoğlu*
"The Impact Of Digital Games And Visual Media On The Defecation Habits Of The Children"

S3 Cullas Ilarslan Eda*
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S6 Rüstem Mustafaoğlu*, Zeynal Yasacı
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S8 Arzu Yılmaz*, Zeynep Savaş Şen, Eren Yıldız, Bülent Alioğlu,
"Evaluating İnternet Addiction In Children With Psychological And Social Problems"

S9 Battal Göldağ*, Mehtap Gölgağ
" Ortaöğretim Öğrencilerinin Dijital Oyun Bağımlılık Durumları

S1- Relationship between Online Game Addiction and Peer Bullying

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ABSTRACT

Computer game addiction is a growing health problem all over the world. Today, many family homes have computers and internet, mobile phones and tablet computers. Because of this, children have the opportunity to access computer games more easily. The fact that computer games are playable via the internet can cause children to move away from face-to-face communication with friends, limit social skills and cause social anxiety. In addition, the majority of online games are violent, which creates other problems.

In this study, we aimed to investigate the relationship between online game addiction and peer bullying in the adolescent age group.

Materials and Methods: 400 adolescents between the ages of 12 and 18 who applied to the children's polyclinic for various reasons were included in the study. Twelve cases that did not return scales and eight cases with incomplete scales were excluded from the study group and a total of 380 cases were completed.

A questionnaire consisting of 22 questions about sociodemographic data, an online game addiction scale and peer bullying (adolescent form) were given to the cases. The online game addiction scale consists of 21 questions; the peer bullying scale consists of 53 questions evaluating the subgroups of physical bullying (15 questions), verbal bullying (7 questions), exclusion (6 questions), rumor (5 questions), harm to personal belongings (10 questions) and sexual bullying (10 questions). Individuals who bully others are referred to as bully and individuals who are victims of bullying are referred to as victim on the scale. In evaluating these scales; the minimum score is 21 and the maximum score is 105 for the online game addiction scale. For the peer bullying scale, possible scores are between minimum 53 and maximum 265 points. In both scales, as the score increases, game addiction and peer bullying increase.

Findings: The mean age of the study group was 17 years (12-18) and 63.7% (n = 242) was female. 89.5% of the adolescents went to school, and 61.3% stated that their school success was good. 97.4% (n = 370) of adolescents had their own cell phone and 86.3% (n = 328) had their own computer. Facebook membership was 55%, Instagram membership was 83.7% and twitter membership was 30.5%. 54.2% of the adolescents preferred to watch comedy movies, 28.7% preferred war movies and 17.1% liked to watch drama movies.

The study group's online game addiction scale mean score was 52.9 ± 18.2, the peer bullying-victim scale mean score was 148.8 ± 79.6, and the peer bullying-bullying scale score was 150 ± 83.1. 88.4% of the adolescents said they played online games. The average game addiction scale for girls was 50 ± 17.6 and 56.4 ± 18.5 for males and this score was statistically higher in males (p = 0.004). There was no significant difference between peer bullying scale point average and gender. There was no significant relationship between

online game addiction scale and peer bullying scale point average, school attendance and school achievement (p> 0.05). The average score of online game dependency score of war movie watching was higher than the average score of comedy and drama movie viewing (p = 0.001). There was no significant relationship between the mean score of the peer bullying scale and the type of film watched (p> 0.05).

No significant relationship was found between the average score of the online game addiction scale and the score average of the peer bullying-victim scale and the average score of the peer bullying-bullying scale (p = 0.727 r = 0.020, p = 0.500 r = 0.038)

Conclusion: Adolescents were found to have a high frequency of online gaming and males were found to have a higher frequency than females. In addition, the average score of the online gaming addiction scale was higher for violent movie viewers. There was no correlation between peer bullying and online game addiction. This is thought to be due to the fact that the group, which does not play online games, is small. More studies are needed in this area.

Key words: Adolescent, online game addiction, Peer Bullying

S2- The Impact Of Digital Games And Visual Media On The Defecation Habits Of The Children

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Abstract

Aim:

The children spend their spare times after school with digital games and video watching which effect their vital and social functions. In this study, the relationship between the characteristics of defecation, stool holding behavior and time spent on digital games and video watching were evaluated.

Material- methods:

A questionnaire form was composed for the following characteristics of the participants; age, gender, characteristics of defecation, time spent at school in a day, presence of computer, tablet, smart phone and/or internet at home, the total time spent on digital games and/or video watching at weekdays and weekends, whether they had eating habit or stool holding behavior while spending time on digital games and/or video watching, playing motion sensitive games, spending time on digital gaming after midnight, spending time on watching television at weekdays and weekends. The children 6-18 years of age were recruited to the study. Both the children and their parents were asked whether they would like to participate in a questionnaire that assessed the relationship between characteristics of defecation and the time that the children spend on digital gaming and video watching in our outpatient policlinic. 118 subjects who agreed to participate in the survey were included in the study. The children who had a previously known bowel disease such as chronic diarrhea or constipation, or any other bowel disease such as chronic inflammatory bowel disease were excluded from the study. The body weight, height, body mass index (BMI) and BMI z-scores were recorded. Stool shape and consistency were assessed according to the Bristol stool scale.

Results:

The mean age of the 118 children (71 females, 60.2%) was 12.3 ± 3.3 years. There was no difference for age in gender. Two children (1.7%) were malnutrated, 17 (14,4%) were overweight, 25 (21.2%) were obese according to BMI z- score. The frequency of defecation was once a day in 103 (87.2%) children, every other day in 13 (%11) children, once in 3 days in 2 (1.7%) children. The stool shape and consistency was normal in 108 (91.5%) children, hard and like pebbles in 9 (7.6%) children, soft and shapeless in 1 (0.8%) child. Fourty-nine (41.5%) children had stool holding behavior at least in one of the following conditions; at school (65%), digital gaming/video watching (51%), social gaming (8.1%). The 64% of the children who had stool holding behavior while digital gaming/video watching weren't stool holders at other times. There was no relation between stool frequency and stool holding behavior. Of the 118 children, 103 (87.3%) had computer/tablet, 111 (94%) had smartphone

at home. Out of 118 children, 103 (87.3%) were spending time on digital gaming and/or video watching at home, via computer/tablet and/or smartphone during the weekdays/weekend. Of the 103 children, 49 (47.5%) were spending time on digital gaming and/or video watching more than 2 hours on weekdays and 71 (68.9%), on weekends. The stool holding behavior wasn't related to the duration of digital gaming/video watching.

Conclusion:

Stool-holding behaviour is found to be common in children during digital game/video watching; 64% of children with stool-holding behaviour was holding their stools only during digital game/video watching. Considering the close relationship between stool-holding behavior and constipation, the impact of digital world is inevitable on the bowel habits.

Keywords: Digital gaming, defecation habit, stoolholding behaviour, children.

S3- Evaluation of The Relationship Between Digital Games Involving Violence and Negative Perception Effects on Adolescents

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ABSTRACT:

AIM:

Information and communication technologies represent as essential components of current daily life. Utilization of digital (video) games is steadily increasing especially amongst adolescents and young adults.Despite many positive effects of digital gaming, digital game addiction and digital games with violent content have been associated with many detrimental effects. Primary aim of this study is evaluation of the relationship between digital games involving violence and perception of violence on adolescents. Secondary aim is assigned as comparison of feeling of discomfort caused by photograph and digital game images involving violence.

METHODS: Adolescents, aged 15-18 years, who admitted to the pediatric outpatient clinic of Ankara University Children's Hospital,were requested to fill a survey instrument questioning sociodemographic characteristics, use of internet and digital gaming. Evaluation of violent content of digital games was based on a digital game content rating system called PEGI (Pan European Game Information). Participants were shown 6 digital game and 4 photograph images comprising violence; along with 3 non-violent digital game and 3 photograph images. They were asked to remark the degree of discomfort created by each image on themselves (1-5). Participants were divided into three groups: Group 1 (non-digital gamers), Group 2 (digital gamers), Group 3 (digital gamers including violent content). Comparison of the mean discomfort scores of violent and non-violent images and photos was made for each participant. Mean discomfort scores created by video game and photograph images involving violence were compared between groups. In addition, discomfort scores created by violent content were compared between digital game images and photographic images for each group.

RESULTS: A total of 53 adolescents with a mean age of 16.43 ± 1.42 years [31 (58.5%) female, 22 (41.5%) male)] were included to the preliminary data of this pilot study. 15 participants (28.3%) signified no digital gaming (Group 1). The number of participants declaring digital gaming not involving violence (Group 2) was 19 (35.8%) and 19 (35.8%) participants reported that they played dijital games involving violence (Group 3). When the whole group was taken into account, mean discomfort score was higher for violent images (5.67±1.89) when compared with non-violent images (2.40±0.54) ($p<0.001$). Mean discomfort score evoked by violent content indicated similar results for Group 1 and Group2 ($p=0.825$) while Group 2 indicated higher scores in comparison with Group 3 ($p<0.001$).

Mean discomfort score of Group 3 considering violent photos was higher than violent digital game images ($p<0.001$). Group 1 and Group 2 were noticed to have similar discomfort scores as regards of both photos ($p=0.646$) and digital game images involving violence ($p=0.427$). Moreover, Group 2 appeared to have higher discomfort scores for both violent photo ($p<0.001$) and digital game ($p<0.001$) images when compared with Group 3.

CONCLUSIONS: Preliminary data of this ongoing study indicate that digital games involving violent content may effect adolescents in terms of decreased sensitivity to violence perception. It must be considered that these effects may also relate to real life violence. We think that increasing the sample size of this pilot study will provide much more reliable data. We also believe that increasing number of well-designed preventive studies on this issue of concern should be conducted in the future.

Key words: adolescents,digital gaming, violent content, insensitivity to violence

S4- Digital World's Bringing Innovation to the Children with Autism Spectrum Disorder

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Abstract: Autism Spectrum Disorder (ASD) is a pervasive developmental disorder, which affects children with varyingdegrees of impairment in different areas. It is not only a problem of families effected by the autism, but also a social problem, as the number of children diagnosed with ASD increases. One of the main problems seen in this field is a limited access to a support system, especially with respect to early diagnosis, but also therapy. Currently, there has been research donein serious game for autism children. Developing digital games for autistic children includes studying the associated technology andpaying attention to aspects related to interaction with the game. Digital games for ASDinvolvesissues related to education, therapyfor communication, psychomotor treatment and social behaviorenhancement.

"Serious Games" is defined as digital games and tool with a schedule of educational base and beyond entertainment. For 40 years, the term serious game has commonly been used in many research. In 1968 Clark Abt'sdefinition of serious games is that they:"have an explicit and carefully thought-out educational aim and are not developed to be played primarily for fun. The technologies applied in serious games development for children with ASD includes 2D and 3D stand-alone and online computer game, virtual reality, mobile devices, touch screen computer and tabletop and interaction games. The serious games for the children with ASD are thought to beintended for twopurposes, first is for therapy and secondly for education(include learning and training). By combining other forms of conventional assessmentwith modern digital methods, video games can be used on aregular basis.It's mentioned that the idea of a child performing typical tablet-based activities like playing educational games, supplies a number of objective measurements of tablet and game use. Each action on the touch screen, tap, fling or swipe could be recorded and then analyzed. Furthermore a lot of data are available from the gyroscope and accelerometer when an autistic child holds a tablet and moves it. Children with ASD are usually more than enthusiasticto use tablets and digital games. According to the therapists'opinion, using a digital form of therapy increases motivation of a child to start and follow an educational activity.Parameters representing behavioral patterns might identify the level of selected skills trained during the therapy sessions. It's indicated that some characteristics based on the games' flow could reflect the ability to understand instructions, focus attention, perseverance, self-control. Others might indicate motor skills, e.g. smoothness and precision of the moves while dragging objects or drawing, the sense of balance and direction changes while flipping a tablet to roll a ball. Computer games applied to children with ASD should be flexible toadapt to the characteristics of each child and integrate the personal information of

the child's own world and the beliefs attached. In this review the lines ofdevelopment and research currently being conducted into digital games which purpose some form of benefit in the field of ASD will be discussed.

Key words: video game, digital play, child, autism spectrum disorder

S5- Screen exposure among children with language delay: Preliminary results

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Abstract

Introduction: echnological innovations have started to take an important place in our daily life. Numerous different factors can influence language development. The cognitive-motor-language development of children matureby physical and emotional contact with the caregiver or parent and by establishing social relations. Nowadays, children at all ages have both foreground and background television (TV) exposure than expected. However, it is also emphasized that in early childhood, they can learn less by watching television than by life experience. The aim of this study was to investigate the role of screen-TV exposure in children 18 -36 months of age identified with language delay during well child visits.

Method: The files of all children (n=187) between 18-months and 3-years of age who came to İstanbul Medical Faculty Social Pediatrics outpatient clinic between 1 January 2018 and 1 March 2018 were reviewed retrospectively. The health records of children with the diagnosis of language delay were investigated in detail. The age, the duration of exclusively breastfeeding time, and total breastfeeding time, the results of 9th, 12th, 15th, 18th, 24th month language developmental status, the results of The Social Communication Area Screening Test (SİATT) at 9th, 15th and 24th month and of Modified Check List of Autism in Toddlers (M-CHAT) at 18th and 24th month were evaluated. All children routinely underwent developmental evaluation during their visits at certain ages in the unit. Children identified to have isolated language delay were followed-up by the child development specialist. Family counselling about playing with children and avoiding screen exposure was given. All children were examined by a pediatrician..The study was conducted in accordance with Helsinki rules.

Results: Language delay was noted in the health records of 28 (14.7%) children. One child was diagnosed as Down Syndrome and excluded from the study. 77.7 % of the children identified with language delay had screen exposure. Of these children 14.8% had also background TV noise beside watching screen directly. All children had been followed-up for at least 6 months after family counselling. Of 27 children 13 had improvement. The final evaluation was not completed in 11 children. Three children did not show any improvement.

Conclusion: Our findings led us to think that language delay may be related with the screen exposure. At the evaluation of language delay detailed family history about media using should be questioned beside the differential diagnosis work-up for organic pathologies. Media diet of the family should be the part of the control during well-child visits.

S6- Technological Device Usage Habits and Participation in Physical Activity of School Age Children

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Abstract

Research has shown that children use technology devices at least as much as adult individuals.Evidence that the use of technological devices has altered physical activity is inadequate, but the level of participation in physical activity decreases as children increase sedentary behaviors.In literature, it is reported that 37% of children aged 4-11 years have a low level of active playing (football, basketball, etc.) and 65% have a high screening time (television, computer, tablet, etc.).In a study on children aged 6-17 years, it was determined that those who have low physical activity level and those who use long time technological devices are two times more likely to be obese. In our country, it is seen that there are a limited number of studies investigating the effects of school children on technological device usage habits and physical activity.For this reason, the purpose of our study was to examine the habits of technological device use by school age children (6-12 years) and their participation in physical activity.The study was conducted between January 15 - March 4, 2018 based on the views of 112 parents aged 6-12 years. A questionnaire prepared by the researchers was used to ask parents about the length of time their children spent on technological devices, their frequency, and their participation in physical activity.It was determined that the usage time of technological devices (television, computer, mobile phone, etc.) during the day was 164.3 ± 112.6 minutes.It was found that television viewing time 66.8 ± 57.5 minutes, 32.9 ± 47.6 minutes of telephone useage time, 29.9 ± 55.6 minutes of computer useage time, 27.5 ± 41.5 minutes of tablet usage time, the playing time with the game console was 6.1 ± 15.9 minutes.When the frequency of use of technological devices by the children is examined, the rate of more than one time in a day watching TVs is 48,2%, 33.0% of telephone users, 20.5% of tablet users and and 15.2% for computer users.When children's purposes of using technological devices were examined,76.2% of the television viewers were watching the TV for cartoon film, 51.5% of computer users for education reason and 48.3% of students play games, 50.1% of telephone users play games and 34.0% for communication, 71.6% of the users of tablets play games and 32.4% of them use tablets for education.When the participation of children participating in the study is examined in the physical activity,this age group is 42.8% of children meeting guidelines for participation in moderate physical activity for at least 5 days/1 hour or more per week in the guidelines for children,and 19.2% of children did not spend any time in parks or playgrounds outside school.However, when we examined the incidence of high intensity physical activities such as football and basketball, it was found that 29.8% of the children complied with the

guidelines stated in the guidelines and 16.1% of those who never participated in high intensity physical activities.The duration of participation of children in high intensity physical activity was 46.5 ± 39.1 minutes. According to the findings obtained during the study, it was seen that children aged 6-12 years used more than 2,5 hours of technological devices during the day.It was determined that the children spent the most time during the day and that the most frequently used technological devices were televisions and telephones, respectively.According to parents, children use television to watch cartoons, computer to education, phone and tablet to play games.It has been determined that six out of every ten children participating in the study do not comply with the recommendation that children in this age group should participate in moderate or severe physical activity for at least 5 days /1 hour or more per week as indicated in the guidelines. Parents should strive to ensure that children are able to participate in adequate physical activity for their healthy growth and development by making plans according to their age and level of development.

Key words: technological device usage, physical activity, television, child, mobile phone

S7- Examination of Relation Between High School Students' Online Game Addiction and Loneliness, Aggression, Depression Tendency

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Abstract: Playing online games is one of the most popular Internet activities of our time. With the widespread use of the Internet, interest in online games has also increased. While it is formerly mostly limited to game centers,online gaming habits can now be maintained at any time of day thanks to the smartphones. One of the reasons why interest in online games increased is online games of nowadays render the possibility of playing with multi-player. Apart from online game playing, this interest also proceeds on virtual social groups through social network activities such as sharing videos of games they play, discussion of them, learning new strategies. Although online games have cognitive, emotional, motivational and social benefits, they also lead to undesirable situations like game addiction. Therefore, it should be taken into account that online game addiction can bring about many physical, mental and psychological problems. In the researches carried out, online game addiction leads excessive anxiety, intolerance, hasty behavior, anger, mood swings, and behavioral changes. For this reason, determining the factors associated with online gaming addiction may be a guide to preventing addiction. The aim of this research is to examine the online game addiction status of high school students and to examine the relationship of online game addiction and feeling of loneliness, aggression and depression tendencies. The research was carried out according to the correlational research model and was conducted on the students of an Anatolian High School located in a province center in the Western Black Sea Region. Participants of this study consist of 276 high school students. Data of study;Online Game Addiction Scale that is to determine addiction status of high school students,the UCLA Loneliness Scale that is to determine students' loneliness status,BUSS-PERRY Aggression Scale that is to determine students' aggression tendencies,BECK Depression Scale that is to determine students' depression tendencies. It has been questioned whether the data obtained within the scope of the study can meet the normal assumptions; as a result it has been seen data is normally distributed. Findings from the researches are; there is a low positive significant correlation ($r = .26$; $p < .01$) between high school students' online game addiction and their feeling loneliness, there is a moderately positive significant correlation ($r = .44$; $p < .01$) between online game addiction and aggression tendencies, there is a low positive significant correlation ($r = .28$; $p < .01$) between online game addiction and depression tendencies. When the relations of other scales are examined; it has been seen, there is a moderately positive significant correlation between feeling loneliness and aggression tendencies ($r = .47$; $p < .01$), there is a low significant positive correlation between depressive tendencies and feelings of loneliness

(r=.15; p<.01), there is moderately positive significant relation between depression tendency and aggression tendency (r=.34; p<.01). According to findings obtained from the research, due to the increase of online gaming addiction it can be said, students' feeling loneliness increased a bit, their aggression behaviour increased and depression tendency an increased a bit. In reducing online game addiction; taking preventative measures can be taken to decrease online game playing addiction and to reduce addicted user's feelings of loneliness, their tendency to engage in depression and aggression tendencies. It was discussed what can be done in order to decrease the game addiction of the students in the direction of the findings obtained from the research. Various suggestions have been given to teachers, parents and policy makers.

Keywords: High school students, Online game addiction, Loneliness, Aggression, Depression

S8- Classification of internet addiction in children and examination of association with psychological and social problems

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Abstract:

In recent years, the internet has become the most important educational and entertainment tool for adolescents and adults. Accessing information via the Internet and communicating with other people around the world is easy and fast. However, loss of control of internet use can affect daily life, family relationships and emotional relationships negatively. Internet addiction or problematic internet use is defined as a type of behavioral addiction (1). Depression is the psychological disorder most commonly associated with internet addiction. However, the studies that have been conducted support a bilateral relationship between internet addiction and psychiatric symptoms (2).

The purpose of the study is to identify, categorize, and evaluate the coexistence of psychological and social problems with the addiction status of internet use in children.

S9- The Digital Game Addiction Status of the Students in High School Institutions

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The goal of the present research is to investigate the digital game addiction status of the students in high school institutions. The research was conducted in a relational screening model. The universe of the research is composed of high school students in nine, ten and eleventh grades of public schools in Yeşilyurt and Battalgazi, Malatya districts in the academic year of 2017-2018.

Layered sampling method was used in the selection of the sample. The sample of 342 students includes 152 students at general high school education institutions and 190 at vocational and technical high school education institutions.

In order to determine the digital game addictions of the students; Lemmens and his/her colleagues used the Game Addiction Scale translated into Turkish by Irmak and Erdoğan to determine the problematic digital gaming behaviors of adolescents aged between 12 and 18 and by validity and reliability studies. The scale is a seven-item short form of the GAS (Game Addiction Scale) -21, consisting of seven sub dimensions and a total of 21 items. To determine whether a person is addicted to a game, two monothetical and polythetical formats are used. According to the monothetical form, if the person gives 7 points to 3 (sometimes) and over, the risk is defined as high-risk game addict, if he/she gives a rating of at least 4 to 3 (sometimes) and over according to the polythetical form.

The hypothesis of normality for difference analysis was examined in all subgroups; the data were found to carry the normal distribution feature (skewness and kurtosis coefficients ± 1). For this reason, parametric tests were used in the analyzes. Data obtained in the study were analyzed using independent sample t-test, one-way analysis of variance (ANOVA). Significance level was taken as 0.05.

According to the newly obtained results in the research; 19.6% of the students who participated in the survey are digital game addicts.

There was no significant difference in the level of digital game addiction among the students according to the sex, the school they attended, the class they were learning, the games their families played and the time they controlled the playing time.

There was a significant difference in the level of digital game addiction among the students in terms of the degree of dependence of digital game relative to having computer, having fixed internet connection, having mobile phone, internet on mobile phone, mother education, parent education, family income situation and digital game playing time.

According to the possession of a computer; the average score of the digital game addiction of students who have a computer is higher than the average of students who do not have a computer.

According to the situation of having fixed internet connection; students with a fixed internet connection at home had a higher average score of digital game addiction than students who did not have a fixed internet connection.

According to the possession of mobile phone; students with mobile phones have higher average scores of digital game addiction than students who do not have a mobile phone.

According to the situation of internet in the mobile phone; the average scores of digital game addiction scores of students with internet on mobile phone were higher than those of non-internet students on mobile phone.

According to mother education status; the average score of the digital game addiction scores of the students whose mothers having high education level was higher than the students whose mothers having low education level.

According to father's educational status; the average scores of the digital game addiction scores of the students whose father having high education level were higher than those of the students whose father education level was low.

According to family income situation; the average scores of digital game addiction scores of the students having high family income were higher than those of family having low and middle students.

According to playing time; as the duration of playing increases, the average score of the students' digital game addiction scores also increases.

Keywords: Addiction, Digital Game, Digital Game Addiction, High School Education

S 10 – S 18

Oturum Başkanı: Yrd. Doç. Dr. Türkan Karakuş Yılmaz

S10 Fatih İlhan*, Erman Yükseltürk
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S11 Burcu Berikan*, Şahin Gökçearslan, Funda Erdoğdu
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S12 Şahin Gökçearslan*, Funda Erdoğdu, Burcu Berikan
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S13 Süleyman Eren Yürük*
"Etkileşimli kurgu oyunları için bir yazarlık aracı: Twine"

S14 İdris Göksu*, Engin Kursun, Alper Aslan, Yiğit Emrah Turgut, Önder Yıldırım
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S15 Hüsniye Biçer, Agah Tuğrul Korucu*
"Examination of Secondary School Students' Digital Game Dependencies and Responsibilities for Learning"

S17 Süleyman Eren Yürük*
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S18 Türkan Karakuş Yılmaz*, Asiye Kalkan
"Sanal dünyalarda oyunlaştırılmış rehberlik: Bilişsel ve duyuşsal çıktıların incelenmesi"

S10- Move to Learn: Designing and Developing Kinect-based Games in Education

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Kırıkkale University

Video games gets increasing attention and space in our daily lives as an interactive entertainment media. The research on the advantages and disadvantages of games are broadening as well. Especially cognitive and psychological effects of games are inspected in educational literature. However there are some new properties to games as new technologies emerge. Motion based games are one of them, requiring users to be physically active as well. Technologies such as Nintendo Wii, Microsoft Kinect, Sony PlayStation Move have made movement-based sports video games, and exergames highly popular. These developments might create new opportunities for improvements in some educational contexts. This study aims to point out that one of them is coding educational games. Particularly Kinect and Scratch was used for this purpose. The Kinect is a motion sensing input device developed by Microsoft for use with the Xbox 360 video games or a Windows computer. The second version is also produced and sold together with Xbox One, though version 1 was used for this study. Using a sensor, users can control and interact with the games through gestures and spoken commands. In education, Kinect may be used to enhance classroom interactions, to increase classroom participation, to improve teachers' ability to present and manipulate multimedia, and to create opportunities for interaction and discussion. Students can utilize the bodily information gathered by Kinect with software programs to create highly interactive multimedia works. One of those educational software is the widely used Scratch (http://scratch.mit.edu/). It is an educational programming language developed by MIT that simplifies programming so that kids can explore and learn the basics of software development. There are many extensions and improvements being made on Scratch. As one of them Kinect2Scratch was developed by Stephen Howell (http://howell.azurewebsites.net/kinect2scratch/). Kinect2Scratch allows kids to interact with software program they developed, without having to touch the screen, the keyboard or a mouse. Figure1. Kinect2Scratch running simultaneously with Scratch The goal of this study is to discuss how to design and develop Kinect-based games with Kinect2Scratch in education. Particularly mathematics subjects geometric shapes, and the four operations were selected for the content of the two games we developed, targeting second grade students. Geometric shapes game requires player to draw basic shapes like triange, square, circle etc. one by one. Player draws the shapes on the air with their right hand gestures, and moves the cursor on the screen to follow the paths and reach the corners of the shapes. Figure 2. Geometric shapes game. a) Following the path to reach the corner. b) Informing message of the properties of the shape after completing the drawing. Four operations game consists of five levels, addition, subtraction, multiplication, division, and mixed of the

four. Each level has nine questions with three different difficulty levels. Questions and their answer options are entirely randomly generated each time, considering the difficulty levels easy, moderate and hard, having three questions each. Player uses their right hand to reach towards the correct answer up in the air, and if right catches the balloon, thus increasing their score. Figure 3. Four Operations Game. a) Addition level moderate difficulty. b) Subtraction level hard difficulty. As a result, Kinect has great potential to enhance classroom interactions and to support student creativity. We will summarize the advantages of Kinect while using it in classroom environment in this study. Furthermore, we will mention the limitations of it and give some recommendations for teachers, such as, arranging large classroom space, considering calibration process and coping with pedagogical constraints.

S11- Programlama Eğitimi için Kullanılan Bir Oyunun İncelenmesi: Light-Bot

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Examining a game used for programming education: Light-Bot The Light-Bot is a web-based game designed to teach people from different age groups programming. Besides increasing interest to programming education in the world, our courses are inadequate to teach programming in Turkey. For this reason, in Turkey, it is becoming crucial having activities that can develop programming skills outside of the school. Therefore, it can be said that digital games that contribute to the development of programming skills close a big gap in Turkey. There are many digital games designed for programming education. Some of these games are text-based and are not suitable for used by illiterate children. Light-Bot is an icon-based game, designed also for used by students who are illiterate. Although game designers have included educational objectives in the promotion of games, it is important to evaluate such games in pedagogical terms by researchers before using them in lessons. The aim of the study is to evaluate the educational outcomes of game by collecting data from experts based on their classroom experiences and test students in terms of predefined outcomes. Three teachers should be teaching programming and using the game in their own courses and two academicians should be doing researches in the field of programming education are involved in study. In interviews with teachers, the educational outputs of the game and questions about the emotional status of the students were included. In the questions under the theme called Educational Outputs, programming concepts and skills are included. The research questions related to students' emotional states; observations of teachers related to the motivation of the students that taken in consideration of the indicators such as difficulty, excitement, and embarrassment. In interviews with academicians, it was asked to critically evaluate the game whether the educational outputs specified by the teachers overlap with the mechanism of the game. Finally, with the test includes open-ended questions are asked to the students played this game before is applied to evaluate the concepts and skills that experts think the game teaches. The collected data were analyzed with descriptive statistical methods and content analysis method. As a result of the data analysis; under the theme of educational outputs, programming concepts, skills and the thresholds for skills and concepts are explored. For educational objectives; function and loop concepts have come to the forefront as powerful aspects of the game. Whereas, it is discovered that the data types and structures that have an important place in programming have not been taught in the game. In addition to concepts, problem solving, abstraction, pattern recognition, modular thinking and debugging have become the forefront codes for programming skills. The data obtained from the students by asking them to define the concept of function support the findings obtained from the experts. Students use modular thinking skills while explaining the benefits of using functions. In addition to

this, it was discovered that the students divide the problem into small pieces and discover the patterns while forming a function, and this finding supported the observations of experts. In the collected data related to the emotional state of the students; the code of not having any holistic context in the games came to the forefront as negative code in terms of persistence of motivation. At this point, it is suggested that the game should have a holistic context. Moreover, the game have been criticized for not being able to award students who complete their tasks with much fewer steps and more efficiency. The game just gives the maximum number of steps that can be used in problem. It is suggested to improve the design of game by adding rewards considering the efficiency. In the study, as well as expert opinions and data collected from the students, descriptive statistics related to variables such as level of fun, relevance to programming, level of difficulty were given as percentages. To sum up, it is seen that Light-Bot is beneficial to create mental models that make students ready to programming and teaches some programming concepts and skills. As a result of the study, it was discovered that this game does not support data types and constructs concepts that are important in programming. In this regard, it is thought that this study might be beneficial for the practitioners and researchers who plan to use that kind of games in the programming education to strengthen the weak ways of the games.

S12- Minecraft education edition: Learning community analysis

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Games help children integrate their inner world with the outer social world. Games that change children's physical, social and psychological development by amusing them teach them to tolerate and respect other people within the group (Başal, 2007). Games are not only played by children. Mankind has played different games in different geographies and cultures and sometimes different and sometimes similar games since ancient times (Kukul, 2013). Games make us experience a variety of developmental processes such as facts about situations, skills, decision making processes, behavioral change, interpretation, rules, processes, creativity, language development, observation and communication (Prensky, 2001). The first digital computer game was introduced with the name Spacewar in 1961. This game refers to a learning experience with all its features. (Morreim, 1991). With the widespread use of personal computers in the 1980s, digital games became available to more people. At that time games conduced to the sales of millions of computers. Digital games offer a variety of experiences to individuals. Digital games offer simultaneous response and deep learning experiences for people to recreate themselves in new worlds (Gee, 2003). Many digital games have been presented to users. The Nintendo company has announced that the popular and old Mario game has sold 240 million units worldwide (Plunkett, 2010).

Minecraft has reached 58 million users (Minecraft, 2018). In a study conducted with secondary and high school students in Turkey, Minecraft has been on the fifth rank among 21 game types that are played the most (Taylan, Kara, & Durğun, 2017). Various studies have been conducted concerning that platform which has reached so many users and also has an educational aspect (Short, 2012; Schifter and Cipollone, 2013; Lane and Yi, 2018; Tessler, Givony, Zahavy, Mankowitz and Mannor, 2017)

Games and training tend to be mentioned together on many platforms. Microsoft conducts studies to participate in educational projects and has put signature to a remarkable project. Having purchased all the product rights from the Minecraft producer Mojang since 2014; Microsoft aims to offer a training version of the product in 41 countries in 11 different languages (Tatari, 2016). What makes Minecraft popular is that the game combines the components of aesthetics, sensibility, mechanics, continuous development and creativity in a fascinating way. Minecraft is considered not only a game, but also a platform developed for new meaningful experiences. (Duncan, 2011).

The Minecraft training edition offers a platform promoting the development of 21st century skills for learning environments. Teachers are able to share the lessons they develop with

their stakeholders in learning communities. By this way, they share experiences about learning objectives regarding courses, student activities and performance expectations in learning communities. There are many experiences on the platform regarding a number of lessons from mathematics to chemistry and computer science. The Minecraft learning community allows teachers to share. Wilson and Ryder (1998) define a group that supports each other on learning platforms as a "learning community". Teachers help each other in solving a problem by participating in the community (Palloff and Pratt, 1999). It creates an ideal sharing and learning environment for groups working away and an ever-developing platform. On the other hand, it is believed that a profound analysis of views in learning communities will contribute to educational outputs.

The objective of this study is to analyze the posts the learning community on the Minecraft training platform profoundly. According to that objective, an analysis will be carried out on the basis of qualitative data to reveal the scope of teachers' experiences. The data acquired will be analyzed with descriptive analysis method, which is among qualitative data analysis methods (Yıldırım and Şimşek, 2000). The post sent by teachers in the community called "general" are more than 200 and on various subjects. It is believed that analyses to be conducted regarding the posts of a real and non-formal learning and sharing community will guide teachers and researchers working on this subject.

Keywords: Minecraft, learning community, community posts

S13- An Authoring Tool for Interactive Fiction Games: Twine

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The intense interest in digital games by the new generation has driven many sectors into action by triggering the development of many professional games in a wide variety of genres. Games have attracted great attention of not only children but also educational researches with the pedagogical potential they own. Just like the transformation of games and pedagogical insights, academic studies on gaming is constantly gaining new dimensions. At this point, of course, games have witnessed the development processes of technology and have undergone various transformations. Games are gaining ever-increasing user control from two-dimensional graphics-based game boys to multi-player online mobile games. This has allowed the interaction dimension to become increasingly important in game scenarios. The elements of interaction are increasingly attracted to the mechanical framework of today's digital games in order to provide a meaningful experience. Through the history of digital games, these two elements complement and enhance each other more and more each day. In the process of the search for meaning in the contemporary age, interactive fictions have been rediscovered and put into practice by way of practical experience of well-known fiction authors. Interactive digital narratives cover a growing area of computing and artificial intelligence, housing a large number of artistic and gaming assets. Interactive fictions can provide the discovery of characters, plots and contexts, through adventure games, historical simulations, engaging stories, or experimental digital arts. In a highly interactive digital narrative, it is possible for users to select their own story in a large fiction pool by creating various decision combinations with dynamic tasks and background scenarios. This genre of game, which is called "Choose your own adventure", first appeared on the market in the 1980s as book chapters, and the latter was adapted to digital games. One of the criticisms of the rejection of video games as an art form is the lack of diversity of experiences. But this criticism can be answered with the different narrative game scenarios as the "choose your own adventure" game genre developed and accepted. While there are many games developed by professional teams in this genre, there are also other types of authoring tools that allow game development without requiring programming knowledge on the professional level. There are some tools that allow amateur users to independently produce digital games and to publish their work on the internet at very low cost or for free. Some of these tools are two-dimensional and three-dimensional graphics-based software, while others are only text-based and scenario-driven. Among these tools, Twine (twinery.org) is frequently used and stands out among its counterparts. The purpose of this research is to examine Twine, which makes it possible to design games in the form of choose your own adventure. In the study document analysis was used within the qualitative approach. It is an open source, HTML-based free authoring tool developed by Chris Klimas. As well as Windows, MacOS and Linux packages, it is also accessible online via web browsers.

it is an environment that can be used by teachers at every stage from elementary school to university. In addition to the development of skills such as decision making, creative writing and problem-solving, it also allows for simulating historical facts. This structure, which adopts a non-linear instructional design, can include activities based on discovery and problem-solving which are expected in contemporary multimedia. As a result, when used as a game designing tool by students, they can be used for skills such as narrative editing, algorithmic thinking and creative writing; and when it is used as an instructional game, it contributes to the development of skills such as selection, decision making, discovery and problem-solving.

Key words: Authoring tools, Choose your own adventure, Interactive games, Twine

S14- Examination of Most Played Mobile Games in terms of Digital Skills and Risks

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Along with increased mobile device usage, demand for mobile games is also increasing. The intensive use of mobile games also requires guidance in this sense. Although the content rating standards such as Entertainment Software Rating Board (ESRB) and Pan European Game Information (PEGI) guide the individual in order to play appropriate mobile games, analyzing games with scientific methods will make this guidance process more effective. It is important that the existing rating standards are insufficient when cultural factors are taken into account and therefore the relevant games should be examined not only in terms of the risks involved but also in terms of the skills they have offered. In this context, the aim of this research is to examine the most played mobile games in terms of digital skills and risks. To do this, the most played games in play store which are Clash of Clans, Subway Surfers, Clash Royale, Candy Crush Saga, My Talking Tom, 8 Ball Pool, Shadow Fight 2, Pou, Hay Day, Hill Climb Racing, Temple Run 2, Farm Heroes Saga, Sniper 3D Assassin®, Dragon City, Candy Crush Soda Saga, Traffic Rider, Hungry Shark Evolution, Angry Birds, Real Racing 3 and Traffic Racer games were examined by the researchers. The probable skills that these games can provide are examined in the dimension of technical, information management, communication, collaboration, creativity, critical thinking, problem solving, ethical awareness, cultural awareness, flexibility, self-direction and lifelong learning. In addition to the skills offered by these games, the risks they may expose like violence, crude language, sexual content, gambling, drug and tobacco use, discrimination, ideological elements and theft are also examined. In this research, document analysis were used. The researchers examined games by actively playing them and watching videos related with those games. A total of 20 games were examined and the probable skills and risks for each game were evaluated as none (0), low (1), medium (2) and high (3) for each game. In addition to this, the presence of the skills and risks were justified by giving example screens from the games. The findings of this study revealed that the games examined have the potential to provide its players problem solving (*f*=12), critical thinking (*f*=11), lifelong learning (*f*=8), technical (*f*=7), self-direction (*f*=7), cultural awareness (*f*=6), information management (*f*=6), collaboration (*f*=5), creativity (*f*=4), communication (*f*=2) and ethical awareness (*f*=2). However, none of the games reviewed provide flexibility which is the skills to adapt

one's thinking, attitude or behavior to changing ICT environments. On the other hand, violence, fighting, weapons or blood elements were found in the 8 examined games. It has been found that almost all the games reviewed (*f* = 17) encourage the player to spend real money. In some games (*f* = 4), ideological elements were encountered. Interestingly, it has been seen that one of the games examined is trying to normalize theft. On the other side, it has been found that none of the games examined exposed players to risks such as crude language, sexual content, sexual dialogue, tobacco use, drug use, discrimination and racism in the games. However, in spite of the majority of the games reviewed have PEGI3 or PEGI7 degree, the player is encouraged to pay real money and games have risks are a matter to be emphasized. It is thought that the results obtained in this study are likely to contribute to both children and parents while choosing appropriate mobile games. The constantly evolving mobile gaming industry is driving the development of existing games as well as the emergence of new mobile games. Hence, there is a need for mechanisms that allow mobile games to be examined in the context of risks and skills in a way that is sensitive to cultural values.

S15- Examination of Secondary School Students' Digital Game Dependencies and Responsibilities for Learning

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The games that have been played throughout the human history, for various purposes such as education, development, socialization and entertainment have seen changes after computers and the Internet came into our lives. Traditional games played in parks and on the streets have left their place to digital and virtual ones. The games played in these new environments have both positive and negative impacts on children including their responsibilities, academic success, communication skills and interaction with the social environment. The children interest in digital games, excessive leisure time and uncontrolled use etc, have been resulted in a form of addiction. Focusing on the secondary school children, the aim of this study is to examine the relationship between their levels of dependency on digital games and their responsibilities towards learning. The study was conducted with the participation of 320 students, in 5th, 6th, 7th and 8th grades, who are studying in different middle schools in the province of Konya in the academic year of 2017-2018. Quantitative research method was adopted in the research and screening design was used. The demographic data form prepared by the researchers was used to collect information such as gender, age, class, education level of the family, the Internet and computer usage time. In addition to this, 'Digital Game Addiction Scale for Children' developed by Hazar and Hazar (2017) and 'The Scale of Responsibility Towards Learning' developed by Yakar and Saracaloglu (2017) were also put into use in the research. SPSS 21.0 program was used in analysis of data. The findings of this study suggest that there is a meaningful relationship between digital gaming dependency of the secondary school children and their learning responsibilities.

Keywords: Digital Game Addiction, Learning Responsibilities, Secondary School Students.

S17- A Game-Based Approach to History Education: Mission US

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Constructivist learning philosophy is recognized as the most contemporary educational concept of the 21st century. It is the fundamental theme of this philosophy that learners take an active role in the education process, experiencing real-life problems and delivering solutions. Due to these characteristics of constructivism, history education has some disadvantages in implementing the constructivist approach due to the inherent nature of past events and experiences. But with the developing media tools and environments, it has become possible to transfer almost any kind of educational message to the recipient. The increasing level of human-computer interaction as a result of the integration of the technological advances of pedagogical power, which multimedia possesses, has made it possible to create many scenarios-based teaching environments. Digital games, as the strongest representatives of this transformation, are strengthening their place in the 21st century especially among the young generation day by day. Rather than sequential, prescriptive learning experiences, digital games have also gained features and interactions based on uncertainty, non-linearity, discovery and problem-solving. The games that take the user into a story, make them to think, decide and choose through interactions and determine the results according to the selections thus make it possible to design constructive teaching environments in history education. While today's traditional multi-media witness these features turning into contemporary multi-media, there is a strong potential for history education. With this great power of pedagogical methods combined with technology, many instructional designs based on real-life problem for history education have become possible. It is said that traditional approaches to teaching are following a vicious course when considering students' inadequacies on the subject of history consciousness. So an investigation found that the adequacy of history ratio was about 17% among the students. However, history education hosts societies' achievements such as developing national consciousness, historical empathy, critical and ethical thinking. The possibilities offered by digital media for the implementation of the constructivist approach and the multimedia-based instructional designs developed on this basis reveal the necessity to develop materials that can respond to the current infertility of history education. The purpose of this study is to examine the Mission US (www.mission-us.org) game project, which was developed by an American gaming company for the purpose of recruiting important events in American history to secondary and high school students. Mission US is defined as a serious game project that is educational beyond purely fun. The project was first presented with 1770 US independence, 1848 anti-slavery rebellion against the slavery, and three different games involving 1866 Indians-US relations, followed by the 1907 migrant movement and the 1929 economic storm. The games are designed with a very rich planned scenario and the experience and decisions of a user-controlled character are directed. In the

study document analysis was used within the qualitative approach. The examination of the game is limited with the "For Crown or Colony?" 1770 American war of independence among the five games under the Mission US project. The game is about a character of Nat, a 14-year-old, who starts to work as an apprentice in a printing house, defines the environment in which historical events occur, decides on the tasks assigned to him, and determines the fate of himself and society under those circumstances. According to the findings, it was seen that the game design was frequently given to learning activities based on constructivist, cognitive and behavioral learning theories, and the players experienced a rich and powerful learning experience. The study has been concluded by giving preliminary results of the relevant studies and various suggestions on the history teaching program applied in the Turkish education system.

Key Words: Constructivism, Interactive games, Choose your own adventure, History education

S18- Gamified Guidance in Virtual Worlds: Examination of Cognitive and Affective Outcomes

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Virtual worlds are three-dimensional virtual environments that are used over the Internet, where the user is represented by an avatar. In these environments, real world-like areas can be designed with 3D objects. These environments are synchronous environments, and users represented by avatars can see each other, communicate and collaborate. Many multimedia items such as 2-D pictures, videos, presentations can also be used in these environments. Users interact with both these materials and 3D objects. Cooperative, experiential, inquisitive, and exploratory learning opportunities based on constructivist learning seem to be frequently used in these environments where many technologies coexist.

Virtual worlds are flexible environments, where users can easily navigate and discover the environment. It is important to provide a well guidance in the design of educational environments to prevent this flexibility from missing learning elements. This guidance may be in the form of directing the users by different objects as well as by the teacher existing in the environment. This guideline must be well planned, especially to ensure that younger learners focus on learning elements. In this study, the effects of guidance designed in two different ways on students' cognitive (knowledge level) and affective (flow and attitude) outcomes were examined. The developed environment enables the students to learn the characteristics of short track, which is one of winter sports, equipments, necessary clothes and basic rules while at the same time practicing on a virtual track. For the study, two different environments were designed by using the Second Life platform. In the environment where guidance is designed with a flexible approach, the students were not spatially restricted, but the way to follow was shown using many guidance elements. In the gamified guidance environment, 6 different game mechanics and some temporal and spatial restrictions were used.

134 students, 73 girls and 61 boys, participated in the study from a middle school in Erzurum province. One week before the practice, the students were tested for short track sport knowledge. The students were played and divided into groups of equal size for flexible and gamified guidance, and a seminar on virtual environment was given to students first. Later, the students experienced the virtual environment for 90 minutes. After the implementation, short track knowledge test and additionally flow and attitude scales were applied. In addition, structured interviews were conducted with 72 students and it was aimed to reveal the outcomes such as perceived flow, attitude and learning.

As a result of the analysis, it was found that in the gamified guidance group, the attitude towards the learning of winter sports in virtual worlds and the flow level were significantly

higher than the flexible guidance group. In addition, the interview results showed that similar learning objects were more engaging and instructive in the gamified guidance group.

It is believed that the environment in which the gamified guidance is used gives a more effective learning experience because it appeals to the auditory organ with audiovisual elements, makes the learning more interesting with different interaction-communication possibilities and attracts the individual into the environment with the game elements it contains. The limitation of the user environment in the gamified guidance, the necessity for the user to obtain the necessary information to progress in the environment and perform certain tasks, and thus the more interaction with the learning materials, strengthens the learning experience. On the other hand, the transformation of the virtual world into games has reduced communication and socialization among students. For this reason, the virtual world's flexibility and the use of different game mechanics and dynamics are suggested in the design of game-like learning environments in virtual worlds.

S19 – S27

Oturum Başkanı: Ali Yazıcı, MSc

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S27 Elif Ünver Korğalı*
"Use Of Information Communication Technology By Children Aged 3-7 Years And The Factors Affecting İt "

S19 - Parents Knowledge for Their Children's Attitudes About Digital Games with I-Pad or Tablet

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ABSTRACT

Introduction: In parallel with the development of digital technologies in recent years there has been a serious increase in the frequency of use of I-pads and / or tablets, and these digital devices have been used by children since early childhood period. These devices might be used for educational purposes, however commonly used for children's leisure time, during mealtime, watching videos or movies, and playing digital games. After widespread use of these new digital media tools, it has become important for parents to determine the knowledge about these new technologies and monitoring/supervision of their children at home. The aim of this study was to evaluate parent's knowledge about the children's preference for playing digital games and daily duration of playing digital games among families who have I-pad or tablet at home.

Method: In this study, a survey was conducted with the aim of assessing parents' level of knowledge about their children's digital games use with I-pad or tablet. If the parents have more than one child playing the game on the I-pad or tablet, requested to fill the form for the youngest child. This questionnaire includes items about parents' age, education levels, number of children, percentage of children playing digital games, digital game preferences, the duration of playing, presence of purchasing of digital game. This questionnaire has been performed via Survey Monkey. Statistical analysis has been performed with SPSS package program.

Results: 243 parents (168 mothers, 75 fathers), had an I-pad or tablet at home, have been participated to this study. 125 out of the participants had one child, 109 had two children and nine had three children. 74% of the participants (n = 180) stated that their children played digital games on the I-pad or tablet. The age range of children playing games varies from 1 to 17 years (median 9 years). Children spent median 2 hours (between 30 minutes and 5 hours) with the I-pad or tablet for playing digital games. 54.4% of the parents did not know the name/brand or content of the game played by their children, 56.1% did not monitorize/supervise their children during playing the games. 14.4% of the parents stated that the games played by their children were educational purpose and they defined as "useful" for their children. 68% of the parent's who have children below seven years old thought that their children playes these games for educational purposes. Digital game content varies according to children's age groups. Majority of the parents don't know the name of the game and noticed as car racing, strategy games, building games, etc. In the age group of above 7 years old, majority of the children prefer to play digital games with

multiplayer choice. Young children were usually played the games as puzzles, pet feeding or baby dressing. We found that 64% of the parents paid for digital games, at least one time.

Discussion: In our study, it was seen that most of the children who had I-pad or tablet at home played digital games and majority of the parents did not have sufficient information about the names and/ or contents of these games. Children start to play digital games at early childhood period, and parent's thought that these digital games might be useful for education and development of their children. Two years ago, regarding to our previous report about the new media technologies in children, we noticed that I-pad and / or tablets were used as a digital pacifier especially for young children, and now, we observed that children play these games at outside the control of their parents. Parents were not adequately informed about the risks about digital games through the internet and social media, approved tools and guides are needed for parents about digital games I-pad or tablet.

Key words: digital games, children, family

S20- Investigation of Digital Gaming Addiction and Loneliness of University Students

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Rapid progress of technology, urbanization and inadequacy of playgrounds have changed children's playing and socializing habits. Over time, traditional games were replaced by computer games and digital games played via the Internet. The most important effect of digital games is psychological and physiological dependence. Digital game dependency; social or emotional problems, excessive use of computer or digital games by persons, and inability to control themselves. Digital gaming addiction is a negative result. The investigations carried out in this area are based on two basic views. The first is that games can make positive contributions to the mental development of children and young people at certain points; the second is that the desire to play an uncontrollable game is causing social problems and addiction. One out of every five university students carry a risk of game addiction in the research conducted on the subject. 1 out of every 3 students spend hours at the game for hours, at least 1 hour each day. Among the reasons for this dependence, university students who are trying to get used to a new atmosphere are thought to have loneliness lives. The difference between the social relationship of the loneliness individual and the social relation they desire is the unpleasant feeling that is experienced. When the factors affecting loneliness are examined, some problems arising from family, home or school environment are striking. Among these are moving away from home, moving away from a close friend, disappearing of an owned object, disintegration of the family, the death of an important person or an animal being looked after at home, are the domestic environment factors affecting the loneliness of children; personal characteristics such as school change, rejection by close friends, difficulty in acquiring new friends, lack of social skills or shyness, anxiety and low self esteem are the factors that cause feelings of loneliness in the school environment. Particularly in young people who come away from their families, there are many problems in the students who become members of a group, own a profession and direct the future, adapt to a new school or foreign environment. It is extremely important to establish satisfactory relationships in this period. In this context, this research which aims to determine the relation between digital game addiction and loneliness levels is thought to contribute positively to the elimination of the risks of digital dependency emerging in recent years.

Research Method: This study was conducted according to the relational screening model. "Research approaches aimed at describing screening patterns in the past or as they are currently existing. Relational search models are research models that aim to determine the extent and extent of interchange between two or more variables ". The research group of the researchers formed 850 university students who continue to the Faculty of Health Sciences at the Health Sciences University in Istanbul. Work has begun by taking necessary

permissions about the research. Personal Information Form, Digital Dependency Scale and UCLA Loneliness Scale were used as data collection tools in the study. The data obtained in the study were analyzed using the SPSS 22 statistical package program. According to the results of the research, it was determined that there is a positive relationship between digital dependence and loneliness levels.

Key words: digital game, addiction, loneliness

S22- The Role of Family Factor in Digital Game Addiction Among Children

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Abstract: We are living in an era of rapid transformation in technology due to continuous progress of computer and internet technologies. New media and new communication technologies have emphasized the phenomena of speed and digitalization has had a deep impact on almost every field. Today, digital games, as the extensions of digital technology, effect people of all ages and segments and different games with different qualities are commonly used. Along with the effects of globalization, digital games caused changes in life styles, standards of living and cultural activities. This has led to the birth of a new technological order; and at the same time, digital games provided a basis for the formation of a uniform culture. Game consoles, smart phones and games on the social media platforms influence the personal development of children deeply and are capable of causing changes in their perspective on life.

In addition to this, the economic structure of digital games should also be considered. There is a rapid growth in the digital games sector and the number of users of these games increased accordingly. The real progress began in the 1980's and by the 2000's, the impact of the sector have been felt profoundly on internet and virtual platforms. There is a linear supply-demand relationship in the digital game sector. This demand varies depending on the conditions. As they serve as means of recreation, escapism, entertainment and relaxation, the use of digital games increases continuously. There are a many reasons underneath this rapid increase. The overuse of digital games in an uncontrolled manner is called "digital game addiction". Digital game addiction can be defined as playing games on game consoles, computers, smartphones, tablets etc. for long periods of time, to ignore daily tasks, to isolate oneself from society, or to be unable to fulfill ones duties and responsibilities.) Today, digital game addiction is seen as an ever increasing psychological issue. It is a threat especially to children as it effects the socialization process of children negatively. In the development of children, families are inarguably the most important factor. Family is the smallest unit of society. Children receive their first education from the family and are prepared for life within this family environment. Hence, family plays a big role in the life of a child. Therefore, this study aims to determine the role and effects of families in the use of digital games by children. As the method of the study the in-depth interview technique was used. Five different, open-ended questions were asked to thirty families and the answers were used to determine the situation. In addition to that, a detailed research was conducted on the subject matter and relevant discussions were included in the study. Families living in the Şişli District of Istanbul participated in the study and these families were selected through random sampling. The results of the study showed that family and environmental

factors lead children to digital game addiction. Another important result was that families had a low level of knowledge about their children's digital game addiction. It was determined that not only children, but also their families were interested in digital games and they played games particularly on their smartphones. It is a notable conclusion that children play digital games mostly for entertainment purposes and compromise their daily lives and studies for this reason. Digital game addiction not only effects the social life of children, but also directly effects their physical and emotional environment. Creating awareness in families, spending more time with children and receiving psychological help are among the steps that can be taken against digital game addiction. In addition to these, increasing the level of digital media literacy within society is another suggestion that can be made in order to prevent digital game addiction.

Keywords: Child, Digital Game, Addiction, Family, Digital Media Literacy

S23- Analysis of Game Types, Game Addiction Played by Secondary and High School Students Playing Digital Games

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Introduction

Games are very important activities for child development. Especially in K-12, it can be said that plays play a vital role in children's sociocultural, mental, psychological and biological development. Nowadays, games have been moved from digital media to physical media. Thanks to its constantly evolving features, the number of users of digital games is increasing day by day. The virtual world presented in digital gaming environments has become the second life of children. This intensive use leads to game addictions. In addition, users who have access to digital games at all times are in constant interaction with other users. At this point, determining the gaming behavior of children and the level of digital game addiction will provide important data at the point of preventing children's addiction on digital games.

Purpose

The purpose of this research is to determine the gaming behaviors of middle school and high school students playing digital games and to play digital games (educational games, sports, simulation, strategy, online multi-user, battle / addiction behaviors. For this purpose, the following questions were asked:

1. What are the levels of digital game addiction for students?
2. What is the most popular type of digital game?
3. Does the duration of daily digital gaming affect the level of gaming addiction?
4. Will the type of digital game played most often affect the level of game addiction?

Method

The present study was designed with relational screening method. A personal information form and a digital gaming addiction scale were used to determine participant gaming habits, the types of games they play, and their digital gaming addiction. In line with the aim of the study, in the spring semester of 2017-2018, a secandory school attached to the Ministry of National Education and 293 students studying in various high schools were implemented. The study group for the application was selected from the students who play digital games. In this study, personal information form and online game addiction scale were used. In the analysis of the quantitative data obtained in the study, t test and one way ANOVA were used. Analysis of the data was made using the SPSS program.

Findings

When the game addiction behaviors were examined, it was found that the participant showed low game addiction ($X_{secondary}$ = 2.38, $X_{highschool}$= 2.29) according to the scores obtained from the general scale. Participants were found to exhibit moderate addictive behaviors at a low level of success ($X_{secondary}$=1.75, $X_{highschool}$=1.84) and economic gain

($X_{secondary}$=1.87, $X_{highschool}$=1.84) and at moderate level of success ($X_{secondary}$=3.36; $X_{highschool}$=3.11) when they were analyzed from the perspective of sub-dimensions.

Participants of secondary school were most likely to prefer sports games (football, car racing, etc.) (f = 24) and battle / adventure games (f = 21). Participants of high school were most likely to prefer battle / adventure games (f=55), sports games (football, car racing, etc.) (f = 40) and information / strategy games (f = 40).

According to the one-way ANOVA comparison of the level of game addiction according to the duration of the daily play, the duration of playing has a significant effect on the game addiction ($F(2, 290) = 46.98$, $p < .01$). The Scheffe test was applied to determine which groups the resulting effect is between, and it was determined that the gaming addiction level was significantly higher than the gaming group less than 1 hour per day for 1-3 hours and 4-6 hours per day. The Scheffe test was applied to determine which groups the resulting effect is between, and it was determined that as the duration of daily play increases, the level of gaming addiction is significantly increased (less than 1 hours >1-3 and 4-6 hours per day, 1-3 hours per day > 4-6 hours per day).

When the level of game addiction was examined according to the most frequently played game type, it was found that the students who played "multi-user games" had a higher level of addictive behavior than the others. On the contrary, the participants who played the games in the "educational games" category had a lower level of game addiction than the participants who preferred the other game categories. A one-way ANOVA was used to determine whether the most common type of game play influenced the level of gaming addiction. According to ANOVA result, there was a significant difference between the level of gaming addiction according to the preferred game type ($F(5,287) = 9.30$, $p < .05$). The Scheffe test was conducted to determine which groups the differences between the groups were between, and it was found that groups that prefer multi-user games, battle / adventure games and sports games have higher level of game addiction than those who play educational games. Also, it was found that the groups that prefer multi-user games and battle / adventure games have higher level of game addiction than those who play information / strategy games.

Conclusion

The conclusions of this study, in which the effects of secondary and high school students' gaming preferences and behaviors on gaming addiction levels are examined, can be summarized as follows:

- Given the participants' level of gaming addiction, it was determined that high and secondary school students participating in the study had low level of gaming addiction behavior. On the other hand, the achievement subscale of the scale was reached, and the result that high and seconday school students exhibited moderate game addiction.
- According to the results of the study, it was determined that high school students preferred the most battle / adventure games and secondary school students preferred the most sports and battle / adventure games.

- As the amount of time devoted to daily digital games increases, the level of game addiction has increased.
- According to the findings of the study, participants who prefer multi-user games have higher levels of game addiction than other participants. However, it was determined that participants who preferred educational games had lower levels of game addiction than the other participants.
- It is concluded that groups that prefer multi-user , battle/ adventure and sports games have higher level of game addiction than those who play educational games. Also, it is determined that the groups that prefer multi-user and battle/ adventure games have higher level of game addiction than those who play information / strategy games.

S24- Investigation of Video Game Playing Habits and Addiction Levels of Secondary School Students

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Abstarct

Aim: Because of the rapid progress of technology and the widespread use of the internet, the frequency of playing video games which have sub-types such as console games, personal computer games and online games in the virtual environment has increased in recent years especially among children and teenagers. The purpose of this study is to investigate the frequency and variety of video game playing, its effect on daily activities and responsibilities, the levels of addiction on video games in secondary school students and determine the attitudes of their parents in this area.

Material and Methods: Our study was designed as a cross-sectional descriptive study. The study which was carried out between January 15, 2018 and February 15, 2018, included students from four secondary schools in different sociodemographic characteristics. A structured questionnaire was applied to the parents who agreed to participate in the survey. 'Videogame Addiction Scale for Children' was applied to children playing video games.

Results: Of the 311 students who participated in the study, 14 were excluded because they had a chronic illness. The mean age of 297 children (± SD) was 11,8 ± 1,0 years and 46,5% of them were male students. 82.5% (n = 245) of the students, 91.3% of the boys and 74.8% of the girls were playing video games (p <0.001). The age at which they started playing video game was similar for male and female students (7,5 ± 2,1 years, 7,6 ± 2,0 years; p = 0,520, respectively). 11.8% of children playing video games had a game console. The mean score of addiction scale for children playing video games was 47.6 ± 15.3, while it was significantly higher in males (52.7 ± 15.7) than females (42.2 ± 12.8) (p <0.001). Children with gaming consoles had a higher score than those of their peers (53.5 ± 16.2, 46.8 ± 15.0, p = 0.026). Playing with multi-player had higher scores on addiction (50.7 ± 15.5, 45.9 ± 15.0, p = 0.018, respectively). The average score of VASC of online gamers was higher than those does not played online (52.3 ± 17.6, 45.2 ± 13.4, p = 0.002). Those who played intelligence games had lower scores on VASC than their peers (41.8 ± 16.4, 48.5 ± 15.0, p = 0.020, respectively). The scores of those who play war games were significantly higher than those who did not play it (54.8 ± 16.3, 45.6 ± 14.4, p <0.001, respectively). The educational status of the mother (> 8 and ≤8 years), the educational status of the father (> 8 and ≤8 years), the place of residence, the birth order of the child (1 and >1), the status of sibling,

and status of parents playing games did not affect the VASC score. When children's ages were controlled and analyzed, there was a negative correlation between the age of starting video game and the score of VASC in males ($r = -0.224$, $p = 0.012$) but not in girls. It was determined that 4 students whose VASC scores were above 90, have video game addiction.

Conclusion: According to our results, it is determined that the habit of playing video games in children is high and boys are playing more than girls. It has been shown that intelligence games are protected from addiction, as opposed to the fact that the risk of addiction to video games is higher in children who play online games and war games.

Keywords: Video game, Addiction, Online, War Game

S25- Digital Gameplay Habits in a Primary School 3rd Grade Student Sample

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Objective: The aim of this study is to examine the frequency of playing digital games and the various variables associated with gameplay habits in primary school 3rd grade students.

Method: The research was conducted at a public primary school in Odunpazarı district of Eskişehir, Turkey. The sample of this study consisted of 56 third-grade students (26 girls, 30 boys) aged between 8-10 years. The Computer Game Addiction Scale for Children (CGASC; Horzum, Ayas & Çakır-Balta, 2008), which is suitable for the age and education level of the students, and an information form were administered to the participants. Before applying the CGASC, an additional instruction was given: "You may be using different devices (desktop computer, laptop, tablet, mobile phone, console, etc.) while playing games, it does not matter. You can think of them all as "computer games" while answering the questions". By means of this guideline, the CGASC was answered by considering all digital games. In the information form, short questions about digital gameplay habits (e.g. "On average, how many hours per day do you play digital games?", "How often do you talk to your friends about games?", "Which devices do you use while playing digital games?", "How often do your parents set a time limit?") and demographic information such as gender and age were asked. The obtained data were analyzed both to determine the general profile of the sample and to examine in terms of various variables such as gender.

Results: The average age of the participants was 8.79 ± .59. The questions about the digital gameplay habits in the information form were examined separately. In terms of the daily playing time, half of the students report that they play games less than 1 hour, 30.4% play 1-2 hours, and 10.7% play 3-4 hours. Only 8.9% of the students (n=5) state that they do not play any games. The students use mostly tablets (71.4%, n=40) or their parents' phones (39.3%, n=22) for playing games. Interestingly, when the children were asked the question "Which one you do, your parents or family allow you to play more games?", the most popular choices were "doing homework", "reading book", "being well-behaved" and "tidying up the room", respectively. The children also state that their parents rarely or sometimes set a time limit. In addition, boy gamers compared to girl gamers talk with their friends about games more frequently ($p<.05$). The total CGASC score of the sample was 36.21±9.58 and more than half of the participants (64.3%) are rated as normal users (20 girls, 16 boys). Only 35.7% of the students (6 girls, 14 boys) are evaluated as problematic user. The findings indicate that the problematic users, in comparison to the normal users, chat with friends more frequently ($p=.013$) and think more in respect of games while they are not playing ($p=.031$). Moreover, both the total score ($p=.012$) and the scores of two subscales of the

CGASC named "Being disturbed when not allowed to play / Refusing to stop playing games" (p=.009), and "Living the game in imagination / Associating real life with the game" (p=.016) were higher in male students. Additionally, for detailed comparisons students were divided into two groups according to daily playing time (less than 1 hour/n=33, 1 hour and more/n=23). The participants who play games 1 hour and more per day had higher scores in two subscales of the CGASC: "Being disturbed when not allowed to play / Refusing to stop playing games" (p=.007) and "Disrupting duties due to playing game" (p=.016). Being disturbed when the game is not allowed

Conclusion: These results show that a high frequency of playing digital games in 3rd grade students, but a low percentage of problematic users among the sample of the study. However, it is noteworthy that parents have significantly influenced children's digital gameplay habits. Unfortunately, it seems that parents use digital games as a reward for some activities, such as doing homework and do not pay attention to setting limits on playing time. Finally, in accordance with the literature, male students play digital games more often than female students, and even when they are not playing, they are more likely to chat with their friends about games. In this sense, it will also be worthwhile to investigate how much time children spend on digital games when they are not playing.

Keywords: Child, digital games, game addiction, digital parenting, primary school 3-grade students.

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S26- The Collegians' Habits of Digital Game Playing: A Multicenter Study

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Abstract

There is an increasing trend in digital games all over the world among at all ages. In this study, we aimed to find out the preferences and habits of collegians in playing digital games, with the reasons determining the habit of playing video games and the positive and negative opinions about digital games.

We conduct a survey to the 5th grade collegians getting education in four different faculties of medicine, namely "Hacettepe University", "Mersin University", "Afyon Kocatepe University" and "Eskisehir Osmangazi University" to collect data. Thirty-six questions were asked to the participants. Demographic characteristics, monitor, social media and digital game preferences were interrogated.

Five hundred fifty medical school students participated in this survey. The average (SD) age of the students was 23.1 (1.2) years, 44% of them were males. The average (SD) age of getting first mobile phone was 13.3 (1.9) years. The average (SD) age they started using internet was 12.3 (3.1) years. Eighty-nine percent of students were using social media. The rate of social media using were similar between faculties and gender. Thirty percent of students declared they were still playing digital games while 27.5% of them declared they had been playing games in the past and average (SD) age to start playing games was 11.3 (3.6) years. The rate of playing digital games was the highest in Eskisehir Osmangazi University Faculty of Medicine (77.5%). The rate of playing digital games was higher in males. One of every five students was playing digital games minimum two hours a day. The most favourite game was action:war (47.1%) game. Seventy-two percent of the students considered the digital games as beneficial; the most stated benefit was forming strategy (48%). The rate of playing digital games increased in our country in recent years. Our results show the first internet using age, the first mobile phone owning age and the first digital game playing age of collegians' were under 14, and students grew up during computer age, so these determinations may be the reasons of this increase. War game choices may be the result of chaos environments, shootouts and wars in most countries, especially in our nearby geographic areas. Playing digital games is a sedentary behaviour and in 38.9% of the participants, it caused a decline in activity and hobby events in this study.

This research examined the collegians' habits of digital game playing and provided information about preferences and opinions related to these habits. Our muti-center study

determined that at least half of the collegians played digital games at a time of their lives. This result points overall studies about digital games and their influences are required.

Key words: collegian, digital game, multiplayer network, war game

S27-Use Of Information Communication Technology by Children Aged 3-7 Years and the Factors Affecting İt

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Abstract:

Introduction: The rate of use of today's childrens' information communication technologies (ICT: television, smartphone, computer, tablet) is expanding. Particularly with smart phones and touch screen technologies, children begin to use ICT from their early ages on. Whether this condition is beneficial or harmful in terms of child health is still controversial. It can be said that there are two different ideas in this issue. The first one of these ideas is that technology is necessary and useful for children, and that children should meet technological tools from an early age. Another view is that children ought to be acquainted with the technological tools as late as possible because these tools can cause physical and mental problems. At this point it is important how and for what purpose technological devices are used. Our aim in this study is to determine the prevalence of ICT use among children between 3-7 years and to examine parents' attitudes and factors that affect the children's ICT use.

Materials and Methods: The study was conducted on the data collected from the mothers of children aged 3-7 years. Data collected from 100 mothers were presented as preliminary results of our study. The information was collected through a questionnaire consisting of 35 questions prepared by the researchers. The questionnaires were applied to the mothers who referred to Cumhuriyet University Hospital Pediatrics Polyclinic. In the analysis of the data, t test, Mann Whitney U test and chi-square test were used. 49 of children (49 %) were girls and 51 (51%) were boys. The average age of children was 5.9 ± 1.2 years (36-94 months). 15% of mothers and 9% of fathers were primary / secondary school graduates while 85% of mothers and 91% of fathers were high school / college graduates. 92% of the families live in the city center. 37% of the mothers were housewives. 13% of the families have a monthly income of less than 2000 TL, while 32% were between 2000-5000 TL and 55% were more than 5000 TL. The families have an average of 2.08 ± 0.7 (1 - 5) children. Children watch television (TV) approximately 115.2 ± 77.9 minutes on weekdays and on average 156.0 ± 80.6 minutes on weekends. Using smartphones, computers and tablet (SPCT) except for TV for children are an average of 68.4 ± 62.8 minutes on weekdays and 101.4 ± 77.4 minutes on weekends. The parents spend an average of 96.9 ± 26.2 minutes per day as an individual with their children. Children watch on TV mostly cartoon (89%), kids films (70%) and TV series (25%). 33% of children watch the inappropriate programs for their ages 1-2 times a week on TV. The aims of use SPCT for children often are to play and watch the cartoons or videos. Seventeen percent of children play violent games in SPCT. 43% of the families stated that they had strict rules on SPCT and 57% stated that they did not enforce any rules or

enforce the rules. 43% of families use ICT as a punishment or a reward most often for food and study. There was no significant difference between girls and boys in terms of TV and SPCT monitoring time. In families where parents were high school or college graduates, weekday TV watching and weekday ATBT use of children were found to be significantly lower than those whose parents' have gratuated from primary / secondary school.(respectively 105.2 ± 71.6 versus 172.0 ± 89.6 $p<0.05$, 62.1 ± 53.8 versus 104.0 ± 96.1 $p<0.05$). Children of working mothers watch TV on weekdays and weekends significantly shorter than the children of housewife mothers. (respectively, weekdays: 93.80 ± 63.9 versus 151.6 ± 86.6 minutes; $p<0.05$, weekend: 138.6 ± 77.2 versus 185.7 ± 78.4 minutes; $p<0.05$). Children whose parents are primary / secondary school graduates play 3 times more violent games than those whose parents are high school / college graduates. While paternal education is not effective on the rules of the SPCT, as the mother education increases, there are clearer rules in this respect. In a similar way, while the education of the father is not effective in monitoring the violent programs of the child, the children in the families where the mother is a primary / secondary school graduate are watching 2.46 times more violent programs. When parents spend more than 2 hours per day on TV and SPCT, the duration of children's weekday and weekend SPCT use also significantly increases. 82% of the parents think that ICT is harmful, and 35% say that ICT causes mental and physical health problems in children.

Conclusion: According to our study, children aged 3-7 years use ICT more than 2 hours a day. The most important factor affecting the length of time children spend on the screen is the level of education of their parents. In this regard, appropriate programs should be chosen adapted to child's age and children should be followed up on ICT within certain rules.

Key words: Children Aged 3-7 Years, Information Communication Technology

S28 – S37

Oturum Başkanı: Prof. Dr. S. Sadi Seferoğlu

S28 Seda Topçu*
"Okulöncesi Dönemde Çocuğu Olan Ebeveynlerin Dijital Medya Kullanımı Konusunda Farkındalıkları/ Awareness Of Digital Media Use Of Parents Who Have Children In Pre-School Period"

S29 Ahmet Osman Kılıç, Eyüp Sarı, Hüsniye Yücel*, Melahat Melek Oğuz, Emine Polat, Esma Altinel Acoglu, Saliha Şenel
"1-60 Ay Arası Çocuklarda Mobil Medya Cihazı Maruziyeti Ve Kullanımı - Exposure To And Use Of Mobile Devices İn Children Aged 1-60 Months"

S31 Sibel Barın Özkan* , Yasin Özkan
"Ailelerin Yeni Üyesi: Dijital Oyun"

S32 Mustafa Abdusselam *
"Çocuk Dünyasında Ciddi Oyunlar: Moonbase Alpha Örneği"

S34 Guner Guler*, Fırat Sarsar
"Öğretmen Adaylarının Çocuk Ve Dijital Oyuna Yönelik Görüşleri"

S35 Nihal Durmaz*, Betül Ulukol
"Sağlık Çalışanı Ebeveynlerin Çocuklarının Dijital Güvenliği Konusundaki Tutum Ve Davranışları"

S28- Awareness of Digital Media Use of Parents Who Have Children in Pre-School Period

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Aim: The parent is the individual who protects and guides the child in any environment that allows a child to be physically, emotionally, and socially. It is also the parents' responsibility to guide children in the early childhood period who are not yet literate in the use of rapidly developing and changing digital media (1). This study aimed to assess parents' awareness of the use of digital media by their children in preschool period.

Metod: A questionnaire consisting of 20 questions evaluating some sociodemographic features and digital media usage was applied to 124 parents who have children aged 4-6 in a kindergarten in Ankara.

Results: All mothers and fathers who have accepted to participate in the research have graduated from higher education and have no income below the poverty line. The average age of the mothers is 32.7 years, the fathers is 36.7 years. Half of the children were 5 years old, 42% were 4 years old and the ratio of girls / boys was similar. All of the children and their parents are reported to be use digital media, and what tools they use and how often they are used are shown in Table 1. 38.4% of the children and 23.2% of the parents were playing digital games. It is stated that the parents spend most of their time playing games with their children, the second most often they watch television. While parents do not do daily sports activities with their children, the duration of digital gaming together is 9.6 minutes / day. When parents are asked to rate their concerns about their children, such as health, safety, nutrition, sleep, and self-help; most often they stated that their children are concerned about health and safety, and at least they are concerned about their intellectual skills. The use of digital media is scored similarly to the social environment and effective communication skills.
92% parents indicated that digital media posed a problem between parents (eg time lost, stealing from each other, violation of family duty sharing). However, 94.4% of parents stated that the digital media facilitated their lives because the child spent time on their own. Half of the parents said their children could not set a limit on the timing of digital media use. All parents stated that digital media had risks, and 72.8% stated that they are not aware of the safety of children in the digital environment

Conclusion: In our study, it is seen that all families and children with high socioeconomic level and educational level use different areas of digital media. Families are aware of digital media, but their knowledge and attitudes about the risks posed by the digital media are not enough. In this regard, programs should be developed to guide wider studies and families to

identify needs (2). The implementation of these programs can increase the parents' digital literacy and enable children to use digital media effectively and safely (3).

Key words: digital media, parents, pre-school child

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Table 1. Frequency of children and their parents using digital media

Digital media tool	**hour/day**
Television	
Child	2,29±1,9
Parent	3,37±1,15
Phone	
Child	1,48±0,51
Parent	4,76±0,96
i-pad	
Child	1,47±0,40
Parent	-
Computer	
Child	0,15±0,36
Parent	2,18±1,54

S29- Exposure to And Use of Mobile Devices in Children Aged 1-60 Months

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Abstract

Aim

The use of mobile media devices has become very common in childhood. There are no particular pediatric guidelines for the use of mobile devices, although such use is not recommended before age of 24 months. For children aged ≥24 months there is a need for warnings and precautions to avoid their potential harmful effects. The present study aimed to determine the frequency of mobile device use, and the purposes of such use in children aged 1-60 months, and to detect the relationship between the frequency of mobile device use and family socioeconomic status. In addition, the study sought to determine which devices play an important part in the life of children, so as to make well-informed suggestions about children's use of such devices to families, health service providers, and society at large. To the best of our knowledge, the present study is the first in or country and one of the rare studies in literature to examine the use of mobile devices in children aged 1-60 months.

Materials and methods

The study included 422 parents that presented with children aged 1-60 months to the pediatric outpatient clinics at Dr. Sami Ulus Maternity and Children's Health and Diseases Training and Research Hospital, Ankara, Turkey, between 01 June 2016 and 01 August 2016. Parents whose children had neuromotor retardation were excluded from the study. A questionnaire with 21 items adapted from earlier studies was administered to the parents via face-to-face interview. Mobile devices were divided into 3 categories (cellphones, tablets, and computers). Monthly income was categorized as below or above the national poverty threshold (1777 Turkish liras, or approximately $500).

Results

In all, 50.2% of their children were female (n = 212). Among the children, 24.4% (n = 103) had never used a mobile device, and among the children that had used a mobile device 20.6% (n = 66) were aged 1-12 months, 24.5% (n = 78) were aged 13-24 months, 18.2% (n = 58) were aged 25-36 months, 21.3% (n = 68) were aged 37-48 months, and 15.4% (n = 49) were aged 49-60 months. The youngest child that used a mobile device was 6 months old. The median age at first-time use of a mobile device was 12 months.

Among the 422 children, 15.9% (n = 67) had a tablet in their room, 0.7% (n = 3) had a computer in their room, 0.7% (n = 3) had a cellphone in their room, and 1.6% (n = 7) had both a tablet and computer in their room. The most commonly owned device among mobile devices was tablets with a frequency of 83.7%. The frequency of using a tablet increased significantly after age 25 months ($P < 0.001$). In total, 25.7% (n = 82) of the children that used mobile devices used multiple devices simultaneously (media multitasking).

The frequency of tablet use significantly decreased as the parental level of education increased ($P < 0.01$); this was strongly correlated with the mother's level of education ($P < 0.01$).

The most frequent activity the children used mobile devices for was watching videos (70.8%, n = 226), followed by playing games (56.7%, n = 181), use of other applications (28.5%, n = 91), watching television (16.6%, n = 53), and reading books (1.2%, n = 4).

The parents reported that 38.6% (n = 123) of the children usually received help when using mobile devices, 21.6% (n = 69) received help sometimes, 17.6% (n = 56) rarely received help, and 22.3% (n = 71) never received help. As the age of the children increased the frequency of receiving help using mobile devices decreased ($P < 0.01$)

In total, 59.6% (n = 190) of parents gave their children permission to use mobile devices while they (parents) are doing daily tasks, 28.8% (n = 92) let their children use mobile devices while the family is visiting others' homes and shopping, and when parents use their own mobile devices or leave the home. Among the parents, 91.5% (n = 386) had never been informed by a doctor about the effects of their children's exposure to mobile devices.

Conclusion

Although it is recommended not to use mobile devices in children under twenty- four months and limited and controlled use in children older than twenty-four months, uncontrolled and independent mobile device use regardless of income level was detected in our study even in children less than twenty- four months. Parents should be trained by health care providers to make children have conscious and beneficial interactions with mobile media devices.

S31- Ailelerin Yeni Üyesi: Dijital Oyun

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**MEB

Çocukların gelişimlerinde ayrılmaz bir parça haline gelen dijital oyunların ailelerin de yeni üyesi haline gelmektedir. Çocukların çoğu zaman aile ve arkadaşlarıyla vakit geçirme yerine dijital oyunları tercih ettikleri bilinmektedir. Dijital oyun tercihlerinde çocukların çevrelerindeki yetişkinlerin rolü olmakla birlikte ailelerin de büyük bir rolü olduğu düşünülmektedir. Bu sebeple çocukların dijital oyunları kullanımına ilişkin ailelerin görüşlerinin değerlendirilmesi amaçlanmıştır. Araştırmada nitel araştırma yöntemi kullanılmıştır. Araştırmanın çalışma grubu 7 yaş çocuğa sahip çocukları Zonguldak' ta devlete bağlı ortaokula devam eden araştırmaya gönüllü olarak katılan 6 anne oluşturmaktadır. Araştırmada veri toplama yöntemi olarak görüşme yöntemi kullanılmıştır. Araştırmada yarı yapılandırılmış görüşme formu kullanılarak annelerle yüz yüze görüşme yapılmıştır. Araştırmanın analizleri sonucu elde edilen bulgulara göre paylaşılacaktır.

Anahtar Sözcükler: dijital oyun, ortaokul öğrencileri

S32- Serious Games in Child's World: Moonbase Alpha

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Digital games provide positive contributions to sharpen the cognitive and perceptional capabilities of individuals. Particularly, the visual performance capacity is higher in the action-based and fast game players than other type game players.

The Serious game is kind of digital game that is developed for non-entertainment purposes. Actually, serious game has been developed to allow players to see and feel real events simulated and processed in the framework of learning goals or goals. Rather than entertaining, the purpose of these games is to contribute to their education through training and experience.

When serious game applications are scrutinized; unlike the existing computer-aided teaching practices, many features allow players to take an active role in the teaching process. Serious games aiming to gain knowledge and improve their skills on a specific specialty, which is developed with the motive of using the fun factor as a motivation tool. Serious games has been used in different areas like education, military, medical and commercial.

One of the serious games is Moonbase Alpha. This serious game was developed in collaboration with NASA and the Army's Aviation Missile Research Development and Engineering. With this game, NASA has tried to contribute to the education fields. In particular, in the field of science, it is the example of the work of the United States to enhance the quality of education by working with government agencies. This game is support the multiplayer mode and modelled with a mission scenario on the Moon which developed by NASA. This game was released in STEAM gaming platform in 2010 to a number of player members exceeding millions and it has been developed in three dimensions via Unreal Engine 3. The main purpose of the improvement in particular is to analyse the situations, to follow meaningful pathways and to experience effectively the activities in the STEM fields' students encounter during the game. In addition, NASA prepared teacher manuals and student worksheets for this serious game and made them available for use. The game is for grades 6-9, in case of developing "Physical Science and Earth Science" learning activities in traditional formal education. In addition, the scenario of Moonbase Alpha serious game is expected to complete its mission within 20 minutes. NASA is planning this process in four different sessions, with each session being 90-minute periods.

In this study, Moonbase Alpha game, which is one of the serious games, is has been examined whether it is possible to be used as a supportive sources in Childs' world in which

situation should be involved. For this purpose, the published document, the serious game and users' comments were examined. Firstly, according to the documents obtained this game is designed based on 5E instructional model (Engage, Explore, Explain, Extend, Evaluate) and it combines aspects of traditional education with game-based learning to teach science, technology, and engineering concepts to students. In the second stage of the examinations, this game can be played over the internet or local network, supports individual or group work (up to 8 players) and it can be run through today's school hardware and software. Finally, according to the STEAM gaming platform, it is close to 90% of the comments of individuals playing the game are positive, and advantageous aspect of this game is the reality graphics and designs but as disadvantage is the lack of defending different languages. As a result, Moonbase Alpha serious game is advantageous to use as an adjunct to secondary school Science. However, it can be suggested to be supported by Turkish language.

Keyword: Serious game, Child, Moonbase Alpha, STEM, 5E

S34- Öğretmen Adaylarının Çocuk ve Dijital Oyuna Yönelik Görüşleri

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Bilişim öğretmenlerinin meslek hayatına atılmadan önce dijital oyunlar hakkındaki görüşlerinin şekillenmesi ve oyunlar hakkında farkındalıklarının yüksek olması önemlidir. Mesleği gereği teknoloji ve dijital ortamları yoğun kullanan bilişim öğretmenleri bu konularda öğretmenleri, öğrencileri ve velilere uygun bilgileri aktarılması gerekmektedir. Bu araştırmaya 2017-2018 akademik yılı bahar döneminde "Sayısal Tabanlı Öğrenme Ortamları" seçmeli dersini alan 15 Bilgisayar ve Öğretim Teknolojileri Bölümü ikinci sınıf öğrencileri katılmaktadır. Bu nitel araştırmanın amacı öğretmen adaylarının oyun ve çocukların oynadıkları dijital oyunlar hakkında farkındalıklarını ve çocukların gelişimindeki etkilerine yönelik görüşleri anlamaktır. Bu kapsamda araştırmacılar tarafından hazırlanan açık uçlu sorularla veriler toplanmıştır. Verilerin içerik analizleri devam etmek olup, sonuçlar kongre de katılımcılarla paylaşılacaktır.

S36- Internet Security of the Children of Parents Employed in Health Sector and Their Information, Attitudes and Behaviours towards Digital Games

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INTRODUCTION-AIM: Today the internet has come to be an important means of meeting one's daily needs of every sort as a result of the rapid developments in computer, internet and digital games as well as the economic sector regarding them (Günlü & Ceyhan, 2017). Individuals use the facilities offered by the internet today for most of their shopping, needs, habits or behaviours. Parallel to the global case, the use of the internet has become common and widespread in Turkey, as well. According to the results of TUIK's (Turkish Statistics Institution) Survey for the Use of Information Technologies within the Family in 2012, 8 out of 10 families have an access to the internet and also while the rate of access to the internet was 47.2% then, it rose to 66.8% in 2017 (TÜİK, 2017). According to the TUIK's survey on the 16-74 age group people in 2014, the use of internet was found to be the highest (73%) in the age group of 16-24 (TÜİK, 2014). Viewed from this perspective, social concerns are generated by the fact that especially the children and the young are densely interested in this technology and that they very much outpace the adults in a short time (1). Such reasons as non-planned urbanization, insufficiency of the fields for children, parents' preference to keep their children in the eye control within the house due to the child abuse and neglect have increased the children's interest in digital games and changed their habits of playing and socialization. Turkish Language Institution (TDK) defines the game as a means of entertainment with certain rules for having a good time that improves ability, skill and intelligence and the toy as a means of game (Bekmezci, Atatürk, Sağlık, & Fakültesi, n.d.). With the developed technology, traditional games and toys have come to be replaced by the digital games on the internet today, especially in cities. However, the debate as to whether digital games are useful or harmful to children and adolescents is on the increase in the world and in our country. The studies in recent years have attempted to shed light on this issue. The common view in these studies is that the content of the game is of importance (Yılmaz, Griffiths, & Kan, n.d.).

There are a lot of studies showing that playing digital games enhances visual skills and concentration, contributes to quick decision-making and strategy-developing, and develops their social skills. There are also some studies that show that digital games can help develop the learning skills and spatial abilities of the children with autism, attention-deficit disorder and disabilities (MD, 2002). On the other hand, there are a lot of studies to reveal that these games not only cause depression, anxiety, uninterrupted worry, in appetency, sleeping disorder and neglect of physical activities among the children but also cause them to isolate themselves from their friends and family into a solitary/isolated virtual world (Yılmaz et al.,

n.d.). The studies have demonstrated a relationship between the children's gender, age and parents' education levels and the time they spend playing digital games (Pe N, n.d.). It has been found that male children spend more time playing digital games than female children do, that the children in the 12-15 age group spend more time playing digital games than those in the other groups, and that the children of the parents with a lower education level spend more time playing digital games than those of the other parents.

This study is intended to determine the information, attitudes and behaviours of the children of parents employed in health sector with a high education level towards digital games and internet security. It also aims to enhance the health-staff parents' awareness of the positive and negative effects of digital games.

MATERIALS-METHODS: This study was conducted with the participation of 299 health-staff parents (doctor, nurse and other health staff) employed at Dr. Abdurrahman Yurtaslan Ankara Oncology Training and Research Hospital and Gülhane Training and Research Hospital affiliated to University of Health Sciences in March 2018.

The participants were informed that they should answer the questions if they have children between the ages of 5 and 18. Once the participants had been given necessary information about the study, their written permissions were taken; then a survey was applied to them concerning their socio-demographic qualities and questioning their children's information, attitudes and behaviours towards digital security. It was conducted on a voluntary basis. The ethics committee approval was taken from the Health Sciences University's Non-Invasive Clinical Research Ethics Committee. The data about the study were transferred to the SPSS programme and analysed statistically.

RESULTS: 299 parents who were also health staff were included in the study. 210 (70%) of the participants were female and 89 (30%) were male. The average age of the participants was 41.3±4.7 (min-max: 30-60). Women's mean age was 40.8±4.5 (min-max: 30-58), while men were 42.6±5.1 (min-max: 30-60). On the basis of professional groups, 51/17%) of the participants were doctors, 165 (55%) of them were nurses and 83 (28%) of them were other health-staff. The median of the participants' number of children was 2 (min-max 1-4), and their average number of children was 1.76±0.7.

Children's mean age was determined as 12.9±0.7 for the first child and 5.04±0.3 for the second child. Of the digital-security measures taken by the parents while using computer in daily life both for themselves and for their children, the highest rate was 75% on anti-virus software programmes; for their children, however, besides the existing measures, 56% of them reported that they tried to ensure the digital security by personally following the internet pages and websites visited by their children. 20% (61) of the participants said that they themselves played digital games, while 70% (197) of reported that their children played them. The rate of parents who played or watched digital games with their children at varying frequencies was determined as 54% (151). On the other hand, the rate of parents who talked about digital games in daily talks with them was 55% (195) and that of those who did

not do so was 45% (104). Most of those who reported that they did not talk with their children about digital games said that they did not want their children to play digital games and so they did not even want to talk with them about that issue. 78% (234) of the participants reported that they knew which games were in their children's mobile phones or computers.

The rate of parents who intervened in their children choosing digital games was 72% (214). The parents employed in the health sector said that they mostly made their choices and decisions about the games on the basis of the content of the game (42%) and the age of the child (39%). Considering the views of the participants as regards digital games; their most striking answers over the negative aspects of the digital games were that the children playing digital games would be less socialized by 17% (165) and that playing digital games would affect children's health negatively by 14% (142). While there appeared no striking difference between the answers given to the negative aspects of digital games, the parents born in and after 1980, also called digital native, agreed on the positive aspects of digital games at a higher rate. However, no statistically significant difference was found. 62% (183) of the participants reported that they children did not spend more time than acceptable for digital games, and 88% (262) of them said that their children did not spend money over digital games.

CONCLUSIONS: This study reveals that health professionals, though mindful of health and cognizant of the health risks, do not have much information and awareness of digital games though they think and feel that digital games can be harmful. For the required measures to be taken against digital games and internet security, having come to be a public health problem these days, the studies on this issue should be conducted with the collaboration of different professional groups; and this is largely expected to form a basis for these measures.

Key Words: Health staff, parent, child, digital game.

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P2 - Gençlerin Görsel Etkileniminin Pupil Yanıtı İle Değerlendirilmesi

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Giriş

Pupil (göz bebeği) irisin orta kısmında, ışığın gözün içine girdiği yuvarlak bir açıklıktır. Pupil açıklığı göze yansıyan ışığın şiddetine bağlı olarak değişir. Aynı zamanda psikolojik stimülasyonun sonucu olarak otonom sinir sisteminin etkisiyle sürekli osilasyonlar da gösterir.

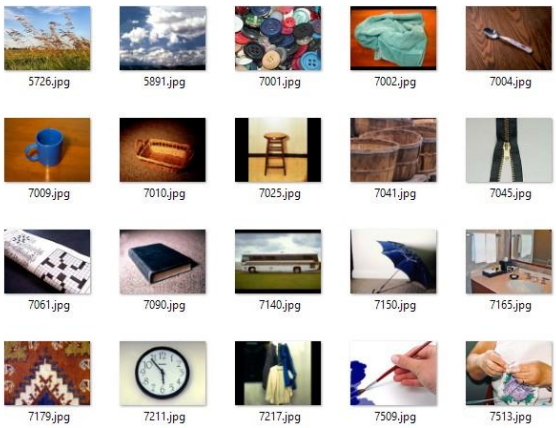
Pupil çapını etkileyen ilk ve öncelikli mekanizma parlaklığın etkisidir. Parasempatik sinir lifleri parlaklığın fazla olduğu durumlarda retina üzerine ışık akışını azaltmak için pupili daraltırken parlıklığın yüksek olduğu ortamlarda pupil çapını genişletir.

Pupil çapını artıran ikinci durum, yoğun duygusal uyarılardır. Görsel ya da işitsel yoğun duygusal uyarılar kişinin içsel uyarımı ile pupil çapını artırır. Pupil çapını artıran bir diğer durum kişinin zihinsel eforunun arttığı durumlardır. Ayrıca sürpriz gibi beklenmedik bir durumla karşılaşmak ve yukardan aşağı işleme (algılarımızın ve davranışlarımızın beklentilerimiz tarafından etkilenmesi) durumunda da pupil çapında artma görülür.

Pupil çapının duygusal uyarılar sonucunda değişiyor olması özellikle görsel ve işitsel şiddetle karşılaşan bireylerde pupil çapını etkileyebilir. Bu çalışmanın amacı gençlerin karşılaştıkları şiddet görüntülerinden etkilenme durumlarının pupil çaplarının ölçümü ile değerlendirilmesidir.

Materyal ve Metod

Çalışmaya 15 üniversite öğrencisi alınmıştır. Öğrencilere 20'si nötral özellikte (günlük hayatta rutin olarak karşılaştıkları) 20'si olumsuz duygular oluşturabilecek, içinde şiddet içeren ya da şiddetin sonucu olabilecek görüntüler de bulunan fotoğraf setleri Şekil 1'de görülen bir deney süreci içinde gösterilmiştir. Deneyde kullanılan tüm fotoğraflar International Affective Picture System'de (IAPS) kayıtlı fotoğraflar arasından seçilmiştir.



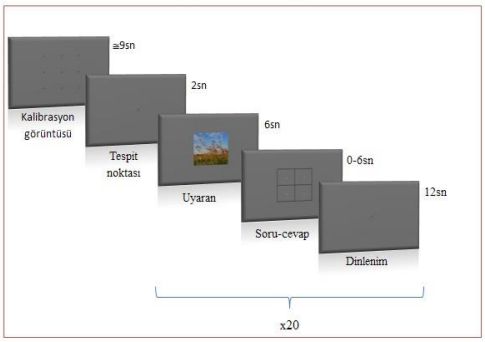
Nötral

Olumsuz

Fotoğraf seçiminde fotoğrafların IAPS de kayıtlı olan duyuşsal değer, uyarılmışlık ve baskınlık değerleri dikkate alınmıştır. Fotoğraflar bilgisayar ekranından gösterilmiştir. Fotoğraflar arasındaki parlaklık farkının pupil çapına etkisini nötralize etmek için tüm fotoğrafların parlaklık derecesi birbirine yakın değerlerde olacak şekilde filtre uygulanmıştır.

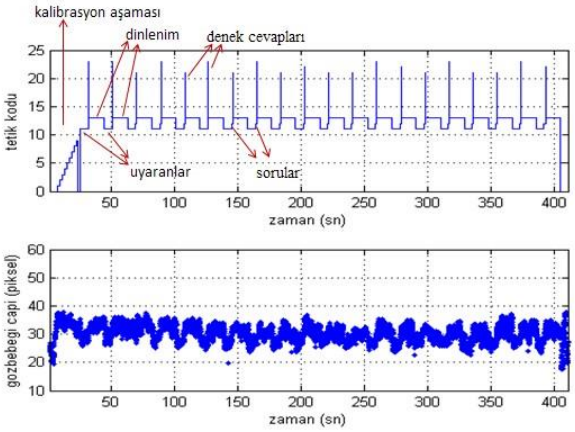
Öğrencilere ilk önce nötral fotoğraflardan oluşan 1. Set gösterilmiş daha sonra 120 saniyelik bir sürede öğrencilerin anksiyete düzeylerini değerlendirmek için PANAS test uygulanmıştır. Ardından olumsuz fotoğrafları içeren 2. Set fotoğraflar gösterilmiştir.

Deney paradigması

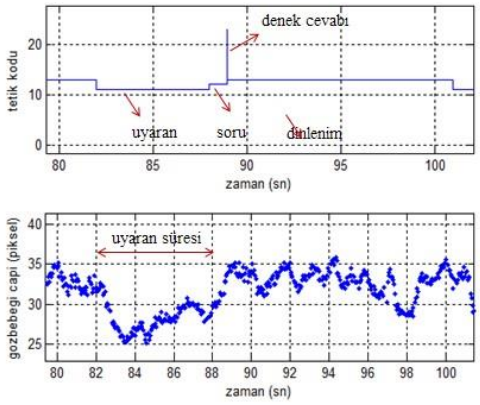


Deneyin gerçekleşme sürecinde pupil çaplarındaki değişim, araştırmacılardan biri tarafından geliştirilen bir kamera tarafından kaydedilmiş ve bu kayıtların analizleri sonucu belirlenmiştir.

Deneysel ölçüm verisi



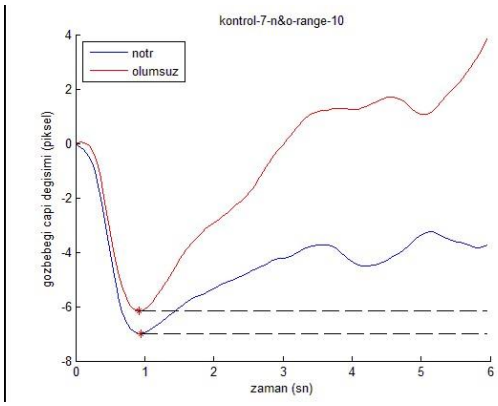
Deneysel ölçüm verisi (detay)

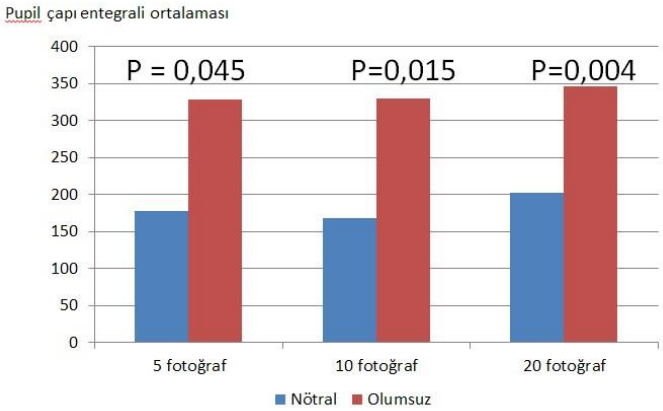


Elde edilen verilerin analizinde; pupil çapının büyüklüğünü değerlendirmek için deney sürecinde pupil çapındaki değişimi gösteren eğrinin altında kalan alan hesaplanmıştır. Öğrencilerin farklı özelliklerdeki (1. Set nötral fotoğraflar, 2. Set olumsuz fotoğraflar) fotoğraflara verdikleri yanıtı karşılaştırmak için bu veri kullanılmıştır.

Sonuç

Bir öğrencinin nötral ve olumsuz fotoğrafa pupil yanıtı resim 2'de görülmektedir. Grafikte ilk düşüş değeri ışıkla karşılaşma sonu oluşan pupil çapındaki küçülmeyi göstermektedir. Daha sonraki artış pupil çapındaki ondülan artışın göstergesidir.





Tüm öğrencilerin 1. ve 2. Set fotoğraflardan ilk 5, ilk 10 ve 20 fotoğrafı izledikten sonraki pupil çapı integral değerlerinin ortalamaları grafikte görülmektedir.

Tartışma

Şiddet günümüzde yaygın ve kanıksanan bir form kazanmıştır, Üstelik keyif ve eğlenme amaçlı etkinliklerin de içine kadar işlemiştir. Bu bağlamda dijital oyunlardaki şiddet görüntülerinin otonom sinir sistemini etkileme ve buna bağlı nöronal değişiklikler oluşturma riski vardır.

Halen bir çok dijital oyunun artırılmış gerçeklik (augmented reality) teknikleri ile görüntüleniyor olması , animasyonun yerini gerçeğe çok yakın görüntülerin alması şiddeti gerçek hayatta olduğundan daha yoğun ve ağır şekilde algılamaya neden olabilir. Kişi oyun oynarken bir kurmacanın içinde olduğunu düşünse de gerçeğe çok yakın görüntüler otonom sistemin kişinin denetiminden bağımsız olarak etkilenmesine neden olabilir. Bu da oyunlardaki şiddet görüntülerinin özellikle çocuklarda ve gençlerde santral sinir sisteminin etkilenmesine ve henüz yapılanmasını tamamlamamış genç beyinlerin karşılaştığı stresten olumsuz şekilde etkilenmesine neden olur.

P5- Anne-Babanın Çocuklarının Bilgisayar Kullanımı ve Internet Erişimi Karakteristiğini Tanımalarını Sağlayarak Denetlemeleri İçin Bir Yazılım

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Bilgisayarlar ve Internet, sağladıkları imkanlar ve kolaylıklar ile pek çok alanda bireysel, toplumsal, hatta küresel boyutta yaşamı etkilemektedir. Bugün söz konusu imkanlar ve kolaylıklar sayesinde artık biz insanların yaşamlarını şekillendirmede önemli bir paya sahiplerdir. Yaşamlarımızı şekillendirirken, bilgisayar ve Internet kullanımımızın olumlu etki ve çıktılarının yanında birçok olumsuz çıktıları olduğu da tespit edilmiştir. Araştırmalar, Internet ve bilgisayar kullanım amacının ve kullanım süresinin yüksek olmasının, kullanıcıların biyolojik, fizyolojik, psikolojik ve sosyal gelişimlerini olumsuz etkiyebildiğini göstermektedir. Amaç dışı, kontrolsüz ve gereğinden fazla Internet kullanımı literatürde Internet bağımlılığı (IB) şeklinde isimlendirilmiştir. IB ve benzeri olumsuz çıktılar, özellikle mobil teknolojilerde son 10 yılda gerçekleşen ilerlemelerle birlikte, çocuklarda da gün geçtikçe artan sıklıkta görülmeye başlamıştır. Bazı araştırmalar, çocukların bilgisayar ve Internet kullanımlarını, diğer bir ifadeyle ekran karşısında geçirdikleri süreyi (ekran zamanı - EZ) yaşa dayalı sınırlamanın çocuklarda bu ve benzeri olumsuz çıktıları önlemede etkili olduğunu tespit etmiştir. Bu sonuçlara dayalı olarak American Academy of Pediatrics (AAP) EZ ile ilgili kıstasları geçmişte yaş temelli belirlemiştir. Fakat AAP 2016 sonlarında yayımladığı kılavuzunda dizüstü, tablet ve akıllı telefonların farklı kullanım karakteristiğine sahip, dolayısıyla farklı bağlamlarda, farklı amaçlar için kullanılabilecek farklı karakterlerde aygıtlar olmalarını da dikkate alarak ekranla geçirilen her zamanın aynı nitelikte olmadığı sonucuna varmıştır. Buna göre; EZ'nin kullanım niteliklerine göre sınıflarını "pasif tüketim" (televizyon izlemek, müzik dinlemek, vb.), "interaktif tüketim" (Web'de gezmek, oyun oynamak), "iletişim" (görüntülü sohbet, sosyal medya) ve "içerik üretmek" (dijital sanat, örneğin; illüstrasyon yapmak) şeklinde tanımlamıştır. Kılavuzda aynı zamanda, anne-babalara çocukların bilgisayar ve Internet kullanımına yönelik bu sınıflandırmayı hesaba katan ve bilimsel kanıta dayalı önerilerde bulunmuştur. Bu çalışmada, çocukları 2-5 ve 5-18 yaş gruplarına ayırarak ele alan bu önerilerin, anne-babalar tarafından gerçekleştirilebilmesine yardımcı olmak üzere bir uygulama yazılımı tasarlanmış ve geliştirilmiştir. Geliştirilen yazılım temel işlevleri itibariyle anne-babaya;

- Çocuklarının yaşına bağlı olarak AAP'nin önerilerini görüntüleme
- Çocuklarının bilgisayar kullanımı ve Internet erişimini kısıtlarını ayarlamak amacıyla;
    - Çocuklarının bilgisayar ve Internet kullanımı için bir günlük toplam ekran süresi tanımlama
    - Tanımladıkları toplam günlük sürenin kullanılabileceği haftanın her günü için kullanım izni verdikleri saatleri belirleme
    - Internet erişim izni verilen saatleri haftanın her günü için belirleme,

- Çocuklarının, yukarıda bahsedilen ekran süresinin kullanım niteliklerine göre AAP'nin tanımladığı sınıflar üstünden belli bir aygıt için (örneğin; dizüstü) bilgisayar kullanım ve Internet erişim izni profilini yaratmak amacıyla;
    - Mevcut uygulama yazılımları, dosyalar, klasörlerden istenenleri ve görev yöneticisini engelleme
    - Birörnek kaynak konumlayıcı ya da birörnek kaynak tanımlayıcıya dayalı erişmesi istenmeyen içeriği engelleme

- Çocuklarının günlük ya da haftalık bilgisayar kullanım ve Internet erişim davranışlarının AAP'nin ekran süresinin kullanım niteliklerine göre tanımladığı sınıflar altında takibini sağlamak ve bilgisayar kullanım ve Internet erişim izni profilini güncel tutmak amacıyla, o gün ya da hafta içinde;
    - Internet'te eriştiği
        - İçerik ve kaynakları (örneğin; ziyaret ettiği siteler) ve indirdiği dosyaları listeleme
        - Belli içerik ya da indirdiği dosya üzerinde inceleme yapıp gerekiyorsa erişimini engelleme
        - Belli içerik ya da kaynağı beraber erişmek için işaretleme, hatırlatma ayarlama
    - Gün ya da hafta içinde kullandıkları uygulama yazılımları ve çocuğun bunları kullanım başlangıç ve bitiş tarih ve saatleri ile birlikte toplam kullanım sürelerini listeleme
    - Yasaklı uygulama yazılımı, dosya, klasör, URL ve URI erişim girişimlerinin frekansları ve tarih ve saatlerini listeleme
    - Belli içerik, uygulama yazılımı ya da dosyaya erişim ve inceleme önerileri yapmai mkanları sağlar.

Temel işlevleri dikkate alındığında uygulama, AAP'nin anne-babaların çocukları için hazırlamalarını önerdiği "Aile Medya Kullanım Planı"nın hazırlanması için ihtiyaç duyulan bilgileri sağlamaktadır. Bu amaçla, 2-5 yaş grubu çocuklar için önerileri arasındaki "Önceden eriştiği içeriğe tekrar beraber erişerek çocuğa kılavuz olma"yı gerçekleştirebilirler. Uygulama yazılımı, Web-tabanlı bir mimaride Microsoft Visual Studio 15.3.0 versiyonu üzerinde, .NET Framework 4.7.02556 kullanılarak C# programlama dilinde gerçekleştirilmiştir. Prototip, anne-babaların Windows platformlu bilgisayarları kullanarak Web'den anlık takip ayarlarına ve çocuklarının kullanım istatistiklerine erişmelerine izin vermektedir.

P6- Dijital Dünyanın Yeni Kavramı: Nomofobi ve Çocuklar Arasında Yaygınlık Nedenleri

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Nomofobi, cep telefonu, tablet, kişisel bilgisayar gibi sanal haberleşme araçlarından yoksun olma durumundan kaynaklanan huzursuzluk ve endişe durumu şeklinde yakın zamanlarda görülmeye başlanan ve tanımlanmaya çalışılan modern zamanların bir rahatsızlığı olarak bilinmektedir. Bu çalışmanın amacı, ortaokul öğrencilerinin nomofobi düzeylerini ortaya çıkarmak ve nomofobi düzeylerinin altında yatan nedenleri incelemektir. Araştırmanın çalışma grubunu 2017-2018 öğretim yılında öğrenim görmekte olup çalışmaya gönüllü olarak katılmak isteyen 58 öğrenci (8.sınıf) oluşturmaktadır. Veri toplama aracı olarak Yıldırım ve Correia (2015) tarafından geliştirilip, Yıldırım, Şumuer, Adnan ve Yıldırım (2016) tarafından Türkçeye uyarlanan Nomofobi Ölçeği (NMP-Q) kullanılmıştır. Ölçek 7'li likert tipine göre maddelenmiş olup, toplam 20 maddeden oluşmaktadır. Ölçekten alınabilecek puanlar 20-140 arasındadır. Araştırmada veri toplama süreci, dijital ortamda gerçekleştirilmiş, analiz aşamasında betimsel istatistik kullanılacaktır. Araştırma sonuçları elde edilen verilere göre paylaşılacaktır.

Anahtar Sözcükler: nomofobi, yaygınlık, ortaokul öğrencileri

P7- Neccesity For Dijital Game Making Within The Context of Teaching Principles

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Abstract

Problem Case: Target groups of digital games are the youth and children. For children groups, which are defined as the target groups in this work, ranging between 04-06 and 06-12, digital games create an entertaining process as they provide an educational support in terms of hand-eye coordination and learning. The conceptual frame of digital games in the studies about them, is about the application in the classroom; teacher and student point of view are often evaluated, the subjects such as; point of view, expectations from games and gaming habits of the target group and those who run the application are analyzed. However, teaching principles of games are mostly overlooked.

Even if there are visual, audial stimulant elements and animations, there is a need for construction of basic teaching principles within a holistic approach. This requirement brings up the fact that the process of designing, planning, application, assessment and development of digital games should be prepared according to the basic principles of teaching for educational function. For that reason, in this study," Necessity for digital game making within the context of teaching principles" is handled as the problem case.

Reason and Significance: The study, within the limits of its scope, is important as it could contribute in the following ways:

- The existent state related with digital games can be described scientifically.
- Educational functions of digital games based on early and middle childhood periods can be defined in a holistic approach.
- Fundamental teaching principles which should be taken into consideration during the preparation of digital games can be solidified.

Limitations: The study will be limited in terms of the following aspects:
Level, Early and mid-childhood level,
Scope of Subject, Fundamental teaching principles in digital games,
Tools to Collect Data, Related printed materials and statistic source of information found online,
Study Duration, is from 12 December 2017 to 10 March 2018.

Aims: Fundamental purpose of this study is to state the preparation principles and educational functions of digital games. There is utmost importance in answering the questions below to realize this fundamental aim:
1-What is the state of digital games?

2- What are the educational functions of digital games in terms of children capabilities?
3-What are the requirements for fundamental teaching principles in making digital games?
4-How should digital games be built within the context of fundamental teaching principles?

Method: The study done with the data based on descriptive literature, first define the cases then deals with the details due to its base required feature to handle the relevant conditions through an approach from general to particular. In the first phase of the study, the answer of the question of "What is the state of digital games" is revealed and in the second phase, how digital games should be built in accordance with fundamental teaching principles is explained.

Conclusions: The obvious results deduced with the data acquired in the study are the followings:
1-Educational functions of digital games are ignored while their types, application examples, their audial and visual aspects are stated in the studies about digital games.
2-Lack of approach in making digital games based on fundamental teaching principles stands out.
3-Digital games are mostly built disregarding the elements of acquisition, content and application in accordance with children level.
4-Digital games are not able to reflect the teaching principles of step by step; thus, known to unknown, concrete to abstract and near to afar in a holistic way.

Suggestions: According to the conclusions reached:
1-Digital games should include audial and visual messages which will improve the perception of children.
2-Digital games should be supportive in terms of social skill acquisition.
3-Digital games should contain schemas, graphics, examples, audio, story and animations which are suitable for the visual memory of children.
4-Digital games should be prepared in a design approach where children are able to use their hand-eye coordination properly.

Keywords: Digital games, teaching principles

P8 - Protecting From Cyberbullying: Digital Safety for Children

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INTRODUCTION

"Cyberbullying" or "electronic aggression" means deliberately using technology such as smartphones, the internet, social media, or gaming environments to harass, humiliate, badmouth, or threaten someone. It can poison someone's joy in life, reputation, and well being. The only protectıon way is teaching digital safety to children. According to children rights one of then main task of the parent is protecting the child from negative effects of life which can be threatened the healthy growth and development. At this point the attitudes of parents for being a good role model is important. Not only in real life and also in digital world, the parents have to teach to children acting with respect, safety, and kindness towards yourself and others. The importance of protecting from harmful words and attitudes and staying mindful is exact way for protecting from digital harms like cyberbullying. Cyberbullying is unsafe and disrespectful behavior that can effect the physical, emotinal, social and sprituel integrity of the children. None of healthy the parents want to give harm to their child delebaretely . In the changed role of pediatric nurse is advocay of child and the family. By this way The pediatric nurses can act as advocator and teach the strategies to parents for digital safety.

OBJECTIVE

So that in this perspective the aim of this study is highlighting active strategies for prevent and stop cyberbullying that can help to parents.

METHOD

The search was done by reviewing literature screening at Medline,Science Direct and Pub Med

RESULTS

According to literature review the main strategies for preventing and stopping cyberbullying are given below

1. Set a good example.
2. Stay connected with your children's worlds online and everywhere else.
3. Treat kids' freedom in the use of communication devices as a privilege, not an automatic right.
4. Teach kids not to do anything online that they wouldn't want the world to see.
5. Teach young people how to take charge of their safety and well being, online and everywhere else.

CONCLUSIONS

Cyberbullying is unsafe and disrespectful behavior . But the children can be protect from it. The pediatric nurses can act as advocator and teach the strategies to parents for digital safety. By this way the parent make allert to this unwanted occurance

KEY WORDS

Cyberbullying, Digital safety, Pediatric nursing, Advocacy

P10- Examination of Digital Game Habits of High School Students

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Abstract: Digital games are becoming more and more popular among today's students. Digital games are used directly or indirectly in many areas such as marketing and communication. In terms of of education, digital games allow students to socialize and also provides stundents with the development of motivation and self-regulation skills. Digital games have become an important pedogogical tool thanks to such benefits. It is important to know the habits and preferences of the students who play digital games to get the best benefit in education. Because the habits and preferences of individuals playing digital games are seen as a cultural phenomenon. So it is necessary to know the preferences and the habits of learners in the target culture. The aim of this research is to analyze the digital gaming habits of high school students. This study is based on survey model. It was conducted in a province in Western Black Sea Region. It was carried out an Anatolian High School students. Participants of this research consist of 418 high school students. The survey was conducted by means of a questionnaire developed by researchers. This questionnaire contains questions about the demographic information of students and determination of the habits of playing digital games. In the analysis phase the percentage, frequency, mean and standart deviation were used. 49.2% of male students and 50.8% of female students participated in the research. 97.3% of the students have a smartphone but 2.7% of the students do not have a smartphone. Also 81.8% of the students have the smartphones with internet connection. When it comes to the frequency of playing digital games 33.7% of the students play digital games everyday, 14.1% play digital games three or four days a week, 25.3% play digital games one day or two days a week, 16.2% play digital games a few times a month. When it comes to the frequency of daily digital gaming 20.5% of students play digital games less than an hour, 21.7% of students play one or two hours, 9.6% of students play three or four hours, 1.2% of students play for five or six hours and 1.2% of students play 7 hours and more. When students are asked where to play their digital games, 50% of students play their digital games on the smartphone, 3.3% of students play digital games on tablet, 3.3% of students play digital games on game console, 6.2% of students play digital games on PC, 34.4% of students play on their laptops. 72.2% students who play digital games say that they play single-user digital game. 27.3% of students say that they play multi-user digital games. When it comes to multi-user digital games, 0.7% of students say that they play with their parents, 23.4% of students say that they play with their friends, 75.9% of students say that they play with unfamiliar people on the internet. 19.1% of students say that they go to the internet cafe to play digital games. When the findings obtained from research are

examined, it is understood that the most majority of high school students have a smartphone with internet connection. Also half of the students play their digital games through the smartphones. These findings can be considered as an important opportunity for the applicability of mobile learning and mobile educational games. When the frequency of students playing digital games is examined, it is determined that one of every three students play a digital game everyday. While most of the students are playing single-user digital games, multi-user digital games are played with unfamiliar people on the internet. There is a possibility that students will be able to cope with unwanted situations and behaviors such as bullying while playing unfamiliar people on the internet. There is not a lot of students who play multi-user digital games with their family. This finding points to the inadeguancy of parental control in multi-user digital gaming environments. As a result of research findings, it has been discussed what can be done about the digital game playing habits of students and various suggestions have been made to families, aplicants and policy makers.

Keywords: High school students, Digital game playing, habits

P14- The Importance Of Intervention To The Problematic Gaming Behavior According To The Stage Of Adolescence

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A large proportion of young people spend their free time by playing computer games, watching a series or surfing among social media accounts. When this becomes a habit, academic success falls, sleep problems, posture disorders and weight problems arise. For some, playing online games is harder to stop, because there is someone alive on the other side and everything is much more realistic. As the pleasure of the player increases, he wants to play even more and this vicious cycle goes on. Problematic gaming behavior, which is not considered as a disease until recently, has been included in the DSM-5 (Diagnostic and Statistical Manual of Mental Disorders) for the first time in 2013. Thus, gaming that disrupts functionality is considered pathological. Teachers, psychologists and physicians are consulted to correct this disease/problem. When an intervention is made to an adolescent's problematic game, the child's stage of adolescence should not be missed.

Adolescence is divided into three stages as early, middle and late adolescence. The physical and psychosocial development of each stage is different. Cognitive development occurs in the child between the ages of 10 / 12-14, which constitutes the early adolescence period, and the child passes from concrete thought into the abstract thought. The tendency of the game curiosity to turn into addiction frequently occurs in this period. In early adolescence, children prefer to play games with same-sex. In the past, when these games were played in school halls or in the neighborhood, they are now in the form of online games. On the online side, there is a friend he usually does not know. However, in these games, dependence can develop depending on the weakening of self-control and external control. İn this stage the adolescent think more unrealistic and include the success of the online game in the future plan. Even dreaming of making lots of money through online games.

Between the ages of 14-17, which is defined as middle adolescence, the peer effect is highest. In this period, in addition to game and social media addiction, substance addiction like tobacco etc. may also arise. Impulsivity increased during middle adolescence. In this period, it is diffucult to control the adolescent. It is a priority to be accepted among the peers and to be included in a group. This group may be an online gaming group or a sports team.Evidence suggests that friends are the primary source of influence on youths' behavior.

In this presentation, two male cases, one of which is early stage and the other is middle stage, will be discussed. The first case was 12 years old and was brought to the hospital by his parents due to overweight. It was determined that the main problem was the online

game addiction. It was learned that he had a 17-year-old brother who was said to be addicted to the Internet. Mother and father were working parents. It is stated that there is no one at home when the child comes home after schooling, and that he is busy with the computer and plays game until the bedtime. The dinner time turned into a nightmare at home, and they usually do not eat together. Several attempts were made to shut down the Internet and set a limit on the child, but the parents failed. When the patient was interviewed it was learned that his future plan is purely gaming and his dream of becoming rich by playing games is very realistic from his point of view. Regarding this case, work was carried out within the scope of setting a limit, quality time with the child and creation of individual activities. In early adolescence, parents should set boundaries and organize social activities and sports activities that the child can love. In this period, the strong sides of the child should be supported by the family.

The other patient was a 15-year-old male with headache complaints. The patient could not go to the school the next day because he played as much as, and there was a problem of absenteeism with the school. This patient was aware that online gaming behavior was problematic. But he said he could not stop himself, but liked playing games at the same time. It was not possible to set a limit for our mid-adolescent patient. In this era of rising impulsivity, such an adolescent can do all kinds of risky behavior and harm himself. A motivational interview was conducted with our mid-adolescent patient to limit the gaming and the study was conducted in the context of the patient's future plan. Motivational interviewing and some behavioral suggestions were made to work on self-limiting issues.

Consequently, adolescents' age, pubertal stage and cognitive development should not be missed while intervention is being done to problematic gaming during adolescence. For this reason, it is considered that the appropriate treatment of such interventions in individual and adolescent stages will increase the success.

P17- Identity Seeking in Digital Games

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Abstract: Identity is a term that clearly or implicitly implies who the person is in general. Prior to today's digital transformation, identity development was being built in a relatively restricted area based on existing physical realities and past experiences. The widespread use of social platforms has allowed individuals to interact more with other peoples. These social platforms can be real physical worlds as well as virtual. The boundaries between real and virtual are increasingly blurred with today's technology. Thus, virtual world users can create new virtual identities by formatting their images (avatars and profiles etc.) according to their wishes. Virtual platforms with no limitations, such as physical facts, constraints or penalties, create an environment in which individuals can create their virtual identity as they desire.

The virtual identity has a wide range of effects on digital games as well as on virtual worlds. In digital games, players who creating their own virtual identity through avatars can use different symbolic materials as they wishes. Therefore, the virtual identities used mostly in children's digital games have an undeniable precaution in the examination of children's identities. For this reason, it is necessary to examine not only the physical identities that appear in the examination of children's psycho-social developments but also the virtual identities in digital games. What is crucial here is how the virtual identity will hold the difference between the true-identity and the identity-represented to others. It is thought that the virtual identity created in digital games was created no to reflect the real physical characteristics of the individual, but to take steps in different worlds with different capacities and features. Virtual identities which used in digital games can be online or offline. Virtual identities created in offline games allow different identities to be created completely independent of the real world. In addition, in online games type of Massively Multiplayer Online Role-Playing (World of Warcraft etc.), players could found in share in connection with their real identity via online on social networks. This difference in online and offline virtual identities has also affected the ability of players to create avatars, depending on the connection between physical identities and virtual identities. On the basis of this situation, it is thought that the experience of interaction based on mutual-influence and influence in games is considered. The taking of experience as a basis for identity formation removes the differences of experience in the virtual world from the real world. In digital games, allowing players to manage their own avatar, determining new targets based on reactions from other players and moving towards this goal; provides players with the experience to gain experience and develop their identity depending on experience. It is stated that the identity that develops due to the interaction and experimentation in the digital games arises from

the union between the individual and the avatar, not from the source but from the unification. In other words, choosing an avatar independent of their gender in a player's digital vote does not reflect the tendency to be the other gender. The reason for this preference, the mission in the game may require such an avatar selection.

Another dimension to be examined for virtual identity in digital games is the ability to make the behaviors that thay are away from their Daily lives through virtual identities due to freedom and anonymity in virtual worlds. Individuals who do not commit crimes in the real world are experiencing criminal activity with the freedom of their virtual identities and the gaming environment in games (GTA etc.) that have experienced criminal experiences. This experience helps people to reveal their repressed feelings and provide them with pleasure. It is thought that this situation normalizes the crime which can be easily processed in the virtual environment. Within this period, it is thought that the individual can internalize dangerous virtual identities in digital games and may lead to criminal experience in the real world. In sum, it ist thought that the difference between the real identity, which keeps away from the crime in the real world, and the virtual identity that enjoys the crime in the digital games may lead to the division of identities of the players. In such a case, the players can manage the real identity and virtual identity according to the needs of the environment. Therefore, it is important to investigate the virtual identity that is influenced by experiences in digital games and how they reflect on the real identity of the players and it should be examined empirical studies.

P18- Investigation Of Digital Game Addiction Levels of Secondary School Students

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The ratio of played digital games through virtual environments reveals a dangerous over game addiction in children and adolescents. Evidence which are in the news of young people who commit suicide due to digital gaming consider this stuation, nowadays (http://www.milliyet.com.tr/mavi-balina-adli-oyun-14-yasindaki-teknoloji-haber-2517481/), (http://www.haberturk.com/gundem/haber/1586511-hakanin-olumu-intihar-cikti). Digital game addiction as is known that the mind is constantly engaged with digital playing games on virtual environments, thus individuals neglected its daily life tasks and responsibilities during for hours (Akçayır, 2013). Many families and teachers said that the reasons of students reluctant to study lessons and their lack of academic achievement is mostly spend their time playing computer games. In addition to, computer games seem to be quite powerful in attracting children and increasing their engagement to the virtual digital games environment. These environments seem to motivate children and increase their desire to play games, too.

Thus, children who become addicted to the game become integrated into the game and start living it in their real life. The most important indicator of this situation is that children overly associate themselves with the characters in the games, resulting in events leading to death. This is why computer games, online and digital game addiction etc., it is most important to investigate the topics (Horzum, 2011). From this point of view; the purpose of study is determined the 6th grade students level of digital game addiction according to gender and playing time. The method of the study was descriptive research and participants of the study is 6th grade students who is 229 students included to the study (37% girls, 63% male). Data collection tool developed by Hazar, Hazar (2017) which is composed of 24 items and 5 likert types, 'Digital Game Addiction Scale for Children' were used in the study. On the other hand, through the personal information form which is developed by the researchers are collected descriptives data about the time of the using daily information and communication technologies of the students, parental education level, number of siblings, which information and communication technology tool preferred by the students playing digital games, how the students prefer digital play, descriptive information about what kind of game they preferred to play is obtained data. According to the study findings, 64% of the students were found to be at low risk, 25% were risky, 6.5% were addicted, and 2% were highly addicted. As a result of the scores obtained from the digital game addiction scale total score and the subscales of the scale, the students' genders ($t=-5.68$, $p<.05$) and daily information and communication technology usage times ($F=15.94$, $p <.05$) were found to be significantly difference. According to the digital game addiction total score, the average score of the girls are 35.47 while the score of the men are 49.47. It is seen that with the

significant difference between the genders, the average score of the digital game addiction scale of males are higher than female students. In addition, when the education level of the participant group's mothers was examined, it was found that 4,3% (n=10) did not complete any education institution, 27,9% (n=64) primary school, 25,3% (n=58) secondary school, 28.3% (n=65) high school and 13.9% (n=32) university. Students' fathers educational level was examined that 7.9% (n=17) did not complete any education institution, 17% (n=39) primary school, 18% (n=42) were secondary school, 39% (n=90) high school and 18% (n=41) were graduated from the universities. When the number of students' siblings is examined, there are with one (n=68), two (n=88), three (n=44), four and over (n=12) siblings but 17 students have no siblings. The students prefer to play digital games by using 31% (n=71) smartphones, 25% (n=57) laptops, 23% (n=52) desktop computers, 20% (n=46) tablets. Students explained that which games they prefer; 55% (n=115) via friends who played digital games, 40% (n = 84) via game sites, 4% (n = 8) from social media, 1% (n=3) were their own choices. The game type preferences of the students were 53% (n =115) of action / adventure, 15% (n=34) of sports, 11% (n=24) fight, 8% (n=17) educational, 7% (n=16) simulations, and 2% (n=8) strategy games.

As a result, it was determined that there was a significant difference in the level of digital game addiction level of 6th grade students between gender, time of the daily using information and communication technology. According to the digital game addiction scale, 25% of the students were found to be at risk and 6.5% were addicted and so the students in the risky and addictive group constitute more than one fourth of total students. Thus, the rapid increase in death news related to digital game addiction and the results obtained from this study emphasized that further study on children and digital game addiction necessity.

Keywords: Digital game addiction, Gender, Time of the using information communication technologies

P19- Technology Related Addictions and Associated Factors in University Students

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Technology-related addictions are non-substance addictions that are examined within behavioral addictions. There are basic components such as withdrawal, tolerance, conflict and unsuccessful quitting attempts. There are many negative effects, including loss of functioning of the person in work or school life, deterioration in social and family relationships. They may also be related to physical problems other than mental problems and the life effects in general.

Technology-related addictions are current and growing problem and this topic has also become frequently investigated. But there is a need to examine different risk factors for these addictions in different age groups such as university students. The aim of this study is to determine the level of technology-related addictions in university students and to investigate the factors that may be related to these addictions.
This cross-sectional study included 1352 students. A multistage sampling method was used to select the sample. Faculties and colleges of Pamukkale University are weighted according to the number of them in Kınıklı campus. 4 faculties and 1 college were randomly selected. All the classes were included in the research by randomly choosing sections from each faculty or college and also randomly choosing one branch if it's a section with multiple branches.

A questionnaire consisting of 69 questions was applied to participants in order to assess the status of addiction and related factors of them. In the study, internet addiction, smartphone addiction, Facebook addiction and digital game addiction were measured as technology related addictions. These measurement tools are valid and reliable in Turkish language and in university student population. The relationship between these addictions and socio-demographic factors, the chances that students have, amount of time spent in activities and the age of first use of the realted technology were examined by analysis of variance, regression and correlation analysis.

The factor associated with each of the four addiction types in the study is low academic achievement. Poor health status perception has been associated with internet, smartphone and digital game addictions. While men were more risky for digital game and Facebook addiction, women were more at risk for smartphone addiction. The internet connection in the place of residence was related to internet, smartphone and Facebook addictions. Low paternal education was related to Facebook and digital game addictions. While being a Communication Faculty student has been associated with internet and smartphone

addictions, being a student at the Faculty of Technology has been found to be a risk factor for digital game addiction. Apart from these common factors, several other independent risk factors were determined for these addictions. Alcohol use, spending less time in social activities, having a private room were found for Internet addiction; living in private residence and early ages of computer use initiation were found for smartphone addiction; low family income, spending less time in activities with family were found for Facebook addiction; age, television ownership and the age of first playing digital game were found to be independent risk factors for digital game addiction.

When the addiction levels are compared with other studies in the literature, the level of internet addiction in this study is lower than studies conducted at younger ages and higher than the abroad studies conducted in the general population. The levels of smartphone addiction are generally somewhat higher and Facebook addiction levels are slightly lower than those found in similar studies in previous years. Game addiction was found to be similar to the literature in our country, lower than some studies conducted in foreign countries. Most of the factors related to the addictions in this study are compatible with the literature. Similarly the correlations of technology-related addictions have shown once again.
Although technology-related addictions correlate with each other and have some common risk factors, there are specific risk factors for each addiction. In the established models, the percentages of variance explained are low, which may mean that different variables could be related to these addictions. Taking these into consideration, new prospective studies can be planned or intervention programs can be developed.

Key words: technology, addiction, student

P20- Teaching Mathematics to Pre-school Education with Augmented Reality Technology

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In education, all processes are generally carried out in the form of literacy. Since the use of technology and information in the classroom, these concepts have not given the expected effect under the behavioral education approach. The literacy approach has gradually begun to decline in many stages. Graphic interface systems and web technology, especially developed with computer and mobile technologies, have enabled the creation of interactive digital media in education. Virtual reality applications, which have many usage areas in education, have created real-life experiences in three-dimensional virtual space created by computers. Using augmented reality technology, which is the virtual reality domain, it has begun to create environments where both computer-generated virtual objects and real-world objects can be used interactively. The use of both virtual reality and enhanced reality environments enables learners to engage in learning activities in a controlled environment and gain virtual learning experience. With the use of these technologies in the lessons, it becomes easy to teach, love and adapt the lessons to the students at all levels. From this point of view, it is very important to make the teaching of mathematics easier and fun for young people. Visual objects are used while basic mathematical operations are taught in primary school books. With the help of visual objects, the qualitative values of these can be taught to the students easily. For example, using basic visuals of objects such as apples, notebooks, and stars, basic mathematical operations are handled with a different perspective on the child's mind. Assume you have a basket picture and an apple inside. And there are three apples outside the basket, let's represent them with their pictures. In another picture, there is a basket with apples on the outside and you are asked how many apples are in the basket. As in the example, teaching is done by associating it with real life by a different method instead of just doing calculations by numbers. In real life, this kind of mathematical operations can be taught by treating these objects as singular, but it is not easy to find objects of different kinds. In addition, preparation and organization of such environments are both very troublesome and time consuming. Instead, we can do the same operations effortlessly in the virtual environment, and we can diversify it. This process can be accomplished using virtual objects of real life using augmented reality technology. With such designs, it is possible to improve that learning by playing with young children. The development of new approaches through the use of digital games in educational technologies, the increase of digital designs for future education, and the emergence of different platforms for mentally and physically disabled children. In this study, with the help of the augmented reality technology, it is thought that in addition to mathematics education for young people, it is important for them to use this technology and develop digital games in their educational activities related to vision, motor skills and analysis skills.

Keywords: Augmented Reality, digital game, game software development, mathematics

P21- The Negative Effects of Digital Gaming on Children's Health and Development

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Objectives: Today, digital technologies are used in many areas such as education, health and entertainment. One of the most common among digital technologies is digital games. Digital games are usually played for leisure, entertainment and pleasure. Digital games, which are quite common among children, have the benefits of entertainment, enjoyment and learning, but their damages such as digital play dependency are also a serious threat. Digital games can be played on consoles, tablets, smartphones and computers. It is discussed how digital games affect these developmental areas by considering the physical, emotional, language and cognitive development of this age group. The proliferation of digital gaming usage areas, and especially the increasingly restricted use of outdoor playgrounds, is becoming an indispensable part of children's daily lives and is thought to cause not only positive but also negative effects on children. In this context, it is believed that children's screen dependence and the prolonged time spent on digital games lead to reduced face-to-face communication with their peers, resulting in decreased group play and increased solo play. However, it is thought that children play digital games in inappropriate content, time, frequency and different posture positions, and they cause health risks such as developmental problems, musculoskeletal system problems, physical inactivity. For this reason, the aim of our study was to investigate the adverse effects of digital play on children's health and development.

Methods: The study was conducted between January 4 - March 4, 2018 on the basis of the opinions of 139 parents aged 7-15 years. A questionnaire prepared by the researchers was used to evaluate parents' potential adverse health effects of their children's digital gaming on 11 questions. Responses given by the parents to the questions were recorded and analyzed.

Results: The average age of the parents participating in the study was 40.6 ± 6.3 years. It was determined that 9,6% of the parents' education levels were at the level of the postgraduate, 50,4% at the bachelor level and 20,1% at the high school level. The average age at which children start playing digital games is 4.5 ± 1.6 years. It was determined that the digital play time of the children during the day was 112.9 ± 95.7 minutes. Children participating in the study, 65.7% of them played in the computer, 72.1% in the mobile phone, 85.2% in the tablet and 24.5% in the game console. According to parents, playing digital games negatively affects children's health and development; 87.1% said that playing digital games for a long

time is addictive to children, 74.8% of violent games cause aggressive attitudes by affecting the mood of children, 72.5% affected spinal health in the negative direction due to postural disorders, 70.0% cause dryness, pain and redness in the eyes, 69.7% of them cause socialization and decrease in intra-family communication, 62.2% lead to sleep disorders such as late sleep, late waking and a decrease in sleep duration, 58.2% reduce physical activity and trigger obesity, 57.8% cause distractibility and impaired concentration in children, 45.2% cause head and neck pain, 41.3% of the children reported that their children had musculoskeletal problems on their shoulders, elbows, wrists and fingers, 37.1% reported that they were experiencing limping and developmental retardation in language development.

Conclusion: According to the findings of the study, it was seen that the children who play digital games have fallen as early as the preschool period and spend up to two hours in the day for this activity. According to parents, playing digital games is addictive as negative effects on children's health and development, causes aggressive attitudes, negatively affects spine health, causes dry eyes, causes pain and redness, causes sleep disorders, decreases physical activity level and triggers obesity have been reported as the most important problems. We think that it is important that the duration, frequency, and content of digital gaming are monitored by parents in order to improve healthy life in children.

Keywords: digital game, technology, child, health problems, parents

P22- Are We Really Social With Social Media?

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Abstract: In human history, the first wave is revolution of agriculture, the second wave industrial revolution, the information revolution or the transformation to information society are described as the "third wave" also (Toffler, 1980). The information revolution, described as the third wave, brings a new way of life in the economic, social, cultural and political areas. Information and Communication Technologies are regarded as one of the most important factors that provide this structural transformation in the process of transition from industrial society to information society. Besides use of laptop computers and pc's, with the widespread use of mobile devices and increased transfer speeds, access to online environments has become easier than all the time. Not only this situation makes online environments appealing for people of all ages, but also it increases the importance of necessity to digital competencies that must have been possessed of users. In that, misuse or excessive use that emerge in the case of lack of inadequate competencies that must have been possessed of users is interpreted as usage disorder or addiction in the literature. Evaluating internet addiction from a different point of view, Young mentions that the internet itself is not an addiction actually, instead, its interactive features and specific applications play an important role in the development of pathological internet usage. In parallel this, the diversity of research that is conducted on the psychological, social and physical problems caused by unconscious, excessive and uncontrolled use of the internet for the purpose is increasing. Today's children of "Z Generation" who are also called "digital natives" are growing up in online media environment, which contains social networks, gaming, sharing videos and text messages. According to survey which was conducted by TUIK in order to determine purpose of personal usage of internet on last three months in our country, the percentage of those who use internet for "social networks" was for males 86.9%, for females 79.5% and for totally 83.7%. Online environments have become a needed technology rather than arbitrary to be used by all age groups in almost every aspect of life. Becoming social is a fundamental for the development of new forms of life and being. But, in our school years, when we wanted to communicate with our friends, we talked with them or sent notes which were written with our own handwriting. Nowadays, adolescents use Facebook, Instagram, Twitter and Whatsapp etc. to communicate with each other while they are even sitting in the same classroom. Actually, these behaviours, which seem ordinary habits in everyday life, are not in only dimension of behaviour due to extreme and irregular social media uses in recent times, but it is obvious that they are turning into addictions without being noticed. Therefore, it is necessary to assess the risks carried by the results which are generated by effects of applications that are developed in parallel with the technological advances that young people adapted quickly, rather than to qualify beneficial

or harmful. Especially, investigating the purpose, frequency, duration and meaning of social media environments of the students in the school age according to their development periods is important on behalf of reducing risks that will be encountered. The fact that the individual spends an average of 3 hours a day in social media means that totally one and half month of the last year has been spent on social media environment incessantly. Nowadays it is an undeniable fact that social networks have been reshaping people's communication, business relations and even learning processes. Here is a double-edge sword: despite the fact that this sites and digital tools offer new portals for entertainment, communication, education, social interaction, on the other hand, it should be considered that their unbounded engagement with digital media has also raised serious issues. For this reason, it has been witnessed that the exponentially increase of researches which are conducted on excessive use of social media and its addiction. According to these studies results, excessive use of social media cause depression, anxiety, social anxiety, less life satisfaction, less selfesteem, social isolated, low academic performance, mental health problems, addiction and cyberbullying. Also in our schools, besides some positive results of increasing social networks usage among our students, we observe that it causes some behaviours like loneliness, decrease in face-to-face communication, addiction and digital bullying. These research results and problems that we encounter in school environment have motivated us for this project. In this context, the priorities of the project; developing the digital competencies to use the social media consciously, creating awareness about the disadvantages of social media, observing the efficiency of good practices conducted internationally and put forward innovative suggestions. Project is planned with three different European countries (Italy, Portugal, Romania) cooperation in to 2 years of Türkiye coordination. Studies will be carried out using the "Social Media Disorder Scale" which was developed by van den Eijnden et. al. (2016) and adapted to Turkish by Uysal et. al. (2017) to reveal the current situation and intercultural differences. The curriculum of partner countries will be examined and a draft curriculum will be prepared which including 21st Century skills. It is thought that the project will be carried out internationally and that project outputs will gain a global perspective. For this reason, awareness of the project is important in terms of dissemination and reaching of the project outputs to wider masses.

Keywords: Social Media, Disorder, Digital Competences

P24- Bilişim Teknolojileri Öğretmen Adaylarının Oyun ve Oyunlaştırma ile ilgili Bilgi Düzeylerinin Belirlenmesi

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Oyunlar, dünya üzerinde milyonlarca insanın önemsiz bazı görevleri yerine getirmek için saatlerini harcamasına neden olmaktadır. Bu durum, oyunların bu özelliğini farklı amaçlarla kullanmak amacıyla çeşitli yolların araştırılmasına yol açmış ve oyunlaştırma kavramı ortaya çıkmıştır. Oyunlaştırma, oyun olmayan bağlamlarda oyun bileşenlerinin kullanılması olarak tanımlanmaktadır. Oyun bileşenleri; hedefler, kurallar, anında geri bildirim, görevler, puan kazanma, zorluk seviyesi gibi öğeleri içermektedir.

Ticaret, pazarlama, yönetim, sağlık gibi sektörlerde yaygın bir şekilde kullanılmaya başlanan oyunlaştırma uygulamaları eğitim alanında da kendine yer bulmuştur. Öğrenciler tarafından sık sık sıkıcı ve etkisiz olarak nitelenen geleneksel öğretim yöntemleri öğretmenleri sürekli yeni öğretim yaklaşımları aramaya itmekte, özellikle öğrenci motivasyonu ve katılımı ile ilgili yaşanan büyük problemler, eğitimcileri oyunlara ve oyunlaştırmaya yönlendirmiştir. Eğitim açısından bakıldığında oyunların en önemli gücü insanları, herhangi bir konu hakkında bilgi edinme, beceri geliştirme ya da işbirlikli araştırmalara katılma konusunda saatlerini harcamaları için motive etme kabiliyetleridir ve bu tamamen gönüllü bir eylemdir. Eğitsel oyunların öğrenme araçları olarak kullanılması, oyunların öğretme yetenekleri ve sadece bilgiyi değil aynı zamanda problem çözme, işbirliği ve iletişim gibi önemli becerileri de desteklemesidir. Oyunların öğrenen ve öğretim üzerindeki bu katkıları oyun bileşenlerinin öğretim süreçlerinde kullanılmasını, dolayısıyla oyunlaştırma kavramının eğitim alanında yaygınlaşmasını sağlamıştır. Eğitsel anlamda oyunlaştırma, öğrenmenin etkinliğini arttırmak ve öğrencilerde istenen davranışları teşvik etmek için öğretim süreçlerinde oyun dinamikleri, mekaniği ve bileşenlerinin kullanılması olarak tanımlanabilir. Oyunlaştırma öğretim sürecinde değerlendirme, tekrar ve alıştırma, içeriğin sunumu gibi aşamalarda kullanılırken başarıyı, kalıcılığı ve motivasyonu arttırma, öğrenenlerin dikkatini konuya çekme, öğretimi eğlenceli hale getirme ve öğrenenlerin öğretime aktif katılımını sağlama gibi katkıları bulunmaktadır.

Oyunlar ve Oyunlaştırma metotları günümüzde okul öncesinden yüksek lisansa kadar her türlü eğitim kademesinde; fen, okul öncesi, bilgisayar, matematik, dil eğitimi gibi birçok farklı alt alanda kullanılmaktadır. Ayrıca lisans düzeyinde birçok bölümde bu kavramlar ile ilgili zorunlu ya da seçmeli derslerin açıldığı görülmektedir. Bu bölümlerden biri de teknoloji ile doğrudan ilişkili olan Bilgisayar ve Öğretim Teknolojileri Eğitimi (BÖTE) bölümüdür. Mezunlarının okullarda teknoloji lideri ve rehberi olarak görev aldığı bu bölümdeki öğrencilerin ilgili kavramlar hakkındaki bilgi düzeyleri öğrencinin alan yeterliliği için önemlidir. Bu kapsamda BÖTE öğrencilerinin oyunlar ve oyunlaştırma kavramı ile ilgili ön bilgi düzeylerinin belirlenmesi araştırmanın genel amacı olarak belirlenmiştir.

Bu çalışma 2017-2018 akademik yılı bahar döneminde İç Anadolu Bölgesinde yer alan bir devlet üniversitesinin Eğitim fakültesi BÖTE Bölümü dördüncü sınıfında eğitim görmekte olan Bilişim Teknolojileri öğretmen adayları ile gerçekleştirilmiştir. Çalışmaya toplamda 42 öğretmen adayı katılmış olup, katılımcıların tamamı Milli Eğitim Bakanlığına bağlı orta okullarda öğretmenlik uygulamasına gitmektedir. Bu çalışma kapsamında öğretmen adaylarına kayıtlı oldukları seçmeli, dijital oyun tasarımı dersi kapsamında genel olarak oyun kavramının tanımı, oyunların kullanım amaçları, oyun bileşenleri ve aksiyonlarının neler olduğu, oyunların eğitsel kullanımı, eğitsel oyun kavramı, oyunlaştırma kavramı ile eğitsel oyun arasındaki farkların neler olduğu gibi sorular yöneltilmiştir. Okullarda bilişim teknolojileri derslerini vermenin yanında, okulun teknoloji lideri olarak öğrencilere, idarecilere, diğer öğretmenlere ve hatta velilere teknoloji konusunda rehber olması beklenen Bilişim Teknolojileri Öğretmen adaylarının dijital oyun, oyunlaştırma ve oyun temelli öğrenme konularında bilgi sahibi olmaları beklenmektedir. Ancak katılımcıların verdiği cevaplar incelendiğinde genel olarak bu konularda yeterli bilgi sahibi olmadıkları görülmüştür. İlk olarak oyun kavramını ve amaçlarının neler olduğunu tanımlamaları istenen öğretmen adaylarının genel olarak "vakit geçirmek" ve "eğlenmek" kelimelerini kullandıkları görülmüştür. Ardından oyun bileşenleri ve aksiyonlarının neler olduğu sorulan öğretmen adaylarından hiçbiri bu soruya doğru yanıt verememiştir. Öğretmen adaylarının bir kısmı sorunun cevabını bilmediklerini belirtirken, büyük bir kısmı ise yanlış cevaplar vermişlerdir. Öğretmen adaylarına yöneltilen bir diğer soru da oyunların eğitsel kullanımının nasıl olabileceğidir. Öğretmen adaylarının neredeyse tamamı oyunların öğrenmeyi eğlenceli bir hale getireceğini ve öğrenilen bilgilerin kalıcılığını arttıracağını belirtmişlerdir. Öğretmen adaylarının oyunlaştırma ve eğitsel oyun kavramlarının tanımı ile aralarındaki farkların neler olduğunun sorulduğu üç soruya verdikleri yanıtlarda bilgi karışıklığı yaşadıkları görülmektedir. Öğretmen adayları genel olarak oyunlaştırma ve eğitsel oyun kavramlarını birbirine karıştırmakta, bundan dolayı da aralarındaki farkları tam olarak belirtememektedir. Çalışma sonuçları genel olarak göstermektedir ki okulların teknoloji entegrasyonu, eğitimde teknolojinin etkili ve verimli kullanılması vb. pek çok görev ve sorumluluğu bulunan Bilişim Teknolojileri öğretmen adaylarının dijital oyunlar, oyunların eğitimde kullanımı, oyunlaştırma gibi konularda büyük bilgi eksiklikleri bulunmaktadır. Bu eksiklerin giderilebilmesi için BÖTE bölüm müfredatına dijital oyun tasarımı, oyunlaştırma ya da oyun temelli öğrenme gibi derslerin eklenmesinin faydalı olacağı düşünülmektedir.

P25- The Risks Of The Children And Adolescents That Encountered During Playing Online Games

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INTRODUCTION: Playing is a bridge between thinking and meaningful, active, joyful, voluntary and rule-based activities. Childhood plays are the roots of the next life of children. Nowadays, the trends in the games have changed after the easy internet access and usage of the digital tools. Computer games are integrated to the lives of today's children. Computer games have positive effects on development by the games supporting attention and cognitive development, motivation, sensory development, but also have negative affects like reducing sociability, increasing violence and brutality, and creating a risk for exploitation and peer bullying. In this study, it is aimed to evaluate the demographic data about the digital games and its environment and also the risks of the children that they encounter like disturbing images, wording, speech and advertisements when playing.

METHOD: The study was applied to the children and adolescents who admitted to Dr.Sami Ulus Maternity and Children Health and Diseases Training and Research Hospital, General Pediatric Out-Patient Clinics. A questionnaire was used. The survey results were evaluated by SPSS 21 packet application.

RESULTS: The hospital area where the work was done is located in a socio-cultural and economically disadvantaged area of Ankara. 58 children and adolescents [39 male (67.2%); 19 girls (32.8%)] participated in the study. The average age is 12.9 years (8-18 years). 65.5% of the children who participated in the survey had social media account; 55.2% had a mobile phone with internet access. Social media accounts were opened at an average age of 9.94 (6-13 years). The first social media account is Facebook with 92.1%. Other social media accounts they had were Instagram, Twitter, Snapchat and Pinterest. 89.47% of those who had social media accounts use their first and last name as their user name and 71% make their own photo profile picture. 65.5% had an e-mail account. 63.8% of respondents stated that they did not encounter disturbing expressions (such as profanity, insult, nickname and threat) on the internet. Online gamers play an average of 2.7 years (1-7 years) and play an average of 2 hours a day. Most of the games are played on their own or with familiar friends. 32.8% (19 children) reported that they made friends through internet or social media. 17.2% children play games with people they do not know. The most frequently played games are strategy, war, match games.

46.6% of the participants told that they messaged during the game. The messengers have often communicated with friends about the game. 31% of the participants talked over the internet during the game. 6 children met in real life with the people they met during the game. These children have informed their family. One of these children was 8 years old. Twelve children stated that they saw disturbing images during play and that they were the most sexual images. Other disturbing images are described as terrible-frightening or commercial.

Twenty-five percent of the children were confronted with disturbing expressions during the game, of which 86.6% were defined as insults and the others were insulted and inappropriate. 81% of the children reported that they had encountered advertisements during the game and 10.6% of them had a sexual content.

DISCUSSION AND CONCLUSION: Children who play are online gamers, chat with strangers, and meet them in real life. Another negativity that children experience is that they encounter disturbing images and expressions. The majority of them are sexual images and profanity. They also often encounter advertisements during play. This shows that children living in a particularly risked socio-cultural environment are at risk of serious spoilage while playing online games. An effective awareness-raising activity must be carried out for all children and children who are able to reach this technology, regardless of socio-economic level, in order to make their environment safe.

P26- Digital Games and Child: A Case Analysis with Positive and Negative Examples

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Games are important for children's development and plays a significant role in to be healthy individuals. Advances in technology have changed the game concept, and games have been moved from outside to digital. Digital games that can be played on desktop computers, portable computers and mobile devices have the ability to be played individually or together as they can be played online or offline. Especially the development in internet and mobile technologies has enabled digital games to turn into a bazaar used by billions of players in the world. Digital games played by individuals of all ages. Digital games are the most important entertainment source for children. Digital games, which are an indispensable tool for having fun, cause positive and negative effects on the development of children. For this reason, digital games are an important research topic for researchers. In literature, there are studies which determine the effects of digital games on situations such as cognitive, emotional, physical and psychological development of children. There are also studies which determine student and parent views about digital games. With this study, it was aimed to determine the positive and negative effects of digital games on children according to digital game researches carried out with children in our country. For this purpose, key words such as "digital game", "computer game", "digital game addiction", "educational computer game" have been searched in the Council of Higher Education thesis center and Google Academic database. The results of the studies are classified in the context of the positive and negative effects of digital games on the development of children. It is aimed to find out the situation in our country. In addition, it is aimed to make recommendations to teachers, parents and administrators.

In the studies pointed out that digital games have some positive effects on the development of children. It emphasizes the necessity of using digital games in education environments. Because children are interested in digital games. It is stated that digital games allow children to feel better by increasing their motivation and self-confidences. Results show that digital games allow children to become computer literacy and develop their visual spatial skills. It is stated that the use of educational digital games make learning easier and provide meaningful and better learning environments. One of the important contributions of digital games to educational environments is learning by amusing. In the courses conducted with educational computer games, it is stated that the students take more active role, use decision making and problem-solving skills more effectively. And studies have shown that educational computer games have improved academic achievement and retention. There are also studies indicate that the negative effects of digital games on cognitive, emotional,

physical and psychological development of children. In these studies, it is stated that digital games cause children to be trapped in the home. And these studies show that digital games prevent from face-to-face communication and socializing.It is also a result of the studies that children usually play violent games and that these games cause children to tend to violence. It is seen that the most mentioned issue on adverse effects is digital game addiction. There is no definite accepted definition of digital gaming addiction. Digital play addiction can be defined as been having trouble in school, business, academic and social life due to the desire to play continuously. It is stated in the studies that digital game addiction is seen among the children and it affects the lives of the children negatively. It is also seen that digital game addiction are investigated according to family situation. This situation reveals the importance of the concept of digital parenting.

Keywords: digital games, digital game addiction, educational computer game

P29- DİJİTAL KALABALIKLAR İÇİNDE YALNIZLAŞAN ÇOCUKLAR

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Dijital çağ olarak adlandırılan yeni zamanda, kişinin yeni sosyalleşme mekanları Facebook, Instagram, Twitter, Snapchat gibi sosyal medya platformalarıyla WhatsApp gibi yeni iletişim alanları olmuştur. Bu alanlar mobil iletişim sayesinde zaman ve mekandan bağımsız bir şekilde kullanıldıklarında kişinin sanal ortamlarda kendisini ifade etmesini ve sosyalleşmesini kolaylaştırmaktadır. Kişi, bütün hayatına etki edebilecek şekilde artan bir dijitalleşme içinde bulunmaktadır. Dijitalleşmenin gündelik hayatın tüm alanlarına etki etmesinin neticesinde dijital medyanın rolü oldukça artmıştır. Ancak dijitalleşmenin tüm yaşantılara etki etmesiyle birlikte, yabancılaşma, toplumsal izolasyon ve yalnızlaşma gibi kavramlar ortaya çıkmaktadır. Kişinin ruh halini ve davranışlarını olumsuz yönde etkileyen psikolojik ve sosyolojik durumlarla karşı karşıya kalınmasına neden olmaktadır. Özellikle çocukların önceki zamanlarda parklarda ve sokaklarda yaşadıkları oyun etkinliklerinin yerini, son yıllarda evlerde ya da internet/oyun salonlarında, bilgisayar başında gerçekleştirilen sanal etkinlikler almıştır. Bu bağlamda çalışmanın amacı: çocukların dijitalleşen dünya içinde hangi konumda oldukları konusunda yapılan uygulama ve çalışmaların incelenmesi amaçlanmıştır. Çocukların dijital kalabalık içinde yalnızlaşmamalarına ilişkin öneriler alan yazın ışığında tartışılmıştır. Çalışmanın gelecekteki çalışmalara ışık tutacağı beklenmektedir.

Anahtar Sözcükler: dijital çağ, çocuklar, sosyal medya

P31- The Relationship Between Digital Game Addiction and Personal Qualities and Achievement

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Abstract

Digital games are electronic games that people interact with through an interface. Gaming platforms (mobile phones, tablets, etc.), which have improved the portability and the ability to connect to the internet at any time and place, have become very popular. Starting from very young ages, research conducted on digital games played by all age groups shows that one out of every six people in the world plays these games. In Turkey, it is stated that the number of digital games played as of 2016, reaching 30 million of those.

Extremely devoted behavior to digital games by children or young people (parents, educators, policy makers, etc.) has become one of the major sources of concern. At the heart of this concern addiction and wrong play choices can affect both the psychological situation and the social behavior of children and adolescents negatively, regardless of the age. Psychosocial negativities such as aggressive behavior, showing tendency to violence, desensitization towards violence, loneliness and anxiety are the main causes of these negativities.

Although digital games are said to have positive aspects such as mutual sharing, goal setting, reasoning, concentration, decision making and encouraging desire for achievement, another important negative result of game dependence can be observed in the education life of the students. These negativities arise as behaviors such as unattendance in school, uncompleted homeworks, failed exams.

In this study, it is aimed to compare the individual characteristics of young people with and without gaming addiction to their success and to find new evidence on the subject. The survey was collected from 446 university students who are still attending their education. Data collected with a scale consisting of items including the behaviors and emotions before, during and after the game are statistically grouped with the help of clustering analysis. As a result of the conducted clustering analysis, the research sample is divided into three groups. These groups are; game addicts (addicts), tendencies to be addicted (candidates) and conscious actors (conscious). In terms of the items included in the scale, those who are in the dependency group have values well above the mean values, while those who are in the candidate group have values that are partially above the averages.

In the comparison analyzes carried out among the emerging groups, no difference was found in terms of income, age and weight problem. On the other hand, it was found that approximately two-thirds of the members of the addiction were men. It is also seen that

there is a difference between the groups in terms of the age of starting with the game in digital environment and the number of activities performed per week.

In addition, it is found out that, in terms of performance variables, as the game addiction statistically increases (study group of addicts and candidates), the study hours decreased and the general academic average decreased compared to the conscious group. Another important finding in the study is that digital gaming addicts and addicted candidates did not accept themselves as failing in terms of the course.

Key words: Digital game, Digital game addiction

P33- Examination of Game Preferences of Junior High School Students

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Abstract

Nowadays, there is a dizzying change and progress in the field of science and technology from day to day. Information technology also playing part in this changement and progress. Computer is the most beautiful and advanced mentioned products of this changement and progress. When we look at the historical process, it is seen that computer games has entered our lives in a short time with the emergence of computers. The purpose of this study is to determine the digital game preferences of junior high school students and to examine their habits of playing games. From this aim, the answers to the research questions that directed the study were searched and the relevant literature was done. The research questions that lead the study are; "What are the computer game preferences of junior high school students?"; "What are the reasons of junior high school students play computer games? Are there a significant relationship between junior high school students' gender, socio-economic level and condition having a computer or not? This research contributes to other studies carried out in Turkey by supporting common themes and findings of this study are important in terms of strengthening. The study was carried out on a total of 58 junior high school students studying in Selcuk, Karatay and Kadinhani districts in the province of Konya in 2017 - 2018 academic years. 8 students did not answer open-ended questions full were removed from the study group and the study was continued over the remaining 50 students. The study group was 24 (48%) male and 26 (52%) female students. Participation in the study was based on volunteerism. Direct quotations were also made from participants. In order to examine the game preferences of middle school students, a mixed research method was used as a research model and survey and interview techniques were used for collecting the data. Descriptive study of survey method was used. The aim of the research is primarily determined to do the research and inventory to the test these objectives was found. In order to determine the student's game preferences according to the research objectives an inventory in two parts was developed by the researchers. In the first part, there are the items to determine the demographic information (gender, socio-economic level etc.). In the second part, Orlick's "Game Classification Model" application that has been transformed into "Game Preference Form" practice by Gazi Karabulut (2010) has been used. As result of the application, the data obtained were analyzed using mixed research techniques, interpreted in a scientific framework and the findings were used to answer the research question. Findings obtained from the research results showed similarity to the literature results. According to the results of the research, the views of the students are as follows; most of the 50 participants said that they played computer games. 42 participants (84%) were playing computer games while 8 participants (16%) did not play computer games. 24 (48%) boys and 18 (36%) girls were playing games; while no boys among those who play

games 8 (16%) are girls. Gender differences were effective and boys were seen to play more game than girls. In addition, the data obtained from the literature show that there is a parallel between the socio-economic levels of students and the game play. The students with high socio-economic status are more likely to play computer games than the students with low socio-economic status. However, when one-way analysis of variance (ANOVA) was performed within the scope of study, it was found that the variances were not homogenous and "Tamhanes T2" test was used. The results showed that there is no significant difference between the socio-economic levels of students and playing status. Another factor the condition having computer or not, 42 participants who played games 29 (69%) of them had they own computer while 13 (31%) did not have they own computer. 31 students said that there had a computer, 2 (6.4%) did not play computer games, 13 students (68%) of 19 students who did not have a computer played computer games. The reason of these results we can think that the played computer games in internet cafes around their schools. According to the independent sample t-test, the variance were not homogeneous and there was a meaningful difference between students with who have his own computer or not and playing games, and it has determined that those have own computer are more likely to play computer games than those don't have.

P34- Ekrana Maruz Kalmanın Çocukların İyilik Hali Üzerindeki Etkisi: ÖzDüzenleme ve Duygu Düzenleme'nin Rolü

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Bu derlemede, ekrana maruz kalma süreleri artan çocukların ruhsal gelişimlerinin nasıl etkilenebileceği ile ilgili bilgi aktarılmaya çalışılmıştır. Bu doğrultuda, yetişkinlerin ve ergenlerin internet kullanımı ile ilgili faktörlere değinilmiştir. Ayrıca, bilgisayar ve internet kullanımının yetişkin ve ergenlerin ruh halini nasıl etkilediği aktarılmıştır. Ardından, gelişim çağında olan çocukların ekrana maruz kalma süresi artıkça ruhsal yönden nasıl etkileneceği ile ilgili 3 kurama kısaca değinilmiştir. Bunlar Bandura'nın Sosyal Öğrenme Kuramı, Sosyalleşme Kuramı ve Caplan'ın sosyal etkileşim kuramıdır. Ekrana maruz kalmanın, çocukların iyilik halini etkilemesindeki bu yazıda ele alınan hipotetik olarak önemli faktörler, ekrana maruz kalmanın çocukların öz düzenleme ve duygu düzenleme becerilerindeki olumsuz etkileridir. Bunun da çocukların iyilik halini olumsuz etkilediği düşünülmektedir.

Günümüzde medya iletişim araçları, neredeyse her evde bulunmakta ve çocuklar, erken çocukluk döneminden itibaren bu araçlara maruz kalmaktadır. Medya araçları, sürekli farklı ses ve görüntülerle çocuklar için cazip bir oyuncak haline gelmesinin yanı sıra, anne ve babalar tarafından çocukları sakinleştirmek için kullanılan yardımcıya dönüşmüştür. Ancak bu araçların kullanım süresinin artmasının çocukların farklı gelişim alanlarını nasıl etkilediği bilimsel olarak bilinmemektedir.

Amerikan Pediyatri Derneği, 2 yaş altındaki çocukların ekrana kesinlikle maruz kalmamasını önerirken, büyük çocuklar için maruz kalma süresinin çocuğun izlediği programın veya oynadığı oyunun/uygulamanın niteliğine göre 1-2 saatle sınırlı kalmasını önermektedir. Ancak, araştırma sonuçları bu açıdan değerlendirildiğinde çok çarpıcıdır. İki yaşından küçük çocukların ekrana maruz kalma süresinin 2 saatten fazla olduğu ve daha büyük çocukların ise 5 saat ve daha fazla ekran önünde vakit geçirdiği bulunmuştur. Ayrıca, 6 yaşından küçük çocukların % 36'sının yatak odasında televizyon bulunduğu belirtilmektedir. Türkiye'de bu tür medya araçlarının kullanım süresi ile ilgili çok sistematik bir araştırma olmasa da Radyo ve Televizyon Üst Kurulunun televizyon izleme ile ilgili yaptığı araştırmaya göre çocukların %65'i boş zamanını televizyon karşısında geçirmektedir. Ayrıca bu çocukların yaklaşık %30'u hafta sonlarında televizyonu 5 saat ve daha fazla izlediğini belirtmiştir. Türkiye İstatistik Kurumu tarafından gerçekleştirilen hane halkı bilişim teknolojileri kullanım araştırma sonuçlarına göre, kullanım 2015 yılının ilk yarısında %55.9' a yükselmiştir ve internet erişim imkanına sahip hane oranı da %69.5 olarak bildirilmiştir. Tüm bu veriler değerlendirildiğinde ve günümüzde yaygınlaşan diğer medya araçları düşünüldüğünde bu çarpıcı sonuçların çocukların ekran önünde geçirdikleri vakit açısından daha dramatik hale gelmiş olabileceği

söylenebilir. Televizyonun yanı sıra, her yere taşınabilen akıllı telefon ve tabletlerin çocukların ekrana maruz kalma süresini dramatik biçimde arttırdığı belirtilebilir.

Öz Düzenleme becerileri, sosyal ve günlük aktivitelerde karar verme, bunları planlama, uygulama, zamanını düzenleme, karşılaşılan sorunları çözme, gerektiğinde hareketi durdurma becerilerini kapsar. Öz Düzenleme becerilerinde başarısızlık madde kullanımı, saldırganlık, suça yönelik davranış, obezite gibi pek çok olumsuz durumla ilişkili bulunmuştur. Ayrıca, öz düzenleme becerilerinin sınırlı bir kaynak olduğunu belirten Baumeister ve arkadaşları, zor bir görevin ardından kişinin bu görev esnasında öz düzenleme becerilerini tükettiğini belirtmiştir ve ardından gerçekleşmesi beklenen performansın kötüleştiği bulunmuştur.

Duygu düzenleme, bir amaca ulaşmak için duygusal tepkilerin yoğunluğunu ve zamanlamasını denetleyen, değerlendiren ve uygun duruma getiren içsel ve dışsal süreçleri kapsar. Duygu düzenleme, duyguların kabul edilmesini ve iyi biçimde anlaşılmasını içerir. Duygu düzenleme becerisinin öğrenilmesi sürecinde çocuk yakın ilişkideki kişiyi kaynak olarak kullanır. Kopp'a göre öz düzenleme gelişiminde öncelik duygu düzenleme becerilerinin gelişmesine dayanır. Duygu düzenleme, çocuk ve birincil bakım veren kişi arasındaki etkileşim sürecinde belirlenir. Eisenberg ve arkadaşlarının araştırmasına göre, duygu düzenleme içeren öz düzenleme becerileri, küçük yaşlardan ergenliğe kadar olan dönemde dışsallaştırma ve içselleştirme sorunları ile ilişkili bulunmuştur. Öz düzenleme becerisi ile benzer şekilde, çocukların ekran önünde geçirdikleri vakit arttıkça, çocuklar duygu düzenleme becerisinin gelişmesi için gerekli sosyal ortamlardan uzak kalmaktadır. Böylelikle, bu çocuklarda duygu düzenleme becerisinin sınırlı kalacağı düşünülmektedir.

Ekrana maruz kalmanın, çocukların iyilik halini etkilemesindeki bu yazıda ele alınan hipotetik olarak önemli faktörler, ekrana maruz kalmanın çocukların öz düzenleme ve duygu düzenleme becerilerindeki olumsuz etkileridir. Öz düzenleme becerisi, kas güçlendirme sürecindeki gibi sürekli tekrarla kuvvetlenmektedir. Bu doğrultuda, çocukların ekran önünde geçirdikleri vakit arttıkça, bu becerinin kuvvetlenmesi için gereken sosyal durumlardan çocuk uzak kalmakta ve becerisini geliştirememektedir. Öz düzenleme becerisi ile benzer şekilde, çocukların ekran önünde geçirdikleri vakit arttıkça, çocuklar duygu düzenleme becerisinin gelişmesi için gerekli sosyal ortamlardan uzak kalmaktadır. Böylelikle, bu çocuklarda duygu düzenleme becerisinin sınırlı kalacağı düşünülmektedir. Bunun da çocukların iyilik halini olumsuz etkilediği düşünülmektedir.

P35- On the relationship between computer games and students, parents & school

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Dumlupinar University[1], Gazi University[2], Gazi University[3]

This is a review paper that aims to investigate the perceptions of students who play computer games before and/or after school regarding their teachers, success and parents' attitudes towards school activities; while doing so, it examines the education status of parents and the success of these students. The data used in the analysis come from the PISA (Programme for International Student Assessment) 2015 study conducted by the OECD (Organisation for Economic Co-operation and Development). The PISA 2015 study covers 87 schools and 5895 15-yerar-old students from 61 provinces of Turkey. 49% of these students consist of girls while the rest are boys. The data from PISA 2015 study have been preferred because it represents the country on the whole and is the most comprehensive source that provides the data required in this work.

According to study findings, 53% of students participated in the study played computer games and 65% of game players were boys.
When we look at academic success and failure status of students in the PISA 2015, we see that 2% of those playing computer games repeated at least a class in the first level of primary education, 1% in the second level and 10% in the secondary education. So, the increased class repetition rate may indicate a positive correlation between playing computer games and student failure in this age group in which peer influence is expected to be quite important.

61% students that play computer games feel like an outsider (or left out of things) at school; 58% feel awkward and out of place in school while 62% feel lonely at school. This finding can be interpreted as the students are unable to achieve in school environment the same level of success and enjoyment they attain while playing computer games in cyberspace. Only 40% of game players feel like they belong at school, which is consistent with the previous findings.

50% of students that play computer games maintain that they skipped at least a whole school day in the last two full weeks of school; 46% skipped at least a class and 51% arrived late for school no less than once. This finding may indicate a positive relationship between absence rate and alienation from school.

Considering game playing students' expectations of school success, 92% want top grades in most or all of their courses while 87% want to be one of the best students in their class. So, contrary to the expectations, students who play computer games have been seen to have

high expectations of success. There seems to be no correlation between playing computer games and low success expectations.

39% of game playing students think they make friends easily at school and 37% think other students like them. This finding can be interpreted as a weakness in the social interactions of students playing computer games.

45% of game playing students claim that their teachers gave them the impression at least few times a year that they think they are less smart than they really are. This is thought to cause students not to feel like they belong at school, make more absences, and increase the frequency of playing computer games.

Parents' education level is also analyzed in the study as it may be correlated with the behavior of computer game playing. The data in the PISA 2015 study indicate that 37% of the mothers of students playing computer games have primary education only, 21% secondary education, 16% associate degree, 14% undergraduate degree, and the remaining 12% have received no training at all. In addition, 78 of these mothers have a PhD degree while 250 have a master's degree. As for fathers, 30% have primary education only, 29% secondary education, 20% associate degree, 15% undergraduate degree, and the remaining 5% have received no training whatsoever. 102 fathers have a PhD degree and 388 have a master's degree.

The following may be concluded from the data on parents' attitudes towards school activities of students. First, 78% students that play computer games are in the opinion that their parents are interested in their school activities. Similarly, 89% think that their parents support their educational efforts and achievements. Likewise, 85% state that their parents support them when they are facing difficulties at school. Finally, 82% of students emphasize that their parents encourage them to be confident.

Keywords: PISA 2015, computer game

P39- Digital Games or Traditional Games?

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Abstract

Traditional games are the type of games that are generally played outside in groups, include social interaction of children and have certain rules. The children skills such as self-regulation, making friends, social skill development, perception of space, decision making, emphasizing and quick-thinking are supported via traditional games. However, rapid urbanization has reduced the number of spaces for children to play outside. In addition, existing spaces has effected the opinion of the parents negatively due to traffic, safety and alienation issues. The traditional games who has its origins in the past and survived to this day have evolved in many aspects and started to leave their places to digital games. Digital games have been in our lives for almost 40 years. The increase in the use of computers, tablets and cell phones has led to an increase in digital gaming. Another reason why digital games have become so popular is they are very easy to use. In recent years, the addiction towards digital games or applications started to hinder daily lives. Many negative aspects of digital addiction have been reported recently. Excessive and inappropriate use of technology limits the individuals' real life social interaction and interpersonal relationships. On the other side, it has been widely accepted that digital gaming is quite normal within reasonable proportions and digital games have positive sides such as helping achieve catharsis and relaxation.

The aim of this study is to reveal the perceptions of nurses with 3-6 age group children towards digital gaming and traditional gaming. The secondary purpose of the study is to determine the effect of independent variables like gender, education status, number of children, the age of children in pre-school period of the nurses who participated in the sampling on their perceptions of digital and traditional games. This study is conducted through metaphor analysis; which is one of the qualitative methods. The research was conducted with 56 nurses working in a hospital in Zonguldak province and the perceptions of these nurses on digital and traditional games were investigated through metaphor method. The sample of the study was determined by convenience sampling method. The nurses were required the following sentences: 'Digital gaming is like ……., because …….' and 'Traditional games are like ……., because …….' According to the data gathered, 46 metaphors have been generated about digital gaming and these metaphors were put under 10 conceptual categories in accordance with the view of three expert; 49 metaphors have been generated about traditional gaming and these metaphors were put under 12

conceptual categories in accordance with the view of an expert. The results indicate that 30.3% of the nurses defined digital gaming with metaphors like cigarette and drugs which belong to 'harmful substances' category; 24.9 % with metaphors like dreams, black holes and destiny which belong to 'abstract' category; 10% with metaphors like fast food and chocolate which belong to 'food' category. The other categories in 'digital gaming' table have the following proportions: 'other substances' 10.7%; 'action' and 'human' categories 5.4%; 'plant', 'addictive behavior' and 'abstinence' categories 3.6%; 'lost' category 1.8%. When traditional games metaphors are put into categories, 26.7% of the nurses expressed 'traditional games' with the metaphors family, sibling, school which are in 'communication' category; 12.5% with walnuts, vegetables and breast milk which are in 'food' category. These categories are followed by 'health', 'action' and 'time' categories (10.7%), 'valuable substances' category (8.9%), 'other objects' and 'abstract' categories (5.4%), 'emotion' category (3.6%), and 'plant', 'animal' and 'occupation' categories (1.8%). When the relationship between these determined categories and independent variables of gender, age, education status, number of children and the age of pre-school children were examined, a statistically significant difference was found categorically. When the metaphors obtained from the nurses are evaluated, it was noted that the view that 'digital gaming is both addictive and destructive; and it has negative physical, social and health effects on children' was dominant. On the other hand, it may be possible to say that digital gaming has to be in our lives when the conditions of the current century is involved. The metaphors about traditional gaming coming from the nurses indicate that traditional games are a basic need for children and it forms a bridge between past and present. It was also expressed that traditional gaming has a vital role and is required for physical, cultural, social and intellectual development of children.

Key Words: Traditional games, Digital gaming, Nurse, Metaphor

P41- Views of Secondary School Students about Digital Play Game

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Abstract

The game is significant for the child and has a great place. Games can contribute to the development of the child positively, if they choose the games that constitute negative examples, they can be adversely affected emotionally or psychologically. Especially nowadays, with the development and progress of technology in every field the game sector is changing and developing. Traditional children's games are replaced by digital games defined as computer games, video games, electronic games. In the age of information computer and the internet, which have a great place in the formation of the information society, have greatly affected our lives in recent years. In addition, it can be said that smart phones, which we can call the combination of computer and internet, affect and change our life considerably. The interaction and communication dimensions of these devices and the digital games that come with them show that the people meet their real communication need through virtual communication and interaction. Individuals have begun to become a part of this virtual world, regardless of age or gender. In digital games, many actions that cannot be done in the real world (such as war games, violence) and earning money can be done easily. The increase in the use of social networks and smartphones has also increased the use and popularity of digital games. Children's play preferences play an important role in children's development. There are many studies on the positive and negative effects of digital games on the development of children. However, it seems that the research on examining student opinions on why children prefer digital games and what they feel when playing digital games is limited. In this context, it is important to determine the opinions of secondary school students about digital game, reasons for choosing digital games, and what they feel while playing digital games. In this study, it was tried to determine the views of the secondary school students about digital game. The study was applied to 20 secondary school students consisting of 12 male and 8 female students studying in Konya Ereğli in the academic year of 2017-2018. Qualitative research method was used in the study. "Personal Information Form" and "Semi-structured Interview Form" were used as data collection tools. Descriptive analysis and content analysis methods in the analysis of the data were used. Categorizes and subcategories belonging to these categories were obtained by coding the answers given by the participants to the interview questions. According to the analysis result, Digital game, Age of starting digital game, Digital game types, Digital game playing frequency, The reasons of the digital game, Digital game effects, The positive - negative aspects of the digital games and these seven categories and subcategories belonging to these categories were obtained. As a result of the research, it was found that most of the students who participated in the research (90%) stated that the majority of the students

who knew the concept of digital game, stated that they started to play digital games at the age of 9-10 and played adventure action games the most, as the frequency of playing games; very frequent and continuous for 6 persons, 2-3 hours a day for 6 persons and 1-2 days a week for 8 persons. According to the students who participated in the research, it is seen that the biggest reason for preferring digital games is that they are entertaining, interesting and winning money and prizes. It was seen that more than half of the pupils felt that they were happy and entertained while playing digital games, and that some pupils felt excited, nervous and tense. A large majority of students stated that the positive aspects of digital games are to have fun. Another positive point is that they are developing English. The negative aspects of digital games are making addictions, eye injuries, exposure to radiation and prevent from studying.

Keywords: Digital game, Secondary school students, Students' views

P42- The Relation and Effect of Smart Phone to Digital Game Addiction: A Research in University Students

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Abstract

Mobile phones are one of the most important and modern communication devices of today. Mobile phones lift physical distances from the center, filling an important gap in both verbal and written communication. Along with evolving technology, the developments and variations in mobile applications have transformed mobile phones into smartphones and made them one of the most indispensable devices of our time. Smartphone technology is emerging as the mobile communication method that shows the greatest development in communication technologies.

The ability of the new generation mobile phones to connect to the internet makes it possible to carry out numerous transactions on a single platform, such as mobile data sharing, up-to-date development, taking photos, taking notes, banking transactions and executing transactions with government agencies. Thanks to the mobile applications, entertainment possibilities such as playing games are very wide, that is the reason why they have become a platform that is an alternative to computers.

Portability of smartphones, which is one of the most important gaming platforms, with its ability to connect to the internet at any moment and at anytime and to be a medium with extensive gaming applications, it offers the opportunity to play digital games anywhere and anytime for every age groups. In this study, the second part of a comprehensive research on digital gaming addiction (sequel to the relationship between digital gaming addiction and personal characteristics and success), the relationship between gaming addiction and smartphone usage and the effects of phone use were examined.

In order to determine the telephone usage habits in the study, a scale with four dimensions (called internet, withdrawal, communication, and freedom) was used which was found to be valid and reliable as a result of exploratory factor analysis conducted using data collected from 446 university students and explaining about three quarters of the variance. In order to determine the digital game dependencies of participants in the survey when mobile phone usage habits of groups called addictions (game addictions), candidates (tendency to dependence) and consciousness (conscious players), obtained from the clustering analysis were examined, it was seen that addicts had the highest use in all dimensions. However, there is a statistically significant difference between the groups for internet and deprivation dimensions, but this is not the case for communication and freedom dimensions. In other words, for digital game addicts and addicted candidates, no connectivity to the internet and

taking no advantage of the functions of the phone (except to not communicate with them) is an important problem.

Other results obtained in the analyzes carried out within the scope of the study revealed that internet and freedom dimensions of the mobile phone usage dimensions have a negative effect on the study time together with the deprivation dimension. Effect of communication dimension has not been found. In addition, the relationship between mobile phone use and some other personal characteristics such as gender, age, and income has also been investigated in the study.

Key words: Smartphone, Digital gaming, Digital gaming addiction

P45- Is It Playful or Scared? Will Chucky Be Real?

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The Internet of Toys is a part of the rapidly growing world of the Internet of Things. Internet-connected toys made a significant leap in 2015 and the diffusion of them is expected to grow significantly in the next few years. These toys have some features such as speech recognition and take action. They appear to react to the words of the user and incorporate Internet Technologies that respond to and interact with users. Most of these toys have cloud-based systems and they can provide more personalized or individualized responses to children with their artificial intelligence algorithm. Firms have developed these toys for interacting with children. They are equipped with sensors. They support Wireless and Bluetooth connections. They also have the feature of being programmable by the users. The most important benefits of these toys are the possibilities for personalized play and learning. At the same time, it is thought that the contributions provided by gamification will grow even more with these toys, and it is said that they will provide important contributions in order to gain new knowledge such as 3D printing and to the development of creativity and digital skills. However, there are also studies in the field that argue that there is no benefit in terms of learning processes and that it can only be used for fun. It is said that the positive aspects are not too much and that they are some behavioral risks. The American Academy of Pediatrics states that Internet-connected toys can cause cognitive problems. It is emphasized that these toys are also vulnerable to external threats due to the ability to remotely control them via web links and smartphones or tablet PCs connected to the same network. Some people have concerns about how children's personal information is stored, processed and shared. With regard to this, previous hacks, which have already experienced and echoed with Internet-connected toys, have been put forward.

It is natural that there may be negative aspects and approaches during the development and use of each new technology. Therefore, it is necessary to act cautiously on these negative opinions. The main purpose of this study is to give information about the Internet-connected toys within the scope of Internet of Toys, to introduce them with well-known examples and to inform them about possible risks and ways of protection. This study was conducted in the survey model. The nature and characteristics of the Internet of Toys are mentioned in the study. I presented some examples of popular Internet-connected toys around the World according to their features such as human interaction and programmable by the user. Some of them can be reached in Turkey. Concerns about toys are addressed in five dimensions, such as privacy, safety, health, development and social problems. These toys are open to all threats from outside if they cannot be protected as technologically. The fact that the property rights on toys are also uncertain is a different problem. The software and algorithms of Internet-connected toys can be updated and changed at any time by the

manufacturer. According to the worst scenario, a hacker can lead to the use of toys for different purposes. In this case, the personal information, photographs and documents belonging to the children or the parents can be disgraced. At the same time, this situation can also be expressed as a secret agent, a spy and a stranger entity at home. Different programming and modification of the algorithms in dangerous hands may also cause these technological products to turn into harmful toys that can harm children psychologically or physically. These harmful events can be seen in the form of cyber bullying, pornographic and violent behavior, transmission of confidential messages and different marketing strategies. This reminds us of the killer baby Chucky we had seen on the cinema before. Can these Internet-connected toys really be Chucky? What can we do for children's safety? In relation to the problematic situations described, security measures for the Internet of Toys are being conveyed and the suggestions of the security agencies such as the FBI (Federal Bureau of Investigation) are also mentioned.

Keywords: Internet of Objects, Internet of Toys, Vulnerabilities, Child Safety

P46- Cognitive Networks for Internet of Toys

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Abstract

Cognitive networks use different cognitive processes to sense existing conditions, make decisions based on findings and then start to learn from those decisions in a data communication network. The term cognitive is related with the ability of a network aware of its operational status and adjust operational parameters to fulfill specific tasks, such as detecting changes in the environment and user requirements (Kliazovich & Granelli, 2010). They are called intelligent as they are aware of everything happening in devices and networks they are connected to. Using this awareness, they can adjust their operation to match current and upcoming network conditions. A cognitive network has its own point-to-point goal-based data flow and is designed to go beyond self-modification. Traditional networks work with wireless links using predetermined parameters. Cognitive networks should perform high level point-to-point task over time and provide improved quality of service, secured communication, control over access and other general networking goals. A cognitive network should be proactive for predicting usage cases before occuring and adapt to those previously. If can not predict, returns back to reactive method for finding optimal way of handling the new situation. It learns from every case encountered and uses gained information to increase network efficiency and performance. Main aim is to optimize data communication for whole network between the sender and the receiver to meet required point-to-point goals of users in the network. In a cognitive network, autonomous and adaptive radios select their operating parameters to achieve individual and network-wide goals (Komali et al. 2010). Network becomes cognitive if all operating components are self-adjusting and self-aware according to different unpredictable network conditions for optimizing data transmission performance. Network itself should find optimal ways of connecting devices and tuning network parameters to achieve best performance for data transfers. In a cognitive network, judgments are made to meet the requirements of the network as an entire system, rather than the individual network components. The main reason of the emergence of cognitive networks is to achieve the goal of building intelligent self-adjustable networks and in the same time improve the performance. Intelligent self-adjustable networks will be able to use intelligence to determine ideal network operating state for many tunable parameters. Technological developments have created new opportunities for toy developers in their innovation processes. While certain internet-connected toys are part of some children's everyday experiences, they are yet to become an everyday experience for most young children. A toy can be called "intelligent" if it has a detailed profile on a child that it remembers and act on. An intelligent toy is a personal playmate that guides the child. Algorithms act on, inform and direct an intelligent toy's

interaction with a child. Connected toys, on the other hand, incorporate Internet technologies that respond to and interact with children. The foundation of Internet connected toys is data exchange. Data exchanged between the child and the platform, between the child and the parent, etc. They are sometimes equipped with speech recognition and activation and appear to react to the words of the user. They may also be controlled remotely across network infrastructure, for example via smartphones or tablets connected to the same network. Internet of Toys can be defined as a part of Internet of Things concept. These toys often use sophisticated sensor-based technologies to collect information from children and cloud-based platforms to process this information through real-time interactions. This cloud-based processing relies on sophisticated algorithms that can simulate human intelligence and deliver more personalised or individualised responses to children. However, the diffusion of Internet-connected toys is expected to grow significantly in the next few years. The distinction between smart toys and connected toys is therefore important, since a smart toy is not necessarily connected to the Internet while a connected toy is not necessarily smart. The software and algorithms of these toys are not owned by the users, who only have licenses to use these in much the same way as social network sites or mobile apps. Software and algorithms can be updated and changed at any time by the manufacturer. This study aims to introduce a communication model for Internet of Toys based on a Cognitive Network infrastructure. In the suggested model, connected smart toys using adaptive connection and transmission modes are explained within the concept of Internet of Things. In this study, smart toys with adaptive wireless connection capabilities are configured to establish an Internet of Toys model for analyzing cognitive networking abilities of the components in the system.

Keywords: Internet of Toys, Cognitive Networks, Internet of Things, Adaptive Wireless Networks

P47- Dijital Oyunların Klasik Oyunlarla Kıyası

Abdullah Bedir Kaya

Teknolojinin gelişmeler günümüz dünyasında hemen her şeyi değiştirmiş ve dönüştürmüştür. Oyun kavramı da bu değişim ve dönüşümden nasibini almalıdır. Bu çalışmada klasik oyun tanımları detaylı bir şekilde incelenecek, dijital oyunlarla kıyaslanacaktır. Çalışmanın sonunda ise oyun kavramı dijital oyunları da kapsayacak şekilde yeniden tanımlanmaya çalışılacaktır.

Oyun tanımlarında genelde çocuklar ön plana çıkmaktadır. Oyun çocuğun doğal ve aktif bir öğrenme ortamı, çocuğu yaşadığı kültüre hazırlayan önemli bir alıştırma, çocukların boş bırakıldığında harcadıkları zaman, çocukların yetişkinlik hayatına hazırlık süreci olarak tanımlanmıştır. Hâlbuki oyun sadece çocukları değil yetişkinleri de kapsayan geniş bir kavramdır. Hatta Türk Dil Kurumu oyunu eğlenceden tiyatroya, müzikten yarışmaya, hileden kumara kadar geniş bir yelpazede tanımlar. Bu geniş yelpazeye dijital oyunlarında eklenmesi bir gerekliliktir.

Dijital oyunlar "monitör, fare, klavye ya da joystick gibi arabirimlerin bilgisayar yazılımları ile etkileşiminin sağlandığı, kuralları ve amaçları olan sistemler bütünü" olarak tanımlanmıştır. Bir başka tanımda ise çeşitli donanımlar sıralanmış ve bu donanımlarla oynanabilen oyunlar olarak tanımlanmıştır. İlk dijital oyun 1962 yılında üretilmiştir. O tarihten beri dijital oyunlarda gelişmektedir.

İki oyun türü tanımlar üzerinden karşılaştırılabilir. Klasik bir oyun tanımında oyunun hayal dünyasıyla gerçeklik arasındaki köprü rolü üzerinde durur ve resmi çizgilerle, müziği notalarla, şiiri kelimelerle, dans hareketlerle, tiyatroyu olaylarla oynanan bir oyun olarak tanımlar. Bu yorumu dikkate alarak dijital oyunları yapan yazılımcıların, hayal dünyalarını dijital oyunlara yansıtan birer sanatçı oldukları söylenebilir. Farklı bir tanım ise çocuk vurgusundan uzak bir şekilde oyun bireyin kendini bütünüyle kaptırdığı çok ciddi bir etkinlik tanımlanır. Bu tanım dijital oyunlarla çok uyumludur. Çünkü dijital oyunları hemen her yaş grubundan insan ciddi bir etkinlik olarak görmektedir. Bir başka tanım ise oyunun çocuğu yaşadığı kültüre hazırlayan önemli bir alıştırma olmasıdır. Dijital oyunlar sadece yaşanılan kültürü değil diğer milletlere ait kültürlerin öğrenilmesi içinde önemli bir araçtır. Hatta basına sık sık dijital oyunların "kültür emperyalizmi" yaptığına dair haberler haklı olarak çıkmaktadır. Bir başka tanım oyunun dünyayı eğlenerek anlamanın ve sıkılmadan öğrenmenin en iyi yolu olduğunu söyler. Ayrıca oyun kişilere ve gruplara sosyal statülerini kontrollü olarak değiştirme imkânı vermektedir. Bu tanım özellikle rol yapma oyunlarında en geniş karşılığını bulmaktadır. Normal oyunlarda çocuklar anne, baba, öğretmen olurken, dijital oyunlarda bir savaşçı, bir sporcu hatta bir tanrı dahi olabilmektedir. Oyunun başka bir işlevi bireyleri bir araya getirmesi, bütünleştirmesidir. Oyun topluluğu, farklı yollarla, farklı kesimlerden bir araya gelen bireylerden oluşabilir. Bu özellikte dijital oyunlarla uyumludur. Çevrimiçi oyunlarda farklı dillerden, dinlerden ve milletlerden binlerce insan bir araya gelmekte ve ortak bir hedef etrafında buluşmaktadır. Bu tanımların sayısı artırılabilir.

Klasik ve dijital oyunlar karşılaştırıldığında ortak ve farklı olan yönler ortaya çıkmaktadır. Oyunda her şey mümkündür şeklinde ifade edilen özellik dijital oyunları tam olarak yansıtmaktadır. Dijital oyunlarda fizik kanunlarına aykırı eylemlere ya da fantezi dünyasına ait ögelere kolaylıkla ulaşılabilir. Oyun ortamı, kullanılan araç gereçler, oyuna katılanlar ve davranışları oyunun kalitesini belirler şeklinde ifade edilen özellik; dijital oyunlar için birebir geçerlidir. Dijital oyunlarda mekânlar gün geçtikçe çok daha kaliteli olmakla birlikte sürekli olarak oyuncuya yeni mekânlar, oyunda kullanabileceği yeni araç gereçler (kılıçlar, büyüler, zırhlar vs.) ve dünyanın dört bir tarafından oyuna dâhil olan oyuncularla birlikte kaliteli oyun ortamları oluşturmaktadır. Oyun, çatışmadan özgür bir ortam teşkil eder ve çocuk oyunda güvendedir şeklinde ifade edilen özellik ise dijital oyunlar için tartışmalıdır. Dijital oyunların bir bölümü çatışma ve şiddet üzerine bina edilmiş oyunlardır. Bu yönüyle çatışma oyunun kendisi olmaktadır. Oyuncuysa fiziksel olarak güvendedir.

Sonuç olarak oyun kavramının değiştiği ortadadır. Sokaklarda oynanan pek çok oyun dijital ortamlara taşınmıştır. Eskiden sokaklarda maç yapan çocuklar artık dijital ortamlarda bu faaliyetlerini sürdürmektedir. Artırılmış ve sanal gerçeklik uygulamaları ile oyuncular bir mekâna sıkışıp kalmaktan kurtulmuşlardır. Hatta bu uygulamalar birçok ortopedik rahatsızlığın tedavi sürecinde dahi kullanılmaktadır. Tüm bahsi geçenler bir arada düşünüldüğünde oyun "bireylerin eğlenceli zaman geçirmek için istekli bir şekilde harekete geçtiği, gerçekliğin nispeten ya da tamamen değiştiği, bireysel ya da grupla gerçekleştirilebilen, analog ya da dijital araçların kullanıldığı amaçlı faaliyetler" olarak tanımlanabilir.

P48- Çocuğunu Dijitalleştiren Ebeveynler ve Kamera Önünde Yaşayan Çocuklar: YouTube Üzerine Bir Durum Çalışması

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ÖZET

Sosyal medya ve video denildiğinde akla ilk gelen platformlardan biri olan YouTube, izleyici konumunda olan bireylere video üreten ve paylaşan olma konusunda imkan sağlamakta ve onları çeşitli yollarla (ekonomik gelir sağlama, tanınmış olma vb.) teşvik etmektedir. Bu paylaşımlar bilimden sanata, eğitimden kültüre, sağlıktan spora ve hatta gündelik yaşama kadar geniş bir yelpazede yer almaktadır. Bu araştırmada, çocuklarının gündelik yaşamlarını YouTube'da paylaşan ebeveynler tarafından oluşturulmuş kanal ve kanal içeriklerinin incelenmesi amaçlanmaktadır. Bu amaç doğrultusunda tipik durum örnekleme yönteminden hareketle Türkiye bağlamında takipçi sayısı söz konusu özelliklere sahip kanallar arasında görece daha fazla olan bir YouTube kanalı araştırma kapsamında incelenecektir. Gerçekleştirilecek olan içerik analizinde kanal video içerikleri ve videolara gelen geribildirim/tepki/yorumlar dijital ebeveynlik bağlamında ele alınacaktır. Araştırma kapsamında dijital ebeveynlik kavramı, teknolojinin gelişimi ile birlikte dönüşen ve genişleyen ebeveyn rol ve sorumlulukları üzerine yapılandırılacaktır. Bulgular, betimsel istatistiklerin yanı sıra oluşturulan çeşitli grafikler yoluyla raporlanacak olup; durum tespitine dayalı olarak araştırmacılar, eğitmenler ve ailelere olası sorunlara yönelik bilgiler verilecek ve konu hakkında çeşitli öneriler getirilecektir.

Anahtar Kelimeler: Dijital Ebeveynlik, YouTube, YouTuber, Tipik Durum

P50- Digital Parentship for Keeping Children Safe Online

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Abstract

All around the world, children have an incredible opportunity to learn, create and communicate by using technology. The digital world is very complicated, risky and challenging as it has little respect for age. The digital parent is one who uses one or more of digital media applications and devices in his/her daily activities, especially for parenting. As we all in the digital age, digital natives having children turned into the digital parents. Digital parents are active partners in their child's digital life and Internet usage. In addition to teaching computer usage to children, the digital parent is best suited to guide the child on issues of online safety, and digital citizenship. Digital parents play a key role in shaping how their children use the digital media, being perhaps the first and most important mediator of digital use of children. As parents, we cannot isolate them from the digital world around them but can make it a safer place. It is important that parents are confident in their understanding of digital devices, applications, games, and their ability to help guide their children at every age to ensure a positive experience online. Because so many online services and content providers are free, advertising has emerged as a way of funding the internet, which explains its ubiquity. But as is so often the case with new technology, mass marketing may have come into place before we fully understood its effects. Children might see something online that is intended for adults, which could confuse or upset them. This might be violent or sexual content, extreme opinion or anger, or inappropriate advertising. Inappropriate can mean different things to different people, from swear words to pornographic images or videos, and what is inappropriate for your child will also change as they grow and develop. Despite the risks that children face online, the internet remains one of the most wonderful resources humans have ever had. Too often we focus myopically on danger and risk, neglecting all the positives and opportunities the online world offers to children in the interest of keeping them safe. Internet service providers have rolled out free parental controls to all customers, age verification tools have become more advanced and, where risky content was also illegal, government and industry have worked together to have it removed. Filters and parental controls offer a partial solution to these issues, and few would argue against keeping graphic or disturbing content away from children. But technological and social realities mean filtering can only serve as one, limited part of a strategy to safeguard children. It is important to remember that parental controls and filters are just tools. They are not 100% accurate and are no substitute for open and honest conversations with your child. The role of parents and carers in protecting children and supporting their resilience is obvious. Digital parents should be awere of making children resilient enough to cope with the challenges of a digital world is the best way of keeping

them safe. On the other hand, the internet can be fantastic for children with learning disabilities and autism. Safety is the main concern for all parents, but it's just as important to help your child get the most from the digital world. For example, if your child has difficulty communicating in the offline world, they may find it easier to socialize online. The Internet can also be a valuable educational resource, especially for children who take longer to learn new things. Parents should talk to their children about the impact of seeking approval from the online world and comparing their lives to the edited versions of other people's lives. Parents must help them mentally disconnect from the constructed identities they've created online and allow them to gain the freedom to know who they really are. Families must value their mental health as much as their physical wellbeing and help them learn to use social media as a tool for growth and development. In this study, being digital parents in the new digital era is questioned by means of different approaches for keeping children safe in online environments. Defining regulations and/or putting restrictions are not the solutions for keeping children safe. Within the study, opinions of parents having different socio-economic and educational backgrounds are queried and analysed for discovering how they behave in digital world to help and accompany with their children for their mental development. Results from different academic and field studies in the literature are summarized and presented for discussing new techniques for keeping children safe in different online applications and environments. Additionnaly, semantic analysis are suggested for effective protection of children in online environments.

Keywords: Digital Parentship, Internet Safety for Children, Online Safety for Children

P51- Internet Addiction, Child And Family Role

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ABSTRACT

With the developing technology, the use of computers and internet has become indispensable tools of life. Since the early 1990s, the public use of the internet has become widespread. In addition to being an innovation in the field of communication technology, it has also become the center of both academic and popular interest. Developments in Internet technology increase the rate of internet usage and become a part of our everyday life.

Developing technology brings new risks together with facilitating life on the one hand. One of these risks is internet dependency. Internet dependency is a term used to describe the uncontrolled and harmful use of the Internet. Although there are heated debates about the existence of "internet addiction" or "pathological internet use" in the academic world, it is clear that some people are starting to experience some problems in business, school and family life depending on internet usage. Internet addiction can provide a virtual content that produces escape from emotional difficulties (eg, stress, depression, anxiety), problematic situations or personal difficulties (eg burnout in work life, academic problems, unemployment, family incompetence). The use of the internet in the world and in our country is increasing rapidly, and internet addiction is closely related to psychological needs, parental attitude and social anxiety.

The family consists of sub-systems of husband and wife, parents, children and siblings that affect each other and are affected by each other. The role of the family in the development of the child and the attitude of the parents are important. Starting from the day of birth, the child's personality is shaped by the family, then the school, and the people around. The attitudes and behaviors of parents towards the child are highly influential in shaping the child's personality. The relationship between the family and the child can be decisive for intensive use of the Internet. The research revealed that family - child relationship and parent attitudes are important factors in internet dependence. Children who perceive their parents as more punitive, restrictive, less supportive, and affectionate individuals and have difficulty communicating with their families are more likely to be addicted to the Internet. Strong ties within the family, love environment and trust reduce risky internet use. Children who grow up in repressive families can not use the internet in an intentional way and can be dragged into dependence because they do not have a family environment to share their feelings with. They can also try to make sharing through social networks that they can not perform within the family. Taking place of Internet to family and friends can lead to negative consequences for the future life of young people and can cause the real world to learn from

the wrong sources. The fact that the families do not implement a control and monitoring system in the internet use of the young people may increase the risk of being adversely affected and addicted from the internet.

The level of consciousness of the family is very effective in benefiting from the positive features of the internet, reducing problematic internet usage or internet dependency. It is necessary to use the internet to control the parents' children. It is the duty of the family to check how long the child is using the internet for what purpose. It is also important that family relations are not repressive, punitive, given the necessary social support, creating an environment of love and trust, able to talk to their family and problems freely, and to get professional support when necessary. In order to be able to provide all these, a certain level of consciousness should be given to the family. Educational programs to be organized in cooperation with school-family and health professionals may contribute to increasing parents' awareness and awareness. Such activities will also contribute to the sharing of families with similar problems. Educational programs to be organized from early childhood can contribute to the development of conscious internet users.

Keywords: Internet addiction, Child, Family, Communication

P52- Evaluation of the Impacts of Digital Games on Health

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Digital games are defined as games that are programmed with various technologies, enable users to log in with a visual environment, manipulate them within the environment that the game is presented and as the games which have become a popular culture for children. Today, the use of digital games are preferred by every age group gradually yet the usage in early childhood period has both positive and negative impacts on child's development and health and on the other hand, the opportunities and facilities of the digital world have been used in many different areas. With the increase in the number of the games in the digital field, the game type that is described as serious games has also become popular. Serious games are regarded in the science world both as an entertaining and intervention type made via a computer.

A child who plays digital games spend more time inside instead of making sports outside, the risk of obesity increases, the risk of technological addiction emerges, the risk of being exposed to an inappropriate content appears. Excessive use of technology affects child's physical development negatively. A correlation has been found between the situation of children between the ages of three and five to spend 4,5 hours in front of a screen and their developmental delay. %19 of children between two-five years old use smarts phones yet their skills of swimming, lacing up their shoes and preparing their own food are not developed. There are studies which show that excessive use of internet has impacts on cardiological problems and diabetes. Movement, touching, human interaction and nature which are the main factors of healthy development and learning in early childhood are decreasing in a very serious extent with the intense indoor use of mobile devices. Many studies have been conducted on the impacts of cell phone radiation on the brain and memory. Especially, as the skulls of the young children are not fully developed, the impact of electronic magnetic radiation may have two times more impact on children. There are studies that demonstrate that the excessive and irregular use of technology causes sleeping disorders, postural and skeletal problems and visual impairments and also affects the brain negatively.

In the world, games and education are being used together. Gaming is an effective method of increasing perception and awareness of people. Serious games which have a purpose beyond entertainment have a gradually increasing impact in real life as they can be used in all spheres of life. In this way, an awareness can be raised in different areas as children's education to health education via digital games. Digital games have positive impacts on healthy lifestyles and its determinants, particularly in the knowledge and clinical results. There are studies which show that digital health games ease the patients' experiences during

the treatment period in psychotherapy and physiotherapy implementations and in the case of cancer and hospital care also for the patients with serious pain and in many different situations. Digital health games are used in terms medicine education, particularly in the surgical field with the purpose of acquiring skills and in addition, they are also used in diagnosis and treatment phase by uploading all the data of the patient. As a result, digital games improve health and provision of health care services.

As everything in life, a certain standard does not exist for digital games. Games which have low and high qualities are on the market. The important thing in terms of digital health, first of all, to protect child's health, is to prefer games with a right choice/right amount (as time) and for right age and to provide a transformation from "exposure" to "controlling". It is estimated that digital health games will be more effective in terms of improving health in the future. In this context, benefitting from the applications of digital health games accurately and effectively in Turkey seems possible with the collaboration of all stakeholders with multidisciplinary studies.

Key Words: Health, Digital Games, Health Care, Education, Medicine

P54- Importance of Digital Games in Terms of Violence against Children

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Summary

A game is the real life of a child and the child acquires important competencies against the realities of life in this process. In this context, games are regarded as the irreplaceable and most effective sources of life for children. A child learns about the social rules during a game in an easiest and harmless way. Behaviors such as; awaiting his/her turn, haring, respecting others rights, protecting his/her rights and belongings respecting rules and limitations, obtaining order and sanitation habits, listening, expressing himself/herself are all learned during games. The digital world which provides a playing environment as a tool of a game is very popular at the present time. When the studies conducted on the impact of computer games on people and children, it can be seen that there are different approaches to positive and negative impacts. For the question of "Do children who fulfil their need of playing games via internet forget how to play a game?" many experts, including the informatics group, give the answer that indicates the shape of form of playing is changed instead of forgetting.

At this point, the innocence of traditional children games has given their place to industrialized games and toys. Computer games expose children to violence indirectly. Children have problems with their siblings while they are playing computer games or, the more interestingly, they desire to be the only child in the home. In this way, communication is distorted starting from family. There are studies that show the relationship between the level of the content watched via digital tools and aggression. In addition, in terms of addiction factor, the time of exposure also increases the tendency of aggression. It has been observed that with the increasing amount of blood on screen, the level of aggressive behavior also increase proportionally while empathy decreases. Particularly for the young children who cannot differentiate between concrete and abstract and learn through observation and imitation, the violence on media is very effective. It is also evident that children are exposed to role models who are not from the inner circle and be affected. Again, in many studies, it has been seen that the games that contain violence affect children's and young people's mental health negatively, reduce positive social behaviors and helpfulness, increase antagonistic emotions, make them desensitized against victims and cause the emergence of serious hyperactivity.

The most important difference that separates digital games from books and movies is the provision of interaction and enabling children to try. Another interaction factor is the interaction between players in multiplayer games. This interaction is not only limited by the virtual environment but it is also transferred to the social sphere and has an impact on various behaviors of the child. This situation makes the child happy however when the child

does this perpetually he/she learns to be happy only with that and cannot taste other happiness.

Children and young people have become the consumer subjects of the contents that may damage their nature and mental developments and they are loaded with messages that make them targets and actors of violence. It has been determined that children do not perceive if the game they play contains violence or not. It also draws the attention that the rules set by families about the computer playing on children are mostly related to the time and families do impose restrictions on type and content of computer games. In order to enable parents to be selective and supervisory on computer games their children play (appropriateness to age and level of development, whether it contains violence or not), their knowledge levels should be enhanced. However, most importantly, it will be beneficial to raise the awareness of children on this issue and provide them internal-control abilities. An informatics and media literacy course has been gaining importance in terms of social and personal perspectives. In addition, real playing opportunities can be provided for children by creating playing spaces. It is thought that children's availability to use the right of playing games through traditional and digital games together will make a significant contribution both to child's growth and development and to community health.

Key Words: Violence, Violence Against Child, Digital Games, Computer

P55- Digital Games and Health Education

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Digital games as refers sometimes "video games," "electronic games," or "interactive software". There is no single term that everyone uses to collectively describe digital games. Mostly digital games refer to the application or devices of information technology like computers, play consoles, tablet devices and smartphones, which are used for playing and interactive entertainment. Digital games refer to software games also. This term is in use by some academics. Digital games have become very popular among children. The numbers of computer and video game players have increased significantly. Many researchers concentrate on the digital games effect on children health. There is a significant increase in the number of studies examining various aspects of digital games.

Some research has found several advantages of digital games in children's health such as increasing physical inactiveness of children, influence on psychological, cognitive, social and health behavior related outcomes. Aggressive content in games may lead to increased aggression. Moreover, some content in digital media have been connected to changes in sexual behavior, substance use and body image. Moreover, social interaction through digital devices may compensate real life social connections, and thus, reduce engagement in real life social connections and participation. Internet addiction and a predictor of pathological internet use, has been lead loneliness in children.

On the other hands some research have found several limitation of digital games in children's health such as, problematic sleep patterns, lower psychosocial wellbeing, personal function indicated lower academic achievement, active video games have been shown to have potential in promoting children's light-to-moderate physical activity, and increase in energy expenditure, heart rate and oxygen consumption. Digital games can also develop different skills of the player, such as analytic that can be beneficial when solving health-related problems. Game play may support the player's feeling of belonging in a group. Electronic games have several advantages over other instructional media, the main one being their extremely compelling and engaging nature and constitute potentially powerful learning environments for a number of reasons. In the literature, there is some research studies on electronic gaming in health education and physical education such as Disease awareness, prevention and management, Nutrition education, First-aid education, Injury awareness during sporting activities, Acquisition of motor skills, Improvement of fitness
It is believed that the self-motivation that young people show towards electronic games could be combined with educational content and objectives into what Prensky (2001) calls 'digital game-based learning'. This learning mode can be more enjoyable, more interesting, and more effective than traditional learning modes. These games' primary goal is education.

When this video games achieve health benefits, they are called games for health. Healthy behavior has become very important and healthy habits should be formed as early as possible. Digital games can use as an intervention health behavior change in children.

This review aims to raise awareness about the importance of digital games in children health education. In this context, in the light of the literature, the historical origins of health education with digital games, research findings that evaluates effect of digital games on children health education.

Key words: Digital games, Health education, Child.

P58-Effects of Games on Learners: Review of 29 Articles from ISI Web of Science Library Published in 2008-2018

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Games are stated as interactive media tools that they provide fun. In the literature many studies stated that they have a potential of improving individuals' learning, their motivation. Related to this aim there are some meta-reviews that focus on the effects of game on learners. In general these reviews showed mixed results; while in some studies games result in positive effects in some of them they are not. This study is focusing on the recent state of effectiveness of games on learners. In the study, articles and book parts with the "Learning Game" keyword is searched on ISI web of science library (v5.27.2) which are published in last decade (2008-2018). Initially, 121 results are found. After analyzing abstracts of these articles, 29 of them are selected for review which are applied game studies that focus on concrete benefits of learning games. These articles are further analyzed and the level of learners in these studies (changing between kindergartens to higher education), learning fields (like medicine, science and English) and main findings of the studies are reported.

According to initial findings; while majority of the studies applied on higher education and primary school students, there are few studies applied in kindergarten and secondary school levels. As a subject area mainly science and language learning are selected but there are various studies from different areas like environmental sciences, engineering, learning science etc. Finally the studies reported different effects of games on students like learning gain, motivation and attitudes. Because the methodologies of the studies and their independent variables are different, it is hard to make general statements but it could be stated that: the selected (applied) game studies in last decade in general reported positive learning gains, motivational effects and attitudes. Moreover, the mostly studied variable is learning gain and in only a few cases negative or neutral effects of games on learning gains are reported. Many of the studies either reported better posttest scores than pretest scores, better scores on experiment group than control group, or better scores in a particular type of learning condition than regular learning condition. But in some cases neutral and even negative effects are reported as well. Similarly mainly positive results are reported in terms of motivation and attitude, but again not in all cases.

Depending on the review results; it could be said that "a learning game" is not always effective in any learning task. Some of their features, design elements or conditions have an impact of their effectiveness. Some of the reviewed researches studied such factors. For example some studies outlined the importance of the concepts like risk factor of games, playing collaboratively etc. Some of these concepts support positive effects of games but at the end of the studies, the authors still recommended to make more researchers to better understand the particular effects. So the relatively new medium's effects on learning seems

to be clearer than before and it seems to support learning in many cases but educators need to be careful when applying a game and there is still a need for further analyses.

P59- Teknolojinin Çocuklar Üzerindeki Etkisi

Seçil Aydın

Özet

Çağın ilerlemesiyle teknolojik araçlara olan ilgi de artış göstermektedir. İnternetin dünya çapında bir iletişim ağı olması ve insanlara kolaylık sağlaması internet kullanımını cazip hale getirmektedir. Yeni yazılımlar üretilip çok farlı bilgisayar oyunlarının geliştirilmesi büyük küçük herkesin dikkatini çekip dijital oyunları oynayanların sayısını artırmıştır. Bu artışın ilerleyen zamanlarda nasıl sonuçlar doğuracağı henüz netlik kazanmış değildir. Teknolojik araçların, dijital oyunların ve internetin yetişkin insanlara olumlu ve olumsuz etkilerinin olacağı gibi çocuklara da etkilerinin olabileceği düşünülmektedir. Bu yüzden Bilgisayar, televizyon, telefon, tablet pc gibi teknolojik araçların, dijital oyunların ve internetin kullanımının çocuklar üzerindeki etkilerine ait araştırmalar giderek çoğalmaktadır. Aileler, eğitimciler, akademisyenler ve psikologlar teknolojinin olumlu ve olumsuz etkileri konusunda henüz bir sonuca ulaşmış değiller. Teknolojik araçlar, dijital oyunlar ve internetin çocukların küçük yaşlarda teknoloji ile etkileşimine girmesinin zararlarına işaret eden görüşlere karşın, çocukların bu dijital teknolojiye ilgi duyması ve onların bu teknolojiyi kendilerine faydalı haliyle kullanmaları da önemlidir. Çocukların teknolojik araç ve internet kullanımı imkanlarını doğru, etkin ve verimli bir şekilde yararlanmaları sağlanırken, güvenlikleri de her zaman ön planda tutulmalıdır. Bu nedenle ebeveynlerin, eğitimcilerin bu konuya daha fazla önem vermesi, eğitimcilerin, anne ve babaların konuyla ilgili olarak bilgi sahibi olmaları, bunun yanında çocukların teknolojik araç, dijital oyun ve internet kullanımı ile ilgili eğitilmeleri ve takip edilmeleri gerekmektedir. Bu makalede teknoloji teriminin farklı tanımları yapılmıştır. Daha sonra dijital teknoloji, dijital oyun kavramlarının tanımları verilmiştir. Yeni binyılın öğrencilerinin nasıl olduğu belirtilmiştir. TUİK verilerine göre çocukların bilgisayarı ve interneti kullanım yaşları, cep telefonu, bilgisayar, tablet pc, oyun konsoluna sahip olma oranları, bilgisayarı ve interneti kullanım amaçlarının oranlarından bahsedilmiştir. Yapılan diğer bir araştırmada çocukların televizyon izleme saati oranları verilmiştir. Dijital araçlar denildiğinde televizyon, telefon, bilgisayar ve tablet pc gibi araçların akla gelebileceği belirtilmiştir. Televizyonun çocuklar üzerinde etkilerinden söz edilip, bu etkilerin çocuklar üzerinde oluşturabilecek sağlık problemlerinden bahsedilmiştir. Telefon ve tablet pc lerin çocuklar üzerindeki olumlu ve olumsuz etkilerinden bahsedilip, bu konuda uzmanların yaptığı araştırmalara yer verilmiştir. Dijital oyun kavramının ortaya çıkışından ve tercih edilme nedenlerinden bahsedilmiştir. Bilgisayar oyunlarının etkileri hakkında uzman görüşleri ele alınarak olumlu ve olumsuz yönlerinden bahsedilmiştir. Bu oyunların bağımlılık haline gelmesinin çocuklarda nelere sebep olacağı hakkında bilgiler verilmiştir. Özellikle şiddet içerikli oyunların çocukların hayatını nasıl etkilediğinden bahsedilip, alınabilecek önlemler yer almaktadır. Büyük, küçük herkesin olmazsa olmazı internetin hangi amaçlarla kullanıldığı anlatılmıştır. İnternetin çocuklara yararları ve zararlarından bahsedilmiştir. Çocukları fiziksel ve psikolojik açıdan nasıl etkilediği hakkında bilgiler verilmiştir. İnternetteki tehlikelerden, bu tehlikelerin doğuracağı sonuçlardan ve bu tehlikelerden nasıl korunacaklarından söz

edilmiştir. Bahsedilen teknolojik araçların kullanımı konusunda ebeveynlere düşen görevler anlatılarak çocuklarının hangi amaçla bu teknolojik araçları kullandıklarını bilmelerinin önemi belirtilmiştir. Ebeveynlerin bu konularda bilgili olmaları çocuklarına yarar sağlayarak, onlara yol göstermeleri konusunda bilgiler verilmiştir. Ailelerin dijital oyunlar konusundaki düşünceleri hakkında yapılan anket sonuçları paylaşılmıştır. Eğitimcilerin de çocukları teknoloji hakkında bilgilendirmeleri, dijital oyunlar ve internetten gelebilecek tehlikelere karşı dikkatli olmaları konusunda bilgilendirmelerinden bahsedilmiştir. Okul öncesi öğretmenlerinin yaptığı araştırmaların sonuçları belirtilmiştir. Genel olarak teknolojinin çocuklar üzerindeki etkilerinden bahsedilen bu makalede yapılan araştırmalar ve uzman görüşleri belirtilerek bu konunun gelecek nesiller için önemli olduğu, ebeveynlerin ve eğitimcilerin aydınlatılmasının çocukları bilgilendirme konusunda yaralı olacağı düşünülmektedir. Bu konuda özellikle eğitimcilere önemli görevler düşmektedir.
Anahtar sözcükler: Teknoloji ve çocuk, dijital oyun, dijital nesil, yeni iletişim araçları, okul öncesi ve teknoloji, teknolojinin etkileri, internet ve çocuk