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The Role Of Dyslexia On Self-Esteem And Aggression Of Primary And Secondary School Children

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Abstract

The current study was carried out to investigate the role of Dyslexia on Self esteem and Aggression. The sample size was 56 primary and secondary school children among which 28 were Dyslexic and 28 were non dyslexic. Three scales were used (Anger Expression Scale for Children (stelee et.al2009), Kid-kindal Quality of life scale (Sieberer & Bullinger 2000) and Dyslexia Assessment scale (From Davis Dyslexia Association International) to collect the data. The findings revealed that level of trait anger is high among Dyslexic primary school children than non dyslexic. The level of self-esteem was found to be low in dyslexic children than non dyslexic children. The findings suggested that the level of anger expression is higher in dyslexic children, while the level of anger control and anger in is found to be higher in non dyslexic children than dyslexic primary school children.

Keywords: Dyslexia, Trait Anger, Anger expression, Anger In, Self esteem.

INTRODUCTION

Many kids have difficulty in reading and writing which they require at first place to do well in school. Experts from many different areas are now working to learn about and solve these problems. Dyslexia is the most common learning disability in this group. It is an auditory processing disorder that makes it hard to decode and encode words when reading and writing. This makes it hard to read quickly, understand language, and spell (Torgesen et al 2010; Wajuihian & Naidoo, 2012). This study will look at the mental and behavioral effects of dyslexia, with a focus on low self- esteem and a tendency to be violent.

Self-esteem

Self-esteem is how a person feels about himself or herself, taking into account their own skills and how much they value themselves (Orth & Robbins, 2014). How well a person thinks of themselves in general is a good way to measure their self-esteem(Smith & MacKie, 2007). Self-esteem affects many parts of a person's life, from when they are young to when they are old.When a person has low self-esteem, it can have a big effect on how well they do in school. People tend to think that kids with low self-esteem are not driven and can't do well in school (Oga & Fatimah Haron, 2012).

Aggression

Aggression is described as "any behavior that is done with the intention of hurting someone else" (Anderson & Bushman, 2002; Bushman & Huesmann, 2010). Aggression is a response in behavior to things that could be aggressive. Signs of aggression include violence and anger. The results of aggression, like criminal behavior or failing in school, have been studied and theories about them have been talked about(Nahum, 2009; Findling, 2003).

Relationship between Aggression and Self esteem

Scientists have studied and argued about the link between being angry and having low self-esteem for the past ten years (Donnellan et al., 2005). One study found that having externalizing problems in the real world is linked to lower self-esteem (Fergusson & Horwood, 2002; Sprott & Doob, 2000).

Ostrowsky (2009) says that people with low self-esteem may be mean to other people as a way to deal with their own feelings of failure, inferiority, and shame. Several studies have found a link between low self-esteem and thoughts of not being good enough and aggressive behavior (Cale & Lilienfeld, 2006).

Dyslexia

The DSM-V [1] says that dyslexia is a learning disability that has to do with the brain. It happens to kids who are smart enough to go to school but can't learn to read, write, or spell at the same level as their ability. At least 10% of people have trouble reading. Dyslexia is a disease that causes problems with a wide range of sensory, language, and thinking skills (Snowling et al., 2012; Ozernov-Palchik et al., 2017).

People with dyslexia have trouble reading, writing, and decoding words quickly and correctly. Even though children with dyslexia don't have less access to education and culture than other kids, they are less likely to be able to read at grade level. (Becker et al., 2017). Because of this, kids with dyslexia are more likely to have trouble at school and at work(McLaughlin et al., 2014; Ghisi et al., 2016). Children who might have DD should be checked as soon as possible so that the right help can be given.

Shabila et al (2018) came to the conclusion that dyslexic people had a much poor quality of life in every area. This covers their mental and physical health, their social lives, their free time, and how well they do in school. It is thought that between 35 and 40 percent of people with dyslexia experience visual stress when they read. This can make the words and letters seem fuzzy, out of focus, moving, shaky, shimmering, or even backwards. Reading can be hard because words and letters can look mixed up or split in two. Glare from white pages and tracking problems can also make it hard to read. It's possible that the text is hard to read because the white background is too bright.

Relationship between Dyslexia and Selfesteem

People with learning challenges often have problems with their mental health, their behavior, and their relationships with other people. Developmental dyslexia is one of the most common types of learning disorder that has social and emotional effects that are not always known(Emily, Livingston et al., 2018). Judy and Arin(2004) say that having respect for oneself is important to one's sense of self.People with high self-esteem are more likely to take risks than those with low self-esteem, who tend to avoid social situations and feel sad and lack confidence. When they can't do something fast or right, a lot of kids get angry and frustrated. The result of these feelings is a lack of trust (Richard, 2005).

Teachers, coworkers, and parents can all have an effect on how a child feels about himself or

herself. The research shows that these things help kids who have dyslexia feel better about themselves.

Children with learning disabilities are constantly bullied, which makes them feel so bad about themselves that even small wins can't make them feel better (Smith, 2001). Even in kindergarten, kids with learning disabilities start to notice that they are not as good as their peers at understanding and using the symbols used in school (Smith, 2001). People with learning disabilities often don't have the emotional tools to deal with their condition because they are made fun of for it and spend so much time worrying about what other people will think of them if they fail. Academic problems can cause low self-esteem, social isolation, and bad behavior (Kemp and Segal, 1998).

Children with learning disabilities often find it hard to make friends because they have low self-esteem and have trouble adjusting (Patil, G.Sarswathi & Padakannaya, 2009). Parental involvement in early childhood education has a lot of benefits, but parents can run into problems that make it hard for them to be involved in their children's schooling. For example, low-income families may struggle to pay for school events, fees and a good place for their kids to learn at home due to high inflation (Jamil, 2022) other macro living factor (Jamil et al., 2023) institute responsibility (Jamil and Rasheed, 2023).Initial study showed that having a bad emotional response to dyslexia makes people feel less good about themselves (Lena Carawan et al., 2016).

Some people with dyslexia may feel sad, depressed, tense, worried, or uneasy at different times in their lives (Nalavany, Carawan, & Rennick, 2011)

Relationship between Aggression and Dyslexia

When it's time to read, dyslexic students are more likely to act aggressively than their peers of the same age and ability (Kaplan, 2007). Selenius, Hellstrom, and Belfrage (2011) found strong connections between aggressive traits and crime behavior in both dyslexic and non-dyslexic people. Studies have shown that there is a high rate of violence, criminal behavior, and poor academic performance among deaf students. (Karami et al., 2012)

(Selenius et al., 2011) say that aggressive behavior in dyslexic students is caused by learning problems linked to brain waves, such as not having good phonological processing skills. Selenius et al. (2011) say that not being able to understand sounds is a risk factor for being aggressive.Dyslexia can make people who are already violent even more so. Most dyslexic kids may not like new things because they have trouble with short-term auditory memory, brain wave-related learning problems, poor language processing skills, and other problems (Shanshan & Zichao, 2017).

Rationale

The current study investigated the role of Dyslexia on self esteem and aggression of primary and secondary school children. The Dyslexia is of the main learning disorder that is prevailing among the lower primary and secondary level. The children suffering from Dyslexia face different problems in their social life apart from their learning disabilities. Their learning disabilities lead to many social problems effecting their social relationships and social behaviors. There is an immense need for the teachers and parents of Dyslexic children to understand these social and behavior problems along with their difficulties in learning or reading abilities. There are several techniques that are developed to overcome the learning difficulties of the Dyslexic children yet there is need to give

attention to behavioral problems in order to minimize the effect of this disorder on the personalities of such children. Many research findings explained that learning disabilities may cause social, emotional and behavioral difficulties (Martinez & Semrud-Clikeman, 2004; Wong, 2003).The present study is an effort to describe the level of self esteem and aggression relative to the Dyslexic children in order to understand the emotional and behavioral aspect of dyslexia in addition to learning problems and academic difficulties.

Objectives

The objectives of the present study are as below:

1) To explore the relationship between aggression and self esteem among dyslexic and non dyslexic primary and secondary school children.

2) To find out the demographic differences (gender, birth order, type of school attending, family status and socioeconomic status) on aggression and self esteem among dyslexic and non dyslexic primary and secondary school children.

Hypotheses

The hypotheses of the current study are enlisted below:

1) There is high level of trait anger among dyslexic primary school children then non dyslexic primary school children.
2) There is low level of self esteem among dyslexic primary school children then non dyslexic primary school children.
3) The level of anger expression is higher in dyslexic children of government primary schools then non dyslexic children of government primary schools.
4) There is high level of anger control in non-dyslexic primary and secondary school children then dyslexic primary and secondary school children.
5) The level of anger in is high among non-dyslexic primary and secondary school children then dyslexic children.

Research Design

The present study was quantitative in nature, which was based on correlation research design.

Sample

The sample was children aged between 6 to 13 of primary and secondary grades. The sample size is 56 among which 28 are dyslexic children and 28 are normal children which are taken from Mansehra, Haripur, Abbottabad, Rawalpindi, Islamabad, Lahore, Khariaan, Okara, Peshawer, Noshehra, Attock and Wah.

Operational Definitions of the Variables

Dyslexia: "It is one of the several distinct learning disabilities characterized by difficulty in single word decoding, usually reflecting phonological processing abilities".

Self-esteem: **"** It is what our unconscious believes to be true about how worthy, lovable, valuable, and capable we are."

Aggression: It is the number of times a child yells, hits or show harming gestures to others.

Instruments

Anger Expression Scale for Children (2009)

The scale is developed by stelee et.al. Trait Anger, Anger Expression, Anger in, and Anger Control are the four subscales. Internal consistency values for all four subscales are: a14.84 for Trait Anger, a14.69 for Anger Expression, a14.71 for Anger In, and a14.79 for

Anger Control. The following are the alpha values for the four subscales across the different illness groups: Anger Trait, a14.84/.82 (healthy/cancer), Anger Expression, a14.68/.71, Anger In, a14.74/.63, and Anger Control, a14.74/.86. The subscales were reliable as follows: Trait anger =.60, Anger display =.45, Anger in =.50, and Anger control =.60.

Kid-kindal Quality of life scale (2000)

This is 24 item scale and is developed by Sieberer & Bullinger, (2000) having 6 subscales. One of the subscales for measuring self-esteem in children of ages 7 to 13 is used in the current research, that is 4 items self esteem scale. The reliability values for most sub-scales =.70, while the overall scale displayed a consistencyα =.80.

Dyslexia Assessment scale (From Davis Dyslexia Association International). This is an informal screening test for dyslexic students consisted of 41 items having 5 subscales. General characteristics, vision ,reading and spelling, hearing and speech, math and time management, memory and cognition, writing and motor skills and behavior, health, development and personality.

Results

Table 1 The Demographic Properties of the Research variables.

Variables	N	M	SD	S	K
edu	56	1.29	.530	1.70	2.15
age	56	1.38	.558	1.17	.44
Family status	56	1.66	.549	1.01	-.73
siblings	56	1.59	.496	-.80	-1.91
birthorder	56	2.05	.724	-.08	-1.04
Parents edu	56	2.02	.618	-.90	-.24
Financial status	56	1.63	.524	-.19	-1.13
Student status	56	1.50	.505	.98	-2.07
School type	56	1.48	.504	.07	-2.07

Note .edu=Education, parents edu= Parents Education.

Table 2 Psychometric properties of the Dyslexia scale, Self esteem scale and scale of Aggression.

					Range		
SCALES	n	M	SD	α	Actual	potential	Skew
Dysscale	50	100	45.42	.99	50-148	3-123	.09
selfesteemscale	4	11.66	4.82	.93	4-18	5-20	-.04
TAasubs	10	20.92	9.93	.97	10-37	4-40	.09
AEsubs	6	12.76	6.66	.98	6-23	4-24	.11
AIsubs	4	9.42	1.41		7-13	4-16	.15
ACsubs	6	12.44	1.49		10-16	4-24	.49

Note.Dysscale=Dyslexia scale, TAasubs=Trait anger subscale, AEsubs= Anger expression subscle, AIsubs= Anger in subscale, ACsubs= Anger control subcale

Table 3 The correlation among the scales and subcsales of the study.

scales	Totalesteem	TOTALDYS	TOTALTAS	TOTALAES	TOTALACS	TOTALAIS
	1	.933**	-.949**	-.915**	.429**	.898**
Totalesteem		.000	.000	.000	.001	.000
		56	56	56	56	56
		1	-.974**	-.971**	.423**	.944**
TOTALDYS			.000	.000	.001	.000
			56	56	56	56
			1	.955**	-.465**	-.934**
TOTALTAS				.000	.000	.000
				56	56	56
				1	-.439**	-.943**
TOTALAES					.001	.000
					56	56
					1	.361**
TOTALACS						.006
						56
						1
TOTALAIS						

Note. Totalesteem=Total selfesteem, Totaldys=Total dyslexia, TotalAs= Total Trait anger scale, Totalaes= Total Anger Expression, Totalacs= Total anger control scale, Totalais= Total Anger In scale

The table 3 shows the total correlation among the scales and subscales used in the research study. There is high correlation among the different scales and subscales that are used in the current study.

Table 4 The difference of Dyslexic and Non Dyslexic primary school children on Trait anger subscale.

	Dys		NonDys				95%CL		
Variable	M	SD	M	SD	t	P	LL	UL	Cohen'sd
TraitAnger	30.57	2.63	11.29	1.15	35.54	.00	18.19	20.37	9.49

Note. M=Mean, SS=Standard deviation, LL=Lower Limit, UL=Upper Limit

P<.000

The table 4 shows that the mean and standard of dyslexic primary school children is higher (M=30.57, SD=2.63) then the non dyslexic primary school children (M=11.29, SD=1.15) at trait anger subscale of aggression.

Table 5 The difference of the Selfseteem among Dyslexic and Non Dyslexic primary school children.

	Dys		NonDys				95%CL		
Variable	M	SD	M	SD	t	P	LL	UL	Cohen'sd
Selfesteem	7.14	1.49	16.18	1.70	-21.3	.00	-9.8	-8.1	5.71

Note. M=Mean, SS=Standard deviation, LL=Lower Limit, UL=Upper Limit

p>.00

The table shows that the mean and standard deviation of non dyslexic children are higher (M=16.18, SD=1.70) then the dyslexic children (M=7.14,SD=1.49).

Table 6 The difference of Anger Expression among Dyslexic and Non Dyslexic government primary school children.

Source	SS	df	MS	F	P	η_P^2
Studentstatus	2295.08	1	2295.08	1208.27	.00	.95
Schooltype	1.13	1	1.13	.59	.44	.01
studentstatus * schooltype	14.84	1	14.84	7.81	.00	.13
Error	98.77	52	1.89			

p>.000

Table 5 shows the two way analysis of the variance of student status F(1,52)=2295.08 for the anger expression subscale having effect size .95, and significant p value (.00). The school type has F(1,52)=.59 for anger expression subscale having effect size .01 and non significant p value (.44). The interaction of student status and school type has F (1,52)=7.81 having effect size .13 with significant p value(.00).

Table 7 The difference of Dyslexic and Non Dyslexic primary school children on Anger control subscale.

	Dys		NonDys				95%CL		
Variable	M	SD	M	SD	t	P	LL	UL	Cohen'sd
Angerexp	11.82	1.12	13.02	1.56	-3.43	.09	1.97	.52	.88

Note. M=Mean, SS=Standard deviation, LL=Lower Limit, UL=Upper Limit

P<.05

The table 6 shows that the mean and standard of the non Dyslexic children are higher(M=13.02, SD=1.56) on Anger control then the dyslexic children (M=11.82, SD= 1.12).

Table 8 The difference of Dyslexic and Non Dyslexic primary school children on Anger In subscale.

	Dys		NonDys				95%CL		
Variable	M	SD	M	SD	t	P	LL	UL	Cohen'sd
AngerIn	4.25	.51	9.11	1.00	-22.9	.00	-5.28	-4.43	6.12

Note. M=Mean, SS=Standard deviation, LL=Lower Limit, UL=Upper Limit

P<.00

The table 8 shows that the Mean and Standard deviation of dyslexic primary school children is low and anger in subscale (M=4.25, SD=.51) then the Mean and Standard deviation of non dyslexic primary school children(M=9.11,SD=1.00) on the same scale.

Discussion

The present study was carried out to investigate the role of Dyslexia on level of self esteem and aggression of dyslexic primary and secondary school children. Three scales were used to collect the data including Anger Expression Scale for Children (2009), Kid-kindal Quality of life scale (2000) and Dyslexia Assessment scale (From Davis Dyslexia Association International). The reliability of the subscales of aggression were Trait anger=.60, Anger expression= .45, Anger In= .50, Anger control= .60. The reliability of kid kindle scale is .8o.There is high correlation found among the tests variables of the study (see table 3).

The results showed that the level of trait anger is higher among dyslexic primary school children then non dyslexic primary school children(see table4).This result verified the first hypotheses of the present study .This result strength the findings of Kaplan (2007) that aggression levels among dyslexic students are higher as compaired to the normal students and indicated that dyslexia increases the tendencies of aggressive behavior (Selenius et al., 2011).

The results of table 5 showed that the mean and standard deviation of non dyslexic children were greater the mean and standard deviation of dyslexic children(see table5).the findings revealed that the children suffering from dyslexia have lower level of self esteem then the normal students who don't have any learning disabilities .These findings support the second hypotheses of the study that there is low level of self esteem among dyslexic primary school children then non dyslexic primary school children. The findings also strengthen the previous studies that the students with dyslexia experienced inferiority feelings and low self esteem because of the labeling and stigmatization (Mc Nulty, 2003 ,Burden, 2008; Polychroni, Koukoura, & Anagnostou, 2006) and they have lower academic and general self-esteem than their non-dyslexic peers (Alexander-Passe, 2006; Terras, Thompson, & Minnis, 2009).

The statistics of table 6 showed that there is significant relationship between student status (Dyslexic and non-dyslexic) with the level of Anger expression(p=.00). the dyslexic students of government primary school are at higher level of anger expression (M= 20.00,SD=2.00) then the dyslexic children of private schools (M=18.60,SD=1.84).These findings suggested that the interaction of student status and school type they attended(government or private) has significant difference in expression of their anger. The concept of private and government school is different in Pakistan with respect to the rest of the world. In Pakistan the students that are enrolled in government schools usually don't get much individual attention as compared to students who are enroll in private sector schools, and the researches revealed that the dyslexic children who get sufficient attention has much lower behavioral problems than those dyslexic children who do not get individual attention(Wiener & Tardif, 2004). Lewis et al. (1980) revealed that children with poor reading abilities show more violent behavior . According to Lindgren et al. (2002) the level of criminal and violent tendencies is higher in inmates with dyslexic history then those who don t have dyslexic history.

The results of table7 revealed that the non dyslexic children has higher level of anger control ((M=13.02, SD=1.56) then the dyslexic children (M=11.82, SD= 1.12). These findings support the fourth hypothesis of the current study that suggested that there is high level of anger

control in non dyslexic primary and secondary school children then dyslexic primary and secondary school children.Many previous studies suggested that dyslexic children are poor at self control ability because of the frustration they feel due to learning disabilities. So they are unable to control their anger and revealed their frustration in many ways (Al-Yagon & Margalit, 2006; Meadan & Halle, 2004).

The results of table 8 showed that the Mean and Standard deviation of dyslexic primary school children is low and anger in subscale (M=4.25, SD=.51) then the Mean and Standard deviation of non dyslexic primary school children(M=9.11,SD=1.00) on the same scale. It means that the children with dyslexic disorder are not able to keep their anger in without letting other know their emotions. In contrast the non dyslexic children have ability to keep their frustration hidden from others in various situations. These findings strengthen the study hypothesis that the dyslexic children are at lower level of keeping their anger in then non dyslexic children. Selenius et al. (2011) found that dyslexic children with weak phonological processing skills are more likely to act angrily in the future because they can't control their anger. Neurofeedback methods may help dyslexic students deal with their anger (Breteler et al., 2010; Thornton & Carmody, 2005; Becerra et al., 2006).

Children with dyslexia are also more likely to act aggressively and break the law than their peers who don't have dyslexia (Eissa, 2010; Gallegos, Langley, & Villegas, 2012; Maag & Reid, 2006; Peleg, 2011; Svetaz, Ireland, & Blum, 2000).

Implications

The current study can be beneficial to understand the behavioral differences of dyslexic children from the normal children. The findings of the current study are helpful in educational field in order to plan and implement the techniques to minimize the learning barriers as well as the emotional and behavioral difficulties of the dyslexic children. The results can be helpful for educational and behavioral psychologist and people from sociology, medicine and school psychologists.

Limitations and Suggestions

The current research study has some of limitations even though the efforts were made to overcome all types of limitations. The sample size was small because dyslexia is not very adequately diagnosis in this area because of several reasons including unawareness, lack of educations and not a proper scientific diagnostic measurer. The instruments used in this research study had confined the age limit of the children from 6 to 13. Next time the researcher can used the instruments that measure the more the dyslexic children and related social and emotional issues at more gross age (lower than 7 years).

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