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Pragmatic Language Skills of Children with Developmental Disabilities: A Descriptive and Relational Study in Turkey

Özlem DIKEN*

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Abstract

Problem Statement: Because communication skills, particularly pragmatic skills, are fundamental for living an independent life in society, these skills are vital to the quality of life of individuals with developmental disabilities (DD) and their families. Studies of the pragmatic skills of individuals with DD can provide important insights into the communication skills of these individuals, facilitating the design and delivery of appropriate and effective services for these individuals and their families. Thus, describing and comparing the pragmatic language skills of individuals with Autism Spectrum Disorders (ASD) and intellectual disability (ID) in Turkey is important because communication skills represent one of the most important developmental domains for the quality of life of individuals with DD.

Purpose of Study: The purpose of this study was to explore the pragmatic language skills of children with DD (ASD and ID) in Turkey.

Methods: This descriptive and relational study was carried out with a sample of 86 children with DD, including 34 children with ASD and 52 children with ID. Data were collected using the Turkish Version of the Gilliam Autism Rating Scale-2 (TV-GARS-2) and the Turkish Version of the Pragmatic Language Skills Inventory (TV-PLSI).

Findings and Results: The results revealed that the majority of the participants exhibited very poor pragmatic language skills. The results of the correlation analysis revealed a significant negative correlation between Autism Index scores and Pragmatic Language Skills Index scores. The results also revealed significant differences in TV-PLSI scores between children with ASD and children with ID. Children with ID had a higher

* Dr. Anadolu University; E-mail address: diken.ozlem@gmail.com

level of pragmatic skills than children with ASD. Communication Skills suscale of TV-GARS-2 explained 30 percent of the variance in pragmatic language skills of children with ASD. In contrast, the other two scales (i.e., Stereotyped Behavior and Social Interaction) did not contribute significantly to the model.

Conclusions and Recommendations: Consistent with the international literature, Turkish children with DD also exhibit lower levels of pragmatic skills than children with typical development and children with ID have higher scores than children with ASD. Communication skills explained 30% of the variance and represented the best predictor of pragmatic language skills among children with ASD. More studies that include larger samples are needed. Services and intervention programs should consider addressing pragmatic language skills.

Keywords: Pragmatic language skills, developmental disabilities, autism spectrum disorders, intellectual disability, Turkish sample.

Introduction

The American Speech and Hearing Association (ASHA) defines the pragmatic function of language as the system combining language components (i.e., phonology, morphology, syntax and semantics) to generate functional and socially appropriate communication. According to Westby and Cutler (1994), pragmatic communication skills are fundamental for successfully completing academic and nonacademic tasks (cited in Leonard, Milich, & Larch, 2011). Bierman (2004) stated that children who use appropriate pragmatic communication skills usually have successful social interactions with peers, family, and teachers. However, communication problems, including pragmatic problems, are common in individuals with developmental disabilities (DD) (Rispoli, Franco, Meer, Lang, & Camargo, 2010), as reported in studies that investigated the development and use of pragmatic language skills in individuals with DD. The pragmatic problems reported in individuals with DD include problems taking turns in conversation, failure to adapt a message to the needs of a listener, failure to respond to verbal cues from others, overuse of stereotyped phrases, difficulty in understanding sarcasm, jokes and metaphors, and failure to continue revising utterances when conversational trouble is protracted (Green, Johnson, & Bretherton, 2013).

Among individuals with DD, individuals with autism spectrum disorders (ASD) and intellectual disabilities (ID) are two groups reported to exhibit difficulties in pragmatic language skills. As cited in Volden and Phillips (2010), several studies reported that individuals with ASD exhibit pragmatic language difficulties in a number of communication skills, such as irregular or irrelevant conversation (Kanner, 1946), lack of ease in the use of words (Rutter, 1965), stereotypic or inappropriate use of language (Bartak, Rutter, & Cox, 1975) and metaphorical language skills (Cantwell, Baker, & Rutter, 1978), problems with initiating a conversation (Baron-Cohen, 1988; Tager-Flusberg, 1996) and with responding to

others' initiations (Stone & Caro-Martinez, 1990), difficulty taking turns appropriately (Botting & Conti-Ramsden, 2003; Curcio & Paccia,1987; Prizant & Duchan, 1981; Prizant & Rydell, 1984), problems with developing and maintaining a topic (Baltaxe, 1977; Bishop & Adams, 1989; Eales, 1993; McCaleb & Prizant, 1985; Tager-Flusberg & Andersen, 1991; Volden, 2002), and sudden and inexplicable topic shifts (Bishop, 1998; Bishop & Adams, 1989; Eales, 1993; Fine, Bartolucci, Szatmari, & Ginsberg, 1994; Tager-Flusberg & Andersen, 1991). In addition, Adams, Lockton, Gaile, Earli, and Freed (2012) stated that ASD should be viewed as a spectrum because language and social interaction skills are highly variable within the group. Those authors also state that the majority of children have subtle higher-level language difficulties, such as difficulties with inference generation, narrative organization and comprehension of discourse and mild social difficulties.

Regardless of the level of disability, the language and communication domain is the most influenced developmental domain among individuals with ID (Alev, 2011). Both qualitative and quantitative differences are apparent when comparing the language skills of individuals with ID to those of individuals with typical development. In addition to that individuals with ID primarily exhibit problems with language skills in the areas of sentence structure, establishing hypotheses, and phonological processes, the pragmatic skills of these individuals are also influenced negatively (Owens, 1999). However, some studies reported that children with ID acquire important pragmatic language skills, such as appropriately repeating and revising utterances in response to requests for clarification (Coggins & Stoel-Gammon, 1982; Johnston & Stansfield, 1997; Pearl, Donahue, & Bryan, 1981; Scudder & Tremain, 1992). Children with ID are also reported to have problems with continuing to revise utterances during delayed or extended conversations (Scudder & Tremain, 1992).

As stated above, the communication domain is one of the most important and influenced areas in individuals with DD. Because communication skills, specifically pragmatic skills, are fundamental for leading an independent life in society, achieving academic and social success (i.e., establishing and maintaining friendships and relationships), and participating in employment and leisure activities, these skills are vital to the quality of life of individuals with DD and their families. The studies of the pragmatic skills of individuals with DD that are available in the international literature are primarily US-based. These studies indicate that studying the pragmatic skills of individuals with DD provides insights that are important for understanding the communication skills of individuals with DD and for designing and delivering appropriate and effective services for those individuals and their families. A search of studies in Turkey revealed only one study of the pragmatic skills of children with delays/disabilities. Sahin et al. (2009) performed a study that included 67 young children between the ages of 3 and 6 years and compared children with language delays to children with typical development. Children with language delays received educational treatment, auditory processing training, and speech and language training that consisted of acoustic signal perception, auditory discrimination, auditory comprehension, conception training, phonological processing training, speech sound processing, and speech and language education.

The authors concluded that during the critical early language development period, children who have receptive and expressive language delays also exhibit delays in pragmatic language usage. However, more studies describing and comparing the pragmatic language skills of individuals with ASD and ID in Turkey are needed because the language and communication domain is one of the most important developmental domains and skills for the quality of life of individuals with DD.

The purpose of this study is to explore the pragmatic language skills of children with DD (ASD and ID) in Turkey. For this purpose, the following questions were addressed:

(1) What is the level of pragmatic language skills of children withASD and children with ID?; (2) Is there any significant difference between the pragmatic language skills scores of children with ASD and children with ID?; and (3) Which of the following factors are the best predictors of pragmatic language skills in children with ASD: Stereotyped Behaviors, Communication Skills or Social Interaction Skills?

Methods

Research Design

This study is a descriptive and relational study (Büyüköztürk, Çakmak, Akgün, Karadeniz and Demirel, 2008) that describes, compares, and predicts variables related to the pragmatic skills of children with ASD and ID.

Research Sample

The study was carried out with a sample of 86 children with DD, including 34 children with ASD and 52 children with mild ID. Of the 34 children with ASD, 24 children were male and 12 children were female. The ages of the included children ranged from 60 to 144 months, with a mean of 103 months (SD: 29.09). The Turkish version of the Gilliam Autism Rating Scale-2 (TV-GARS-2) scores of the included children with ASD ranged from 70 to 123. As illustrated in Table 1, most of the children had Autism Index scores higher than 85, indicating that those children have a very high probability of exhibiting ASD (the minimum score that can be obtained on the TV-GARS-2 is 55, and the maximum score is 153).

Table 1

Level of Autism

Probability of Autism	*Level of Autism (TV-AI*)*	*f*	*%*
1. Unlikely	<69	-	-
2. Possibly	70-84	8	23.5
3. Very Likely	>85	26	76.5
Total	-	34	100

**TV-AI: Turkish Version of Autism Index*

Of the 52 children with mild ID, 35 children were male and 17 children were female. The ages of the included children ranged from 61 to 144 months, with a mean of 106 months (SD: 26.94). Convenience sampling procedure was followed to recruite participants coming from a private special education and rehabilitation center in the city of Antalya, Turkey. All of the included children had an official/medical report that indicated their official/medical diagnosis of "having mild level ID", which was stated by a psychiatrist or neurologist from a state run hospital. The children also had an educational diagnosis and report from the Antalya Guidance and Research Center, which is a state center that coordinates special education services and is affiliated with the Ministry of National Education and the Province of Antalya Education Directorate in Turkey.

Research Instruments and Procedure

Turkish Version of the Gilliam Autism Rating Scale-2 (TV-GARS-2) (Diken, Ardıç, Diken, & Gilliam, 2012). The Gilliam Autism Rating Scale-2 (GARS-2) (2005), which was normed on a sample of 1,107 children and young adults aged between 3 and 22 years who had been diagnosed with ASD in the United States, is a revised version of the Gilliam Autism Rating Scale. The scale was initially developed in 1995 by James E. Gilliam in the United States. The GARS-2 contains a total of 42 items and three subscales. Subscale 1 is called Stereotype Behaviors, subscale 2 is called Communication and subscale 3 is called Social Interaction. Each subscale includes 14 items that are rated by the principal caregiver or teacher/specialist who knows the child best, using a 4 point Likert-type scale (0=not observed, 1=rarely observed, 2=sometimes observed, 3=frequently observed). In the original study testing the GARS-2, reliability and validity were examined by performing a series of psychometric procedures, such as content sampling and time sampling for reliability, content validity, criterion-related validity, and construct-identification validity. The results of these analyses demonstrated that the GARS-2 has sound psychometric features. The TV-GARS-2 was normed in Turkey with 1,191 individuals with autism who were aged between 3 and 23 years. In addition to the validity and reliability analyses performed with the original version, Confirmatory Factor Analysis (CFA) was performed in a Turkish standardization study. The results demonstrated that the TV-GARS-2 is a valid and reliable tool that can be used in the assessment process for Turkish individuals with ASD. As for all standardized tests, the raw scores obtained via subscales are converted to standardized scores and the standardized scores are converted to the Autism Index (AI), which indicates the severity and probability of an ASD diagnosis. The Cronbach Alpha coefficients for the Stereotyped Behaviors subscale, the Communication subscale, the Social Interaction subscale, and the whole scale (42 items) were .79, .77, .85, and .88, respectively, in the Turkish standardization study. However, the reliability of the subscales and the total score were reexamined in the current study. The resulting Cronbach Alpha coefficients for the current study were .88 for Stereotyped Behaviors, .89 for Communication, .90 for Social Interaction, and .94 for the whole scale (42 items).

Turkish Version of the Pragmatic Language Skills Inventory (TV-PLSI) (Alev, Diken, Ardıç, Diken, Şekercioğlu, & Gilliam, 2014). The Pragmatic Language Skills Inventory

(PLSI) was developed by James E. Gilliam and Lynda Miller in 2004 in the United States. Based on teacher evaluation, this inventory is a norm-referenced evaluation tool that consists of 45 items. The PLSI is comprised of three subscales (i.e., Classroom Interaction Skills, Social Interaction Skills, and Personal Interaction Skills), with 15 items in each subscale; thus, a total of 45 items can be used to explore the pragmatic language development/skills of 5- to 12-year-old children. The PLSI uses a 9-point Likert scale that is rated by the principal caregiver or teacher who knows the individual best and can be applied in 5-10 minutes. The raw score is first converted to standardized scores for each subscale, and the total standardized score is then converted to a norm score called the Pragmatic Language Skills Index (PLSI). The Turkish Version of the PLSI (TV-PLSI) was studied in 1,383 Turkish children with typical development. Data were also collected from individuals diagnosed with ID and autism to examine the discrimination validity of the TV-PLSI. The results of the Turkish version's validity analyses, such as construct validity, item analysis, criterion-related validity, interrelationship of the subscales, relationship between subscale standard scores and Pragmatic Language Skills Index, discriminate analysis between diagnostic groups, and Confirmatory Factor Analysis (CFA), revealed that the TV-PLSI had a parallel construction (i.e., 3 subscales with 15 items in each subscale and a total of 45 items) to the original version and had acceptable psychometric values in terms of validity. The results of reliability studies (i.e., content sampling and time sampling) indicated that Classroom Interaction Skills had a Cronbach Alpha coefficient of .96, Social Interaction Skills had a Cronbach Alpha coefficient of .98, Personal Interaction Skills had a Cronbach Alpha coefficient of .95, and the Pragmatic Language Skills Index had a Cronbach Alpha coefficient of .98 in the Turkish standardization study. The reliability of the TV-PLSI was explored again for the current study by calculating Cronbach Alpha coefficients. The results demonstrated that Classroom Interaction Skills had a Cronbach Alpha coefficient of .98, Social Interaction Skills had a Cronbach Alpha coefficient of .98, Personal Interaction Skills had a Cronbach Alpha coefficient of .97, and the Pragmatic Language Skills Index had a Cronbach Alpha coefficient of .98.

Data Collection and Analysis

Data were collected from individuals who had an official/medical diagnosis of either ASD or ID and were receiving special education services from a private special education and rehabilitation center in the city of Antalya, Turkey. Special education teachers at this center were contacted and asked to voluntarily participate in the study. Parental approval was also obtained for the collection of data on the children. Therefore, consents were obtained using consent form from the teachers and parents of individuals with DD. Teachers were given instructions on how to complete the TV-GARS-2 and the TV-PLSI soon after expressing the purpose of the study. The teachers then completed the scales for appropriate students that they had been teaching. The collected data were analyzed using appropriate data analysis techniques, such as descriptive analyses with frequency and percentage calculations, the Independent Samples t-test, and correlation and standard multiple regression analysis using the stepwise method.

Results

Level of Pragmatic Language Skills

Frequency and percentage calculations were used to decribe the pragmatic language skills level of children with ASD and children with ID. In addition, the relationship between the degree of the ASD score (i.e., Autism Index-AI) and the pragmatic language skills score of children with ASD was examined using correlation analysis.

Table 2

Level of Pragmatic Language Skills.

		Groups			
		Children with ASD		***Children with ID***	
*Level of PLS**	*TV-PLSI***	*f*	*%*	*f*	*%*
1. Very Poor	<63	26	76.5	24	46.2
2. Poor	64-76	6	17.6	15	28.8
3. Below Average	77-89	2	5.9	9	17.3
4. Average	90-110	-	-	4	7.7
5.Above Average	111-117	-	-	-	-
6. Superior	118-122	-	-	-	-
7. Very Superior	>123	-	-	-	-
Total	-	34	100	52	100

**PLS: Pragmatic Language Skills, **TV-PLSI: Turkish Version of Pragmatic Language Skills Index*

The results presented in Table 2 reveal that the majority of the studied children exhibited very poor level pragmatic language skills. More specifically, 26 of 34 (76.5%) children with ASD and 24 of 52 (46.2%) children with ID, exhibited very poor pragmatic language skills. In addition, 6 (17.6%) children with ASD and 15 (28.8%) children with ID exhibited poor pragmatic language skills.

The relationship between the autism level and the pragmatic language skills level of children with ASD was explored using correlation analysis. The results of the correlation analysis revealed significant negative correlations between AI scores and PLSI scores (*Pearson's r*(34)= -0.51, *p*<.001), Classroom Interaction Skills scores (Pearson's r(34)= -0.53, p<.001), Social Interaction Skills scores (Pearson's r(34)= -0.41, p<.001), and Personal Interaction Skills scores (Pearson's r(34)= -0.45, p<.001) among children with ASD.

Differences in TV-PLSI scores

To compare the TV-PLSI scores of children with ASD and children with ID, a series of Independent Samples t-tests was performed. To control for Type 1 error across multiple tests, the Bonferroni adjustment was used. Specifically, the common alpha value (i.e., 0.05) was divided by the number of t-tests performed (i.e., 4) (Huck, 2011; Pallant, 2005). Therefore, 0.0125 was used as the adjusted alpha value. The results of the t-tests are presented in Table 3.

Table 3

Independent Samples t-test results for the TV-PLSI scores of Children with ASD and Children with ID.

Scale	*Group*	*N*	$\bar{x}$	*SD*	*df*	*t*	*p*	*η2*
Classroom Interaction Skills	ASD	34	2.03	1.98	84	-2.73	.008	.07
	ID	52	3.50	3.01				
Social Interaction Skills	ASD	34	2.03	1.90	84	-2.96	.004	.08
	ID	52	3.49	2.65				
Personal Interaction Skills	ASD	34	3.15	3.00	84	-2.58	.011	.07
	ID	52	4.99	3.54				
Pragmatic Language Skills Index	ASD	34	58.59	11.43	84	-2.89	.005	.08
	ID	52	67.08	15.79				

The results of the Independent Samples t-test revealed significant differences between the TV-PLSI scores of children with ASD and children with ID. More specifically, a significant difference in subscale standardized scores for the first subscale (i.e., Classroom Interaction Skills) was observed between children with ASD and children with ID. The magnitude of the difference between the means (effect size) was moderate. For the second subscale (i.e., Social Interaction Skills), a significant difference in subscale standardized scores was observed between children with ASD and children with ID with a moderate magnitude of the difference between the means. For the third subscale (i.e., Personal Interaction Skills), a significant difference in subscale standardized scores was observed between children with ASD and children with ID. The magnitude of the difference between the means was also moderate. Finally, the groups were compared with respect to total standardized scores or PLSI scores. The results also revealed a significant difference in standardized PLSI scores between children with ASD and children with ID with a moderate magnitude of the difference between the means.

Predictors of Pragmatic Language Skills among Individuals with ASD

To identify the structure(s) or feature(s) of ASD predicting the pragmatic language skills of children with ASD, standard multiple regression analysis was performed using the stepwise method. Prior to the analysis, assumption testing was conducted and no serious violations were observed with respect to multicollinearity, outliers, normality, linearity, homoscedasticity, and independence of residuals. The results of the correlation analysis revealed significant correlations between the Stereotyped Behaviors subscale of the TV-GARS-2 and the PLSI (Pearson's r(34)= -0.48, p<.001), between the Communication subscale of the TV-GARS-2 and the PLSI (Pearson's r(34)= -0.56, p<.001), and between the Social Interaction subscale of the TV-GARS-2 and the PLSI (Pearson's r(34)= -0.55, p<.001). Based on the correlation results, the Stereotyped Behavior, Communication Skills, and Social Interaction Skills subscales were entered into the standard multiple regression analysis using the stepwise method to determine which subscale(s) or skill(s) predicted the pragmatic language skills of children with ASD. The results are presented in Table 4.

Table 4

Predictors of Pragmatic Language Skills among Children with ASD

Variables	*B*	*Std. Error*	*Beta*	*t*	*p*
Constant	80.885	5.392		15.00	<.001
Communication Subscale	-1.962	.517	-.546	-3.798	<.001

(R=.546, R Square=.298, Adjusted R Square=.277 ; F(1,34)=14.428, p<.001)

The results of standard multiple regression analysis using the stepwise method revealed that Communication Skills explained 30% of the observed variance in pragmatic language skills. In contrast, the other two sub-scales (i.e., Stereotyped Behaviors and Social Interaction) failed to contribute significantly to the current model.

Discussion and Conclusion

The pragmatic language skills of children with DD (ASD and ID) in Turkey were explored in the current study. First, the levels of pragmatic language skills among children with ASD and children with ID were described. The results demonstrated that nearly the entire sample exhibited below average pragmatic language skills compared to the norm group, which was comprised of children with typical development. More specifically, 32 of 34 (94.1%) children with ASD and 39 of 52 (75%) children with ID exhibited poor or very poor pragmatic language skills. Further, significant negative correlations were found between Autism Index (AI)

scores and PLSI scores; this finding indicates that as the severity of ASD increases, scores on the PLSI decrease. All of these results support the idea proposed in several studies from the international literature (i.e., Bierman, 2004; Green, Johnson, & Bretherton, 2013; Owens, 1999; Scudder & Tremain, 1992; Rispoli, Franco, Meer, Lang, & Camargo, 2010; Volden & Phillips 2010) that regardless of culture and race, problems in pragmatic language skills are common among children with DD.

Second, differences between the pragmatic language skill scores of children with ASD and children with ID were investigated. A comparison indicated that significant differences of a moderate magnitude existed between the PLSI scores of children with ASD and children with ID. More specifically, children with ASD had lower PLSI scores (i.e., subscale scores and total scores) than children with ID. This result is also consistent with the international literature. For example, as cited by Volden and Phillips (2010), several researchers reported in recent decades that children with ASD exhibit pragmatic language difficulties in many communication skills. Luyster, Kadlec, Carter, and Tager-Flusberg (2008) also stated that all children with ASD, even those who had age appropriate scores on standardized language tests, have significant impairments in many aspects of pragmatics and discourse. However, levels of communication difficulties may vary because ASD is a spectrum (i.e., from low severity, high functioning ASD, to very severe ASD characteristics comorbid with ID), that encompasses a range of severity levels and symptoms.

Similar to children with ASD, levels of communication difficulties may also vary among children with ID because the level of ID may differ for each child, from mild to severe ID. For example, when comparing children with ID to children with ASD, some researchers report that children with ID do acquire important pragmatic language skills, such as appropriately repeating and revising utterances in response to requests for clarification (i.e., Coggins & Stoel-Gammon, 1982; Johnston & Stansfield, 1997; Pearl, Donahue, & Bryan, 1981; Scudder & Tremain, 1992). With respect to the characteristics of the current sample, the Autism Index (AI) scores of the sample ranged from 70 to 123. Most of the participants had an AI score higher than 85, indicating that these participants have a very high probability of exhibiting ASD (the minimum score that can be obtained on the TV-GARS-2 is 55, and the maximum score is 153). In contrast, the children with ID had a diagnosis of mild ID. Therefore, consistent with the literature, children with mild ID are expected to exhibit higher levels of pragmatic language skills than children with ASD. However, the higher level of pragmatic language skills should only be considered to exist between these two sample groups because, as stated above, both groups had below average pragmatic language skills when compared with to the norm group containing that contained children with typical development.

Finally, the best predictors of the pragmatic language skills of children with ASD among the subscales of the TV-GARS-2 (i.e., Stereotyped Behaviors, Communication Skills and Social Interaction Skills) were explored in the current study. Communication Skills explained a considerable amount of the variance (30% of the variance) observed in the pragmatic language skills of children with ASD. Communication Skills are expected to be the best predictor of pragmatic language

skills because pragmatic language skills are part of the developmental domain of communication. The obtained values were significant, even though the sample size was not large enough. Social Interaction Skills failed to contribute to predicting PLSI scores, even though social interactions have been identified as a form of practical language use (i.e., Bignell & Cain 2007; Camarata & Gibson 1999; Leonard, Milich, & Lorch, 2011; Perkins, 2010; Russell, 2007). Subsequent studies with larger samples are needed to identify the unique contributions of each construct within Communication Skills.

The results of the current study should be interpreted in the context of the limitations of the study. First, the sample was not large enough in size and did not include children with typical development. Although the TV-PLSI was standardized with children with typical development and also discriminate analyses performed with a group of children with ASD and ID during standardization study of TV-PLSI, the results presented here would be more meaningful if a group of children with typical development was part of the current study. Second, two groups could not be matched based on their standardized IQ scores because there were difficulties in the standardized IQ assessment process for most children with ASD (i.e., some of these children were not able to use standard tests). Despite these limitations, the results of the current study provide great insights for future research and practice in Turkey and in other countries. To extend the results of the current study, more studies should be performed with larger sample sizes, including children with typical development. Different variables, particularly context-based variables should be included to explore differences between groups in future studies. The current study indicated that both groups had poor pragmatic language skills, which are essential for becoming a successful part of larger society. Therefore, the programs or services provided to these children and their families must include components designed to improve the pragmatic language skills of these children. School- and home-based intervention programs that focus on pragmatic language interventions should also be developed and implemented in Turkey. While developing and implementing these intervention programs, the subcomponents of pragmatic skills, the level and spectrum of DD, and the social contexts of individuals with DD should also be considered.

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Gelişimsel Yetersizliği olan Çocukların Pragmatik Dil Becerileri: Türkiye'de Betimsel ve İlişkisel Bir Çalışma

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Özet

Problem Durumu: Gelişimsel alanlar içerisinde iletişim alanı (iletişim alanında da pragmatik dil becerileri), gelişimsel yetersizliği olan çocuklar için en önemli ve aynı zamanda en önemli derecede olumsuz anlamda etkilenmiş gelişimsel alanlardan biridir. İletişim becerileri ve özellikle pragmatik dil becerileri gelişimsel yetersizliği

olan çocukları toplumda bağımsız yaşaması, akademik ve akademik olmayan becerilerde başarılı olması, iş ve bağımsız yaşam becerilerinde önemli bir yer tutarken, bu çocuklar ve ailelerinin yaşam kalitesi açısından da önem arz etmektedir. Bu bağlamda uluslararası alan yazın gelişimsel yetersizliği olan çocukların pragmatik dil becerileri üzerine çalışmalar yapılmasının, bu çocuklar ve aileleri için sunulacak hizmetlerin içeriğini ve kalitesini belirlemede önemli katkılar sunduğunu ortaya koymaktadır. Ancak yetersizliği olan çocukların pragmatik dil becerilerine ilişkin çalışmalar incelendiğinde sadece gecikmiş dil özelliği gösteren çocuklar ile yapılan bir çalışma dışında gelişimsel yetersizliği olan çocuklar (otizm spektrum bozukluğu ve zihinsel yetersizlik) ile yapılan çalışmaya rastlanılmamıştır.

Araştırmanın Amacı: Bu çalışmanın amacı Türkiye'de gelişimsel yetersizliği (otizm spektrum bozukluğu ve zihinsel yetersizlik) olan çocukların pragmatik dil becerilerini incelemektir.

Araştırmanın Yöntemi: Bu çalışmada betimsel ve ilişkisel araştırma modeli kullanılmıştır. Çalışmanın katılımcılarını ise 34'ü otizm spektrum bozukluğu (OSB) ve 52'si zihinsel yetersizlik (ZY) olmak üzere yaşları 5 ile 12 arasında değişen toplam 86 gelişimsel yetersizliği olan çocuk oluşturmuştur. Gilliam Otistik Bozukluk Derecelendirme Ölçeği-2-Türkçe Versiyonu ve Pragmatik Dil Becerileri Envanteri-Türkçe Versiyonu kullanılarak Antalya ilinde bir özel eğitim ve rehabilitasyon merkezine devam eden katılımcıların öğretmenlerinden veriler toplanmıştır.

Araştırmanın Bulguları: Bulgular her iki grubun büyük bir kısmının oldukça düşük pragmatik dil becerileri gösterdiğini ortaya koymuştur. Daha spesifik olarak, 34 OSB gösteren çocuğun 32 (%94.1)'sinin ve 52 ZY gösteren çocuğun 39 (%75)'unun düşük ve çok düşük olarak adlandırılan pragmatik dil becerileri gösterdikleri görülmüştür. OSB derecesi ile pragmatik dil becerileri puanı arasında negatif yönde anlamlı bir ilişki bulunmuştur. Bulgular ayrıca ZY gösteren çocukların OSB gösteren çocuklara nazaran daha iyi pragmatik dil becerileri gösterdiklerini ortaya koymuştur. Çalışma da son olarak yapılan regresyon analizinde pragmatik dil becerilerini OSB gösteren çocukların iletişim puanları %30 varyansla açıklarken, sosyal etkileşim ve stereotip davranışların pragmatik dil becerilerini açıklamadığı görülmüştür.

Araştırmanın Sonuçları ve Önerileri: Bu çalışmadan elde edilen bulgular uluslararası alan yazını destekler niteliktedir. Türkiye'de de gelişimsel yetersizliği olan çocukların pragmatik dil becerilerinin yetersiz olduğu ve ZY gösteren çocukların OSB gösteren çocuklar ile karşılaştırıldığında daha yüksek pragmatik dil beceri puanları elde ettikleri sonucuna varılmıştır. Pragmatik dil becerileri yaşama aktif katılımda ve nihayetinde gelişimsel yetersizliği olan çocukların yaşam kalitelerini yükseltmede önemli yere sahip olduğundan, Türkiye'de bu alanda daha büyük örneklemler ile daha çok çalışma yapılması ve sunulan hizmetler ve müdahale programlarında iletişim ve pragmatik dil becerilerine öncelik verilmesi önerilmektedir.

Anahtar Sözcükler: Pragmatik dil becerileri, gelişimsel yetersizlikler, otizm spektrum bozukluğu, zihinsel yetersizlik, Türk örneklemi.