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Araştırma Makalesi **Research Article**

Üstün Yetenekli Olan ve Olmayan Öğrencilerin Dijital Çoklu Görev Performanslarına Yönelik Ebeveyn Görüşleri

The Views of Gifted and Non-gifted Students' Parents about Their Children's Digital Multitasking Performances

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Makale Hakkında

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Özet

Bu çalışmanın amacı, alanyazında sıklıkla yüksek zekâ, güçlü çalışan bellek kapasitesi, yüksek hafıza gibi üst bilişsel yetenekleri doğrudan veya dolaylı olarak gösterdiği ifade edilen üstün yetenekli öğrencilerin ve üstün yetenekli olmayan öğrencilerin çoklu görev performansları hakkında ebeveyn görüşlerinin belirlenmesidir. Görüşme formu ile öğrencilerin gündelik hayattaki çoklu görev performansları, öğrenme süreçlerinde dijital araçların etkisi ve çoklu görev uğraşının başarıya etkisine yönelik veriler toplanmıştır. 12 üstün yetenekli, 13 üstün yetenekli olmayan öğrenci ebeveyni ile görüşülmüştür. Elde edilen nitel veriler için söylem ve içerik analizi uygulanmıştır. Çoklu görev performansında başarıya yönelik olumlu görüşe sahip bireyler çoğunlukla üstün yetenek tanısı almış öğrenci ebeveynleri olmuştur. Üstün yetenekli çocuklarının çoklu görev performanslarında başarısız olduğunu ifade edenler olduğu gibi çocuklarının bu performanslarını olağanüstü bulan anne-babalar da olmuştur. Üstün yetenekli olmayan öğrenci aileleri, çocuklarının çoklu görev çabalarına sıklıkla olumsuz veya kuşkuyla yaklaşmışlardır. Her iki grupta, çoklu görev çabasına ılımlı yaklaşarak sonuçları hakkındaki belirsizliği araştırmacıyla paylaşan ebeveynler olmuştur.

Key Words
Multitasking
Gifted
Learning
Parent

Abstract

The purpose of this study was to determine parental views about the multitask performances of non-gifted students and gifted students, who were frequently said to demonstrate directly or indirectly metacognitive abilities such as high intelligence, strong working memory capacity and high memory. An interview form was used to collect detailed information about the students' multitask performances in their daily lives, about the influence of digital tools in their learning processes and about the influence of multitask efforts on their achievements. Within the scope of the study, interviews were held with the parents of 12 gifted and 13 non-gifted students. For the analysis of the qualitative data, content analysis and discourse analysis were applied. There were parents who considered their gifted children's multitask performances to be excellent, while some parents reported that their children were not successful in this respect. Similar to the parents of gifted children, some of the parents of children who were not diagnosed as gifted were suspicious of their children's multitask efforts. In addition, some parents in both groups had moderate views about these efforts and shared uncertainty about the related consequences with the researcher.

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Digital opportunities are now made use of in education and teaching processes. Teachers can use these technologies as supportive teaching tools. Learners, on the other hand, see visual and audio-rich digital materials as tools that facilitate their learning activities. The usual environment of the new generation has turned into an ambience equipped with these facilities (Halverson & Smith, 2009; Plowman, 2015). Recreational use of these technologies is also common in this generation's behavior (George, MJ,

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Russell, MA, Piontak, JR, & Odgers, CL, 2018; Zabatiero, J., Straker, L., Mantilla, A., Edwards, S., & Danby, S., 2018). At this point, the learner can sometimes engage in multitasking to be able to perform two different actions such as learning and entertainment at the same time. The desire to benefit from all the possibilities offered by life is the starting point of this effort. Namely, individuals may want to read and reply to a message received on their mobile phone while watching an educational lecture video. For this, they may choose to stop the broadcast they are watching and to read and reply to the secondary task. However, the educational video can reply to the message without being interrupted. This preference indicates that individuals are involved in different multitasking conditions.

It is very difficult to interpret the multitasking performance of learners. Strong experimental studies support that it is difficult for this effort to be successful academically (Bowman, Levine, Waite, & Gendron, 2010; Burak, 2012; Dindar & Akbulut, 2016; Mercimek, 2018; Örün & Akbulut, 2019; Rosen, Lim, Carrier & Cheever, 2011). It is important to evaluate the social dimensions of the digital multitasking effort as well as the experimental evidence. This evaluation will allow understanding the attitudes towards generations divided by concepts such as "digital native" and "digital immigrant" (Prensky, 2001). Adults state that children are different and superior in terms of digital technology use with the “digital divide” (Norris, 2001; Waycott, Bennett, Kennedy, Dalgarno & Gray, 2010). As a matter of fact, it is thought that their children have difficulties in interpreting their digital behaviors and creating the most suitable learning environments for them (Dağlıoğlu & Alemdar, 2010). In addition, families seem to have an important place in reflecting and evaluating their children's behaviors in home life (Marsh, Hannon, Lewis & Ritchie, 2017). Despite all these views, the number of studies that report parents’ opinions about their children's digital multitasking efforts is quite limited. Parents' views on the possible consequences of multitasking efforts are valuable in this regard.

There are multiple variables that affect multitasking performance. The variables frequently stated in the literature are intelligence, working memory capacity, memory and metacognitive abilities (Colom, Martinez-Molina, Shih & Santacreu, 2010; Engle, Tuholski, Laughlin & Conway, 1999; Jaeggi, Buschkuehl, Jonides & Perrig, 2008). In this respect, it is important to determine the multitasking performances of gifted students (Davis, Rimm & Siegle, 2011; Heyder, Bergold & Steinmayr, 2018; Jausovec, 2000), who are said to have these characteristics directly or indirectly.

The responsibility and management of children's education begin primarily with the family. A family that is aware of the academic and personal characteristics of the student is vital for correct orientation. On the other hand, family views on the multitasking performance achievements of children and young people who place entertainment at the center of their lives represent a reflection of the lives of children in social life and home conditions. Overprotective and oppressive parental attitude is seen among the important predictors of giftedness (Afat, 2013). In this respect, determining the opinions of parents about their children's multitasking efforts could allow having a new perspective to the parent-student relationship.

Multitasking

Being a social creature, human beings endeavor to benefit from all the possibilities offered by life. In cases where many possibilities of social life increasingly exist, it is seen that attention is directed to more than one task. Actions that take place in a very close time period are regarded as multitasking. Seamless transitions between two different or related tasks are another definition of multitasking (Salvucci, Taatgen & Borst, 2009). During the multitasking process, attention is paid to focusing on more than one task (Salvucci & Taatgen, 2008).

Multitasking has an important place in human cognitive architecture. When defining multiple tasks, the importance of attention becomes clear. While the individual can pay attention to the action s/he wants, s/he cannot give the same importance to the secondary tasks taking place in the same time period (Rosen, 2008). Thus, among the tasks recently performed by the individual, a lower performance can be seen in the second and subsequent tasks compared to the initial task.

Multitasking has become a natural and common behavior in daily life (Kraushaar & Novak, 2010). For this reason, many definitions have been made for the concept. The effort to use different digital technologies at the same time is defined as multitasking (Brasel & Gips, 2011; Ophir, Nas & Wagner 2009). The success of this effort is at different levels in different individuals. The multitasking performances of these gifted groups, who are described as super-task complements and who claimed to be able to complete more than one task at the same time (Watson & Strayer, 2010), are a matter of

curiosity. In this context, the multitasking achievements of gifted individuals who are at the top level in many fields among their peers are considered worthy of research.

Giftedness and Multitasking

The concept of giftedness has a wide definition framework in the literature. Individuals who perform better than their peers in a specific area are included in this group (Gagne, 2004; Thompson & Oehlert, 2010). It is observed from time to time that there are contradictions in the definition and identification processes of the concept in the official institutions of our country (Sak et al., 2015). At this point, some key concepts in defining giftedness come to the fore. Among the distinguished characteristics of gifted people are analytical and creative thinking, practical intelligence, high-level knowledge and memory, rapid information processing, and fluent thinking (Clark, 2008; Heyder, Bergold & Steinmayr, 2018; Sak, 2012). In addition to these, gifted people are attributed to superior features such as combining different disciplines and performing different tasks at the same time (Eriksson, 2010; Grobman, 2009). It is stated that gifted people can do different tasks at the same time while surfing the Internet, and they can use another digital tool while messaging on the phone (Eriksson, 2010). In a similar study, Grobman (2009) reported that gifted people who were not under extreme pressure could multitask with their innate characteristics. Multitasking performances of gifted students who are said to have these characteristics are a matter of curiosity. In an empirical study conducted in this context, simultaneous multitasking effort resulted in failure in individuals who were at giftedness level. In addition, no statistically significant difference was found between sequential multitasking efforts and non-multitasking performances (Mercimek, 2018). This study aimed to determine parental views about the multitasking performance of gifted and non-gifted students. It was important to classify the opinions obtained and to present the findings that could clearly reveal the situation by comparing it with the literature. Thus, with this study, together with the experimental studies in the literature, a holistic perspective on multitasking performance could be presented, including the academic and social environment.

Method

Research Design

This study was carried out with a case study, one of the qualitative research designs. With this method, comprehensive, totalitarian and detailed data about the investigated situation emerge (Yıldırım ve Şimşek, 2016). The data were collected using a semi-structured interview form. In this form, there were three basic questions prepared by the researcher to be directed to families. With this form, the purpose was to obtain detailed information through the questions about the multitasking performance situations of the students in daily life, the effect of digital technology products in the learning processes and the success situations in the process of multitasking.

Study Group

Within the scope of the present study, interviews were held with the families of 12 students enrolled in the ÜYEP affiliated to Anadolu University Department of Education of Gifted Students and with the families of 13 students who were enrolled in the Ticaret Odası Secondary School in Eskişehir and were not diagnosed with giftedness. All of these interviews were organized by the researcher in the environment they wanted and with the approval of the participants.

Data Collection

The research data were collected with the approval of the Siirt University Ethics Committee dated 11.01.2021 with document number BELC31ZMJ in the canteen of the Education Faculty at Anadolu University, in the canteen of Ticaret Odası Secondary School, in the meeting rooms as well as in environments where the volunteering participants felt comfortable for the interviews (such as cafes, workplaces). The family views of the students who took part in the study about the academic and social multitasking activities in daily life were determined with the help of face-to-face interviews. The images of the environments where the interviews were held are presented in Figure 1 and Figure 2.

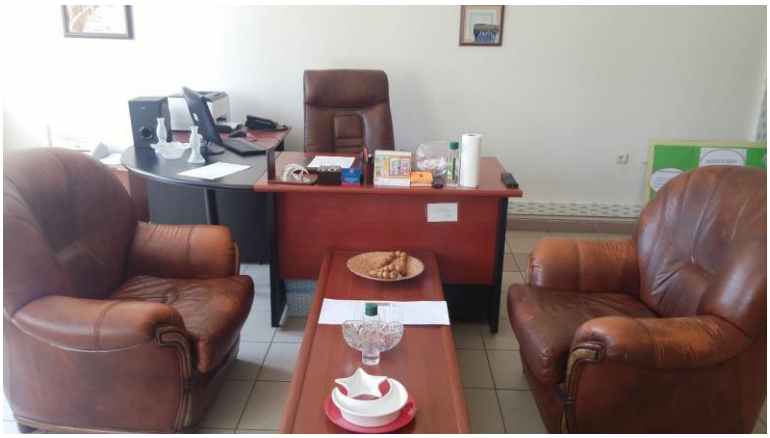

Figure 1. *A visual of a setting where an interview was held with a parent of a student who was not diagnosed with giftedness*

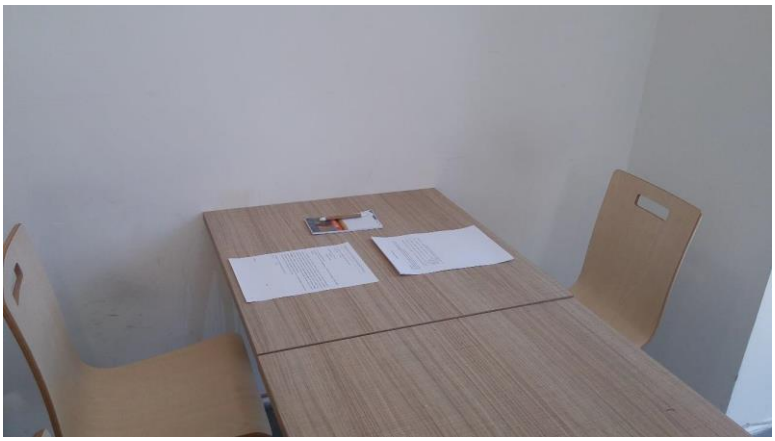

Figure 2. *A visual of the setting where an interview was held with a parent of a student who was diagnosed with giftedness*

Data Analysis

Content analysis and discourse analysis were applied for the qualitative data obtained. With content analysis, in-depth data can be obtained for a situation or phenomenon (Bogdan & Biklen, 2007; Yıldırım & Şimşek, 2006). Gathering these data under common categories and thematizing them were done through content analysis (Merriam, Tisdell, 2015). Thus, the pattern among the data intended to explain the situation can be captured. Discourse analysis also determines the social structure and connections of expressions (Elliott, 1996; Gee, 2004). As a result, the nature of the data acquired and the emotional structure and thematic connections between them can be revealed. Before this structure was presented, coding was requested from two different experts. Care was taken to ensure that the coders were individuals who were prone to qualitative research and who had qualitative data coding and thematic experience. The code and theme framework created by three different coders were evaluated as a whole. Theme and content concordance between coders (Miles & Huberman, 1994) was measured at the level of 70% in the first step. At the end of the editing and updating, full compliance was achieved and reporting was started. Thus, any loss of the data obtained was prevented. During the analysis, the structure leading to the codes and themes was supported with direct quotations instead of personal judgments and comments.

Findings

In this study, the reflections of the participants' multitasking efforts in social life were taken into consideration. The multitasking situations the students encountered in daily life were discussed within the scope of the opinions of the participating families. The success of the students who had to multitask continuously in daily life and their attitudes towards this behavior were examined via the interview questions. Parental views on children's multitasking efforts are also involved in sequential or

simultaneous multitasking scenarios. In this respect, it is important to determine which section the multitasking performance belongs to. As a result of the evaluations about the success of this effort, research themes were formed. Research evidence (parent opinions) underlying these themes is presented below.

Thoughts about their child's effort to multitask in everyday life

Parents are expected to have knowledge about their children's daily life activities. In this respect, it was thought that their children had critical information about their multitasking efforts in social life along with their learning processes. There were negative, skeptical, moderate and positive opinions about the daily multitasking efforts of their children. For example, one parent expressed his opinion about his child as follows:

> *"I mean he does it most of the time. I don't think of examples right now, but he gets up from there and answers him while he is studying. He can answer a question of his brother about the lesson. She can also send a message via WhatsApp to her friend while studying normally and regularly at the same time. She does these things so often."*

The same parent continued his views as follows:

> *"I also liked to study mathematics while listening to music and studying at university. But after a certain point, or those lyrics in the music could pull me to other sides, I don't know how much impact a child at this age will have, but when I was working at university, it would have affected me negatively in terms of cooling me from the lesson. That's why I think it might disrupt the study."*

This parent primarily reported his positive opinions about the multitasking effort of his child in daily life. However, some reflective statements were also revealed in the interview, which was further elaborated with the questions at the end in order to reveal the basic bases of these thoughts. As can be seen, the details showing that he was suspicious of the effects of carrying out different actions together in his own life on the learning process were shared.

The parents' views about their children were based on different basics. One of these differences is observation. It is important for parents to be able to observe their children's behavior and evaluate their results. The main reason for this situation is that children spend a significant portion of their time with their families and exhibit their behavioral patterns towards social life mostly in the family environment. Another rational is reflections. It is in this study that the parents reflected their own experiences as the possible success of their children without having clear information about the child's multitasking performance. Another situation is the evaluations created by generation differences. These evaluations have not been proven experimentally in the literature, but the evaluations reflect the perception that the new generation has metacognitive advantages (Prensky, 2001). In this study, although the families had different bases, their evaluations for their multitasking performance were taken as basis. Thus, comprehensive data on multitasking efforts could be obtained. Four different quotations are shared above regarding the parental opinion. The parents' statements regarding the relevant interview question in the title indicated four different themes. However, the multitasking situations of the children were summarized under three different themes (singular, sequential, simultaneous). The themes of parental views and children's multitasking performances can be summarized as follows:

The multitasking effort headlines are controllers and unconditional.

Controllers: Skeptical, Moderate

Unconditional: Negative, Positive

The parental views and corresponding representative meanings of the themes are summarized in the table below.

Table 1

The parental views and corresponding representative meanings of the themes

Parental Views	
Negative	"Doesn't multitask, struggles, fails."
Skeptic	"He's got effort, he tries, but I'm worried about the effort."
Moderate	"I witness situations that he can do. After all, our children are in a different generation. I have no clear judgment on the results of this effort."
Positive	"I see him doing it. Their efforts do not go unanswered. As he is successful in different fields, he can overcome this. It's an ordinary action for him."

Controlling parents have difficulty in evaluating the performance of their children who are trying to multitask. They do not have a definite judgment about the success of the effort. From time to time, they worry about the effects of this effort on the learning process, and they sometimes put forward statements of not very strong evidence of success. Unconditional parents, on the other hand, are individuals who care less about differences in context and who have made a judgment about the results of the multitasking effort. This judgment can be a negative as well as positive parental opinion sharing proud expressions about their child. In a way to serve the general purpose of this study, student behaviors were gathered in three different themes, which expressed different multitasking scenarios (Single, Sequential, Simultaneous). People who did not show any effort for multitasking and who did not multitask at the same time or consecutively were placed in the single theme of not multitasking. Children who adopted sequential tasks were included in the sequential theme regardless of their success status. Children who were doing more than one task at the same time took part in the simultaneous theme.

Quotations regarding the parents' views and children's behaviors and the themes in which they belonged to can be exemplified as follows:

Family structure which the quotations belonged to

G: Parents of gifted students

NG: Parents of students not diagnosed with giftedness

> *G6: "I think doing more than one job at the same time has a negative effect on his studying, which is his main job."*

This parent with a gifted child pointed to the negative consequences of multitasking performance. However, it was seen that the negative opinions were mostly found in families of students who were not diagnosed with giftedness. Examples of expressions containing **negative** opinions about multitasking are as follows;

> *NG1: "Zero."*
>
> *NG4: "Of course, I think it decreases his performance in lessons. That's, it extends the study time once when you can learn better or in a shorter time."*
>
> *NG13: "I think he will be more successful if lesson-oriented. I think it is better to focus on that job alone, not on both at the same time. Doing two things at once seems to be more of a failure. "*

Some parents are **skeptical** of their children's multitasking performance. These family views are exemplified below:

> *G3: "I think there is nothing in negative sense. I mean, he never fails. I don't think that it leads to failure, but does it lead to success or does it contribute, I really cannot evaluate this at all."*
>
> *G4: "I am not sure if he can understand what he is studying in front of the television. I am not sure about it because I do not have the chance to test it".*
>
> *NG11: "Now, there are two situations in Ersin. If he texts well on the phone, he will be successful, but sometimes there are negativities, and I think he will fail."*

Family opinions gathered under the theme of suspicion about multitasking showed a similar distribution in families of children who were diagnosed with gifted and not. What this group had in common was that they did not use firm statements about the results of the effort, positive or negative and were concerned about the effort. Different from these views, there were parents who offered **moderate** views on multitasking. What these views had in common was that they did not have negative feelings about the results of the multitasking effort. However, they could not predict the results. The views that also cared about generation differences were gathered under this theme. These views can be exemplified as follows:

> *G7: "When he does it by hiding it from me because it is already in a corner of his mind, maybe he will not be able to concentrate during the lesson, so sometimes I like the effort to run both at the same time because at least he fulfills his duty. When I check it afterwards, there is not much wrong, it does not have a lot of lacking in the work it does, so it affects positively because I did not prevent it."*

The statement of "positive impact" in this view does not indicate that the multitasking was fully successful. The statement "It is not too lacking" and the impressions in the context of the interview indicated that the performance was not at a high level. However, it did not contain anxiety or negativity. Other than that, the moderate parental views are as follows:

> *G10: "As an educator, it is not something that we can fully accept, but considering the changing time and the changing technological conditions, in the world of these children, doing too many things for them is positive, negative, beneficial, unscathed, efficient because I cannot fully understand what it is."*

NG4: "There are places where he is successful, so now he can do this and pay attention, he can do it, for example, he does not always correspond with his friend in his favorite lessons in Turkish, but when he interrupts, he does both correspondence and finishes his homework. "

Multitasking can take place in social activities as well as in academic life. Many **positive** family views were also determined for this concept, which cannot be considered independently of daily life. These views contained key statements indicating that multitasking performance resulted in success. As another common feature, it included statements showing that the effort was successful in the observation of the family or the teacher. Sample quotations in support of these views are as follows:

G6: "I mean, he does it most of the time, I don't think of examples now, but he gets up and answers a question of his brother while studying, and he can answer a question of his brother about the lesson, and he can send a message on WhatsApp to his friend at the same time while studying normally."

G9: "Our child is extraordinary to be able to handle this issue… People say he hears about everything, or we do it too much in public language. While thinking about where he worked, he lived abroad for 3 years in London after primary school 1. He constantly watches a stranger video, something strange, a talk-show or a foreign movie, and solves a test at the same time, he listens to questions. I mean, he can do not two, but sometimes three jobs, maybe I haven't counted it, but I realized this more recently, I never have this ability. "

NG9: "While watching television, he can talk to us and also solve cubes."

NG11: "So he can do it, and if you ask how do I arrive at this opinion, the lessons are not bad, the lessons are very good. But of course, he plays on the phones while studying, so I think his grades are good because he can do both together "

NG12: "Now my child listens to music mostly while studying. She listens to music with lyrics and even watches videos occasionally, but this does not affect her lessons negatively, on the contrary, my daughter is successful. He has degrees in the classroom and his degrees at school are both very good at the same time, he can listen to music and watch videos while studying."

A prominent notion that emerged in the interviews was that the belief that multitasking performance was successful increased as the opinions moved from negative to positive. The individuals who believed in this performance and had the most positive views were the parents of students who were diagnosed with giftedness. Negative opinions were mostly seen in families of students who were not diagnosed with giftedness. As can be seen from these statements, it is not possible to reach a definite judgment about the multitasking performances of the children. However, in addition to the belief that the new generation can multitask, differences in generation and possibilities are also mentioned. The parent who was of the opinion that he was experiencing digital segregation had developed the view that multitasking could be easier for a generation growing in the digital environment.

In addition to the subjective evaluations of the families, a classification of the multitasking efforts of the children was also made. Multitasking efforts were combined in singular, sequential and simultaneous themes. The views of students who did not multitask, that is, could perform single tasks, can be exemplified as follows:

G5: "Maybe sometimes scratching the picture or playing with an intelligence cube because he likes it or bouncing the ping-pong ball as I said, but when I go and play music, there is no time. When we talk to his mother next to him, when a couple of people talk or when the bird flies in the room, my father says I get distracted. You know, when the bird comes, when it sits on her shoulder, it either sits on her head or clicks right and left, she doesn't want it"

NG1: "If he wants to do one thing, he will study; if he is going to study, he will play games; if he is going to play games, if he is going to watch television, he will read books; if he is going to watch television, he mostly chooses one thing, and he doesn't do it all together."

NG5: "Generally, if my daughter does it, she will do something. So she does not have multitasking. She does not listen to music or watch television while studying. If she's watching TV, she won't do anything else. If she's listening to music, she doesn't do anything, she just does that job."

Most of the views on the singular task were seen in the families of students who were not diagnosed with giftedness. Sample quotes from the parents' views expressing student behaviors in sequential multitasking are presented below:

G5: "We opened some videos from YouTube a few times in science lesson whenever he wanted, for example, in such cases, I wonder if he does something because he is bored, the picture starts to blacken. He draws pictures, he makes painting style things, he creates patterns or something, but I ask him if he is listening to the lesson, we really do not have any problems with listening to the lesson."

G6:"I mean, he does it most of the time, I don't think of examples now, but he gets up and answers a question of his brother while studying, he can answer a question of his brother about the lesson. He can also send a message on WhatsApp to his friend while studying normally."

As it can be understood from this statement, the same student may be multitasking from time to time sequentially and from time to time simultaneously.

G7: "He feels tired after coming from school. He wants to listen to music during rest hours, read a book to relax, or he wants to move by listening to loud music, then he wants to study or do these activities between classes."

NG4: "Despite this, there are places where he is successful, so now he can do this and pay attention, he can do it, I mean, he does not always correspond with his friend, especially in his favorite lessons in Turkish, but when he interrupts, he does both correspondence and finishes his homework."

It was stated that simultaneous multitasking is more common in student behaviors. The parents reported that it was especially seen in the behaviors of students diagnosed with giftedness. The opinions about the success and failure of this behavior are as follows:

G8: "We have such a problem at school, too, while listening to the lesson at school, he is busy with games or anything on the iPad and listens to the lesson. We thought it would be a disadvantage and wanted to take the necessary precautions with the school teachers, but the answer came from the teachers when I asked a question and gave the correct answer. "

G12: "She can do more than one job at the same time, while playing with her mobile phone, and while watching television, she can comment on the series we watch on TV, or she can get involved if she is studying while chatting with her mother."

NG9: "While watching television, he can talk to us and also solve cubes."

NG11: "If you say that he can do this, he can do as follows; the lessons are not bad, the lessons are very good. But of course, he plays on the phone while studying, so I think his grades are good because he can do both together. "

The parents of students who were or were not diagnosed with giftedness made different evaluations about their children's multitasking performances. In these evaluations, there were common points as well as different interpretations. Although the views of the controlling families showed a homogeneous distribution in both groups, the views of the unconditional families presented a heterogeneous structure. In skeptical and moderate family views, statements with similar qualities and quantities were observed in the families of students who were diagnosed as gifted and not. However, negative family views were mostly seen in the parents of students who were not diagnosed with giftedness. Positive opinions were seen mostly in the families of students who were diagnosed with giftedness.

Discussion and Conclusion

This study tried to determine the opinions of middle school student families about their children's multitasking performances. These views were collected in the context of different situations of multitasking performance (simultaneous multitasking, sequential multitasking (Salvucci & Taatgen, 2008), single task). The findings obtained for each of the interview questions were discussed extensively. The results of the study were evaluated from a holistic perspective.

The views and observations of the parents of students who were diagnosed as gifted and not had similarities and differences. In other words, the parents of gifted children displayed a heterogeneous structure within themselves. That is to say, while there were parents who found the multitasking performance of their children extraordinary, there were also those who stated that their children failed in this regard. This situation is also similar in student families who were not diagnosed with giftedness. Families made evaluations based on different multitasking socially and academically. It varies and shows similarities in accordance with the children's capabilities.

Family views on the behaviors of students diagnosed and not diagnosed with giftedness

The families of gifted students often shared positive views on multitasking success. They stated that their children were successful in their multitasking effort. This situation contradicts with strong experimental studies in the literature (Örün & Akbulut, 2019; Rosen, Lim, Carrier & Cheever, 2011). These families with children at the secondary school level see multitasking as part of their children's lives. However, some parents avoided making clear judgments about the consequences of this effort. Families who were not concerned about their views took a moderate approach. It was seen that their negative evaluations of the multitasking effort were low. There were also views that were skeptical of

this effort. During the course of the study, it was stated that such an effort was alarming for academic success. However, they did not present a clear negative opinion, considering that it was a necessity for the period in which the children were present. In addition to these views, there were few opinions about the fact that the multitasking effort failed.

The parents of students who were not diagnosed with giftedness shared generally negative opinions about their children's multitasking efforts. They stated that their children's multitasking efforts failed. However, they stated that some children avoided multitasking or failed when they attempted. This situation is consistent with the experimental research results. On the other hand, there were also parents who presented quite assertive statements about their child's multitasking performance. The results of the experimental research in the literature did not show consistency with the few positive opinions compared to the families of students diagnosed with giftedness (Bellur et al., 2015; Bowman et al., 2010; Coens, et al., 2011; Dindar & Akbulut, 2016; Felisoni & Godoi, 2018; Örün & Akbulut, 2019). Similarly, the families with gifted children and those with undiagnosed children were sometimes skeptical about their children's multitasking efforts. Some families approached this effort mildly and shared the uncertainty about the results with the researcher. In summary, the families of students who were not diagnosed with giftedness used more consistent statements about the outcome of their children's multitasking efforts. However, there is an important detail at this point. Due to the high ability scores and intelligence levels of children diagnosed with giftedness, it is possible for the families to consider these variables as predictors of multitasking. The negative views of the families of undiagnosed children with low ability levels towards multitasking can also be evaluated in this context.

Classification of multitasking efforts of gifted and not diagnosed with giftedness students

Multitasking classification was made under three sections as singular, sequential and simultaneous. The families of students diagnosed with giftedness stated that their children mostly showed simultaneous working behavior and that this effort was successful. Some parents thought that academic success was the result and that different efforts in the process were not factors that would affect success. For this reason, there were family opinions stating that the multitasking effort was also successful. The number of students thought to be doing sequential multitasking was less than the number of students thought to be working simultaneously. It was seen that the students who did not multitask were mostly those who were diagnosed with giftedness. There were a limited number of family opinions that this group could not multitask.

The families of students who were not diagnosed with giftedness stated that their children mostly worked individually. In this group, there were those who stated that their child was preferably working individually as well as those who stated that their child was unable to multitask. However, some parents stated that their children attempted to multitask sequentially and completed them successfully. At this point, this group was similar to the families of students diagnosed with giftedness. On the other hand, very few parents stated that their children could work simultaneously. These families found the simultaneous multitasking performances of their children very successful. In this context, the families of children diagnosed with giftedness stated that their children mostly worked simultaneously, while the families of children who were not diagnosed stated that they could perform only one task.

Family is the most effective environment to observe the reflections of children's cognitive structures and actions. Parents' views about their children are very valuable in this context. These views do not purport to fully reflect the multitasking structures of children. However, it gives important clues in this regard. It is important to compare parental statements with empirical research results. In recent experimental studies in the literature, it has been revealed that multitasking effort is a factor that disrupts the learning process (Dindar & Akbulut, 2016; Felisoni & Godoi, 2018; Lau, 2017; Mercimek, 2018; Örün & Akbulut, 2019; Wang & Tchernev, 2012). In this study, in which parental views were taken, there were views parallel to the experimental results. However, many parental opinions that contradicted the results of experimental research were also encountered.

The statement "My child can study while watching television" is a plain and superficial expression. The extent to which the child can do this action according to the TV content and the cognitive load created by the lesson is an important debate. Parents are expected to be the most important followers of their children's academic and social lives. In addition, it is now necessary to increase multitasking awareness, which is frequently encountered in daily life and is a part of life. In addition, the ability to use different

digital technologies effectively is frequently seen among new-generation behaviors. This environment has become the natural environment of the new generation. The combined use of different media tools should not be qualified as a metacognitive feature (Kirschner & De Bruyckere, 2017; Kirschner & van Merriënboer, 2013). The brain can do different tasks sequentially and quickly. For some individuals, there is no interruption in this sequence. This should not be evidence that the brain can perform two different tasks at the same time. Parents' ability to measure the cognitive load created by different tasks on the student is limited. Missions of different difficulty levels can affect multitasking success to a different extent. However, strong empirical studies revealed that multitasking has negative influence on learning even in gifted students (Mercimek et al., 2020). At this point, providing guidance to the families with low level of awareness of the scientific outputs of the multitasking effort will help their children manage the process in which they are in this effort. In this context, the results of the experimental studies should be followed carefully. Dönmez and Akbulut (2021) have proven in their study that the secondary task of learners who are trying to multitask are also related to the main task, contributing to learning outcomes. In contrast, unrelated multitasking efforts were unsuccessful. It is a critical situation that can guide the relationship between child and family in the context of multitasking in educational framework. Learning is a serious and focused process. Another issue that should be given importance to in parental guidance is to ensure that entertainment elements that are not related to the learning content are removed from the environment. This process, which can be realized with the cooperation of students and families, is expected to reveal more meaningful and permanent results.

Statement of Publication Ethics

As the author of this study, I declare that the study has no unethical problem. Ethical principles and rules were followed during the all the stages of the research process. Ethical compliance approval was obtained for this research in accordance with the decision of Siirt University Ethics Committee dated 11.01.2021 and numbered 10.

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Genişletilmiş Özet

Giriş

Öğrenenlerin çoklu görev performanslarını yorumlamak oldukça güçtür. Güçlü deneysel çalışmalar akademik olarak bu çabanın başarıyla sonuçlanmasının zor olduğunu desteklemektedir. Dijital çoklu görev çabasının deneysel kanıtlarının yanında sosyal boyutlarının da değerlendirilmesi önemli görülmektedir. Bu değerlendirme ile "dijital yerli" ve "dijital göçmen" gibi kavramlarla bölünen nesiller üzerindeki tutumların anlaşılması önem taşımaktadır. Çoklu görev performansını etkileyen birden fazla değişken vardır. Alanyazında sıklıkla ifade edilenler zekâ, çalışan bellek kapasitesi, hafıza, üst bilişsel yeteneklerdir. Bu özellikleri doğrudan veya dolaylı olarak taşıdığı ifade edilen üstün yetenekli öğrencilerin çoklu görev performanslarının belirlenmesi de bu açıdan önem taşımaktadır. Eğlenceyi yaşamlarının merkezine almak isteyen çocuk ve gençlerin bu süreçteki çoklu görev başarısına ilişkin aile görüşleri, çocukların ev ve sosyal ortamlarındaki deneyimlerinin bir yansıması niteliğindedir. Bu bağlamda ebeveynlerin çocuklarının çoklu görev çabaları hakkında görüşlerinin alınması ile ebeveyn-öğrenci ilişkisine yeni bir bakış açısı kazandırılması beklenmektedir.

Yöntem

Bu çalışma nitel araştırma zeminde oluşturulmuştur. Yarı yapılandırılmış görüşme formuyla veriler toplanmıştır. Bu formda ailelere sorulmak üzere araştırmacı tarafından hazırlanmış üç temel soru yer almaktadır. Görüşme formu ile öğrencilerin gündelik yaşamdaki çoklu görev performansları, öğrenme süreçlerinde dijital araçların etkisi ve çoklu görev çabasının başarıya etkisine yönelik sorular aracılığıyla ayrıntılı bilgi toplamak hedeflenmiştir. Araştırma kapsamında Anadolu Üniversitesi Üstün Zekâlıların Eğitimi Anabilim Dalı Başkanlığı'na bağlı ÜYEP'e kayıtlı olan 12 öğrenci ailesi ve Eskişehir ilinde yer alan Ticaret Odası Ortaokulu'na kayıtlı ve üstün yetenek tanısı almamış 13 öğrenci ailesi ile görüşmeler gerçekleştirilmiştir. Elde edilen nitel veriler için içerik ve söylem analizi uygulanmıştır.

Bulgular ve Tartışma

Bu çalışmada çoklu görev performansına ait farklı durumlar (eş zamanlı çoklu görev, sıralı çoklu görev, tekil görev) bağlamında görüşler derlenmiştir. Üstün yetenekli öğrencilerin aileleri sıklıkla çoklu görev başarısına yönelik olumlu görüşlerini paylaşmıştır. Çoklu görev çabasında çocuklarının başarılı olduğunu belirtmişlerdir. Bu durum alanyazında yer alan güçlü deneysel çalışmalar ile çelişki içermektedir. Ortaokul seviyesinde çocukları bulunan bu aileler çoklu görevi çocuklarının hayatlarının bir parçası olarak görmektedir. Ancak bazı ebeveynler bu çabanın sonuçları hakkında net yargılar kullanmaktan uzak durmuşlardır. Görüşlerinde endişe taşımayan aileler ılımlı bir yaklaşım sergilemişlerdir. Çoklu görev çabasına yönelik olumsuz değerlendirmelerinin düşük olduğu belirlenmiştir. Bu çabaya kuşkuyla yaklaşan görüşler de olmuştur. Üstün yetenek tanısı almış çocuk ebeveynleri çocuklarının büyük oranda eş zamanlı çoklu görev yapma davranışı gösterdiğini ve bu çabanın başarılı sonuçlandığını ifade etmişlerdir. Üstün yetenek tanısı almamış öğrenci ebeveynleri çocuklarının çoklu görev çabalarına yönelik genel anlamda olumsuz görüşler paylaşmıştır. Çocuklarının çoklu görev çabalarının başarısızlıkla sonuçlandığını ifade etmişlerdir. Bununla birlikte bazı çocukların çoklu görev çabasına girmekten kaçındığını veya bu çaba içinde olduklarında başarısız olduklarını belirtmişlerdir. Bu durum deneysel araştırma sonuçları ile tutarlılık göstermektedir. Buna karşılık çocuğunun çoklu görev performansı hakkında oldukça iddialı ifadeler sunan anne-babalar da olmuştur. Üstün yetenek tanısı almış öğrenci ailelerine göre az sayıda olan olumlu görüşler ile alanyazında yer alan deneysel araştırma sonuçları tutarlılık göstermemiştir. Öğrenme, ciddi ve odaklanılması gereken bir süreçtir. Ebeveyn rehberliklerinde önem verilmesi gereken bir durum ise öğrenme içeriğiyle ilgisiz eğlence öğelerinin ortamdan uzaklaştırılmasının sağlanmasıdır. Öğrenci ve aile işbirliğiyle gerçekleşebilecek bu sosyal-akademik süreç ile daha anlamlı ve kalıcı sonuçların açığa çıkması beklenmektedir.

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