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Full Length Research Paper

Are the effects of pandemics on our life always bad? Positive effects of Covid-19 on our life

Merve Ceylan

Department of Physical Education and Sports, Faculty of Sports Science, Mugla Sitki Kocman University, Turkey.

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This study is conducted to investigate whether restrictions applied during Covid-19 process caused positive gains in individuals' lives or not. In this study, data collection method used was questionnaire to reach more number of participants in a short time. Questionnaire form prepared in accordance with purpose of study was designed through "Google Forms". During the data collection process, due to the restrictions applied globally, the link sharing with the research questions and the text containing the information about the research were sent to the e-mail addresses of the potential participants. Prior to questionnaire questions, information transmission was made in relation to purposes of study. Data collection period covers dates of 1st of June, 2020 to 31st of March 2021. Questionnaires sent after these dates were not evaluated. Mail was sent to 871 participants in order for them to take part in the research and among them, 682 participants (78.3%) have returned back. Frequency and percentage distributions of data obtained from participants were calculated. When the results obtained from the research are evaluated in general, it is seen that the pandemic process has an important effect on the realization of interests that have been postponed due to lack of time, in the process of self-discovery of individuals and in having new experiences, and in breaking the prejudice against the use of technology.

Key words: Covid-19, online education, technology use, positive impacts, new experiences, self-discovery.

INTRODUCTION

How can it be that a virus that comes out in a distant point of the world spreads all around the world in such a short time and it gains a dimension that is threatening humanity? How can it cause all our beliefs, habits and even our psycho-social well-being to be interrupted? In fact this can be explained with "chaos theory", or "butterfly effect". A small deviation that occurs in a system somewhere in the world can give rise to very big and unforeseen outcomes in the future. Covid-19 which started to flap its wings in Asia began to show its impact throughout the world in an instant and caused for a pandemic to occur.

From a consideration of pandemics occurrence in various periods throughout human history, it is apparent that Covid-19 will neither be the first nor the last. In each of the three big pandemics experienced in the 20th century, namely "Spanish Flu" that came out in 1918, the "Asian Flu" that came out in 1957, and the "Hong Kong Flu" that came out in 1968, it is observed that one to four million people died (<https://www.euro.who.int/en/health-topics/communicable-diseases/influenza/pandemic-influenza/past-pandemics>).

World Health Organization (WHO) reported on its official website that as of June 2, 2021, 170,747,372

E-mail: merveceylan@gmail.com. Tel: 00905326311745.

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confirmed cases of COVID-19 had been reported globally, including 3,555,726 deaths (<https://www.euro.who.int/en/health-topics/communicable-diseases/influenza/pandemic-influenza/past-pandemics>).

When the high number of deaths due to the Covid-19 pandemic so far is compared with the table above, it is seen that it can easily enter the 7th place among the pandemics that cause the highest death in the history of the world.

The rapid transmission of the Covid-19 virus from person to person through droplets and contact has led to the adoption of various measures globally in order to prevent close contact of people with each other. With the isolation of infected people, the transition to flexible working hours, the beginning of the distance education period, the introduction of curfews, the closure of cafeterias, restaurants, gyms and entertainment venues, the necessity of using masks in public areas, and the implementation of many measures both in the world and in our country, we started spending most of our time at our homes and as a result of this, while having a sedentary life style, loneliness, insecurity and family problems occurred. In a study conducted by Sibley (2020) in New Zeland, it was revealed that persons participating in questionnaire experienced higher mental problems in pandemic period when compared with previous times (zacher and Rudolph, 2020).

In a study conducted in Italy with 1006 participants, it is stated that social isolation during Covid-19 increases depression, devaluation, alienation and helplessness (Pancani et al., 2020). In another study conducted by Ammar et al. (2020), it is stated that individuals experience psycho-social tension during curfew periods, and a decrease in life satisfaction occurs due to decreased socialization (Ammar et al., 2020).

As a result of their research on 188 young people, Fernandes et al. (2020) found that those who scored high in game addiction, compulsive internet use and social media use during the Covid-19 process reported high depression, loneliness, escape, low sleep quality and anxiety due to the pandemic and that regardless of country, the COVID-19 pandemic has a significant impact on adolescents' internet use and psychosocial well-being (Fernandes et al., 2020).

In situations such as the life-threatening Covid-19 pandemic, it is an important element to investigate social experiences in order for individuals to enjoy life and to gain skills to cope with the stress and depression caused by the presence of danger. As it can be understood from above stated research results, studies conducted have generally revealed negative impacts of Covid-19 process. However, when social media which is widely used today is examined, especially on the days when the curfew is implemented, it is noticed that experiences such as activities and hobbies developed at home are frequently shared in these channels. This is an example of how

people can turn the pandemic process into an opportunity to use their creativity. Due to lockdown, people spent quality time with their family, fulfilled their hobbies, learned many new skills. This pandemic is a lesson for us to learn many new things (Kamdi et al., 2020).

For this reason this study is conducted to investigate whether restrictons applied during Covid-19 process caused positive gains in individuals' lives or not.

METHODS

In the study, data collection method used was questionnaire to reach more number of participants in a short time. During the data collection process, due to the restrictions applied globally, the link sharing with the research questions and the text containing the information about the research were sent to the e-mail addresses of the potential participants. Prior to use of questionnaire, information transmission was made in relation to purpose of study.

Participants

The research consists of participants who voluntarily participated in previous researches conducted by the researcher and who approved the recording of their e-mail addresses by stating that they may want to participate voluntarily in future research because of data collected online as it was not possible to collect face-to-face data due to the pandemic. Data were collected online as it was not possible to collect face-to-face data due to the pandemic.

Mail was sent to 871 participants in order for them to take part in the research and among them, 682 participants (78.3%) have returned back. A second e-mail was sent to the individuals who stated that they wanted to participate in the research and the google forms link was shared.

Procedure

Questionnaire form prepared in accordance with purpose of study was designed through "Google Forms". Number of questions was limited in order to have more feedback from questionnaires. Four questions were asked in order to determine demographic features of participants and ten questions were asked in order to have their opinions relating with Covid- 19 pandemic.

Before presentation of questionnaires, the researcher have transmitted the following information to participants: "This study was conducted to determine how restrictions applied during Covid-19 pandemic period affect your lives. Research questionnaire comprised of ten easy questions and it takes nearly 5-10 min to answer them. Questionnaire does not test any information or skills and it only focuses on emotions and experiences. It bears importance for you to answer the questions in a conscious and honest way with respect to reliability of research."

Duration

In this research, data collection period covers dates of 1st of June, 2020 to 31st of March 2021.

RESULTS

In Table 1, the distributions of participants as per gender,

Table 1. Distribution of participants as per their demographic features.

Parameter	Group	N	%
Gender	Female	473	69.3
	Male	209	30.7
Age	18-25	107	15.7
	26-33	196	28.7
	34-41	218	32
	42-49	79	11.6
	50-57	43	6.3
	58- 65	39	5.7
Education level	Associate	108	15.8
	Undergraduate	367	53.8
	Postgraduate	193	28.3
	Doctorate	14	2.1
Profession	Lawyer	32	4.7
	Teacher	69	10.1
	Academician	14	2.1
	Doctor	28	4.1
	Officer	153	22.4
	Businessman/business woman	103	15.1
	Self-employment	37	5.4
	Architect	27	4
	Student	63	9.2
	Engineer	41	6
	Other	115	16.9

Table 2. Answers given by participants to the question of “Could you allocate time for sports before pandemic?”.

Could you allocate time for sports before pandemic?	N	%	If your answer is yes, how long could you do sports in a week	N	%
Yes	216	31.7	Less than 60 min	52	24.1
			1 -2 h	49	22.7
			2- 4 h	67	31
			4-6 h	36	16.6
			More than 6 h	12	5.6
No	466	68.3	Total	216	100

age, education level and professional groups are shown. When table is examined, it is seen that; 69.3% of the participants are women and 30.7% are men, 34-41 age group constitutes the largest part of the participants with a share of 32%. This is followed by the age range of 26-22 with 28.7%. The lowest participation rate is 5.7% in the 58-65 age group. When the education levels of the participants are analyzed, it is seen that the largest share is undergraduate who graduates with 58.3%, followed by graduates with 28.3%. Considering these results, it can be said that the education level of the participants is

generally high. When the occupational groups of the participants are examined, it is seen that the highest participation is civil servants (22.4%), followed by other occupations (16.9%), businessman / business woman (15.4%), teacher (10.1%), student (9.2%), engineer (6), self-employed (5.4%), lawyer (4.7%), doctor (4.1%) and architect (4%). The lowest occupational group is academicians with 2.1%.

Table 2, answers given by participants to the question about how much time they could allocate for sports before pandemic are seen. When the table is examined,

Table 3. Answers given by participants to the question “Could you allocate time for sports during pandemic?”.

Could you allocate time for sports during pandemic period?	N	%	If your answer is yes, how much time could you allocate in a week?	N	%
Yes	402	58.9	Less than 60 min	43	10.7
			1 -2 h	138	34.3
			2- 4 h	123	30.6
			4-6 h	57	14.2
			More than 6 h	41	10.2
No	280	41.1	Total	402	100

Table 4. Answers given by participants allocating time for sports during pandemic period to the question “Did you participate in online sports training during pandemic period?”.

Did you participate in online sports training during pandemic period?	N	%
Yes	319	79.4
No	83	20.6
Total	402	100

Table 5. Answers given by participants to the question “Did you participate in online cultural/artistic courses or activities in order to attain new hobbies during pandemic period?”.

Did you participate in online cultural/artistic events to gain new hobbies during pandemic period?	N	%	If your answer is “yes” what were the activities you preferred?	N	%
Yes	326	47.8	Painting Courses	28	8.6
			Language training courses	36	11
			Jewelry / accessory making	53	16.2
			Cooking / pastry courses	61	18.7
			Garden/ flower care	23	7.1
			Music/ instrument courses	42	12.9
			Museum/art gallery visits	21	6.4
			Other courses	62	19.1
No	356	52.2	Total	326	100
Total	682	100			

it is seen that 68.3% of participants could not allocate time for sports before pandemic, 31% of those who could allocate time for sports could allocate maximum 2-4 h in a week for sports, and that group that could allocate most time for sports constituted 5.6% of participants who could allocate more than 6 h in a week for sports.

When the answers given by the participants to the question about how much time they could allocate for sports during the pandemic process in Table 3 are examined, it is seen that 58.9% of them could allocate time for sports. Compared to Table 2, it is not overlooked that there is a significant increase in the number of participants who spend time doing sports. While 31.7% of

the participants were able to allocate time to do sports before the pandemic, it is seen that this ratio increased to 58.9% during the pandemic process.

When the answers given by the participants about their participation in online sports training during the pandemic process are examined in Table 4, it is seen that 79.4% of the participants participated in online sports trainings.

When the answers given by the participants about their participation in online cultural/artistic courses or activities in order to acquire new hobbies during the pandemic process are examined in Table 5, it is seen that 47.8% of the participants participated in various courses or activities. Food and pastry courses (18.7%), jewelry and

Table 6. Answers given by participants to the question “How would you define the effect of restrictions during pandemic period on your life?”.

How would you define the effect of restrictions during pandemic period on your life?	N	%
Caused me to have family problems	43	6.3
Made my life so hard	109	16
It didn't have any positive effect on my life.	51	7.5
Although I was very bored in the first days, it helped me to renew in the following periods.	119	17.5
I had the opportunity to spend more time with my family/ strengthened my family ties	96	14.1
It was an opportunity for me to discover myself.	103	15.1
It gave me the opportunity to do many things that I wanted to do and could not do before.	161	23.5
Total	682	100

Table 7. Answers given by participants to the question “How would you define the impact of experiences you had during pandemic period on your life?”.

How would you define the impact of experiences you had during pandemic period on your life?	N	%
It didn't affect my life	48	7
It helped me go through the process more comfortably	109	16
It changed my perspective on the use of technology in a positive way	126	18.5
It contributed to time management	103	15.1
It gave me the opportunity to evaluate the process well and learn new things	216	31.7
We had the opportunity to share and experience more as a family	80	11.7
Total	682	100

Table 8. Answers given by participants to the question “Do you think that hobbies you attained during pandemic period will also make positive contributions to your life following the pandemic?”.

Do you think that hobbies you attained during pandemic period will also make positive contributions to your life following the pandemic?	N	%
Yes	497	72.9
No	185	27.1
Total	682	100

accessory making courses (16.2%), and music and instrument courses (12.9%) ranked first in the course/event preferences of the participants, and 19.1% preferred to attend other courses/events.

Table 6 gives the answers regarding the impact of the restrictions during the pandemic period on the lives of the participants. When the table is examined, it is seen that 23.5% of the participants stated that they found the opportunity to do things they wanted to do before and 17.5% of them stated that although they were bored in the first days of the restriction process, it allowed them to renew themselves in the future, while 16% stated that it made their life difficult and another group of 6.3% stated that it caused problems within the family. In other words, it is seen that 22.3% of all participants were adversely affected by the pandemic process, and pandemic period did not have any positive effects on the lives of a group of

7.5% of them.

Table 7 shows the answers of the participants to the question about how the experiences they gained during the pandemic process had an impact on their lives. When the answers are examined, it is seen that 31.7% of the participants evaluated the process well and consider it as an opportunity to learn new things, 18.5% stated that their perspective on technology use has changed positively, 16% of them stated that the experiences they have gained help them to pass the process more comfortably, 15.1% stated that it contributed with respect to time management and 11.7% of them stated that they had the opportunity to share and experience more as a family. The remaining 7% stated that their experiences had no effect on their lives.

When Table 8 is reviewed, it is seen that 72.9% of the participants think that the hobbies they acquired during

the pandemic will contribute positively to their lives after the pandemic.

DISCUSSION

The data obtained from the research were examined, it was seen that 31.7% of the participants could not spare time for sports before the pandemic (Table 2), while the number of those who could spare time for sports increased to 58.9% as of the pandemic (Table 3). In addition, it is seen that 79.4% of the participants who can spare time to do sports during the pandemic period participate in online sports training (Table 4).

According to the United Nations Department of Economic and Social Affairs report, today 55% of the world's population lives in urban areas and this ratio is expected to increase to 68% by 2050 (<https://www.euro.who.int/en/health-topics/communicable-diseases/influenza/pandemic-influenza/past-pandemics>).

Looking at the data of the Turkish Statistical Institute for the year 2020, it is seen that 93% of the country's population lives in provincial and district centers. The excessive migration from rural areas towards the cities and as a result of this, rapid construction has turned the normal urban development order upside down (Atalay, 2011), and as a result, many problems such as inability to adapt to city life, loneliness, depression, etc. have emerged. Especially the time spent in traffic, the stress experienced and the bad air quality cause the enjoyment of life to decrease day by day. In this intense pace of daily life, it becomes impossible for people to allocate time for themselves in order to lead a healthier life. However, due to the pandemic, individuals living in big cities, especially, have started to work remotely due to curfews which eliminated loss of time individuals were spending at traffic while going to and coming back from work. It is possible to say that this time, which is obtained as a result of not going out to traffic, is used for doing sports because while the ratio of those who could spare time for sports before the pandemic was 31.7% (Table 2), it was seen that this ratio increased to 58.9% (Table 3) during the pandemic process. In addition to these, the participation of 79.4% of the participants (Table 4) in online trainings to do sports also enabled sports activities to be held with accompaniment of experts during periods when gyms were not available.

It is seen that 47.8% of the participants took part in online activities to acquire new hobbies during the pandemic period (Table 5). In addition, 18.5% of the participants stated that their perspectives on technology changed positively by means of these online activities they attended. As a result of their research, Shoaei and Dastani (2020) revealed that social media is used to share participants' perspectives, health services and distance learning during the COVID-19 pandemic. For

this reason, they stated that the use of social media can be a valuable tool for governments and experts in preventing the spread of this epidemic and even future similar crises (Pancani et al., 2020). Social participation, which has an important place in the socialization of individuals, is strongly associated with life satisfaction. In periods when people's mobility is greatly restricted, such as the pandemic, it is seen that individuals engage in virtual socialization, even if they are not face-to-face, with the use of the internet. When evaluated in terms of social well-being of individuals, it is seen that life satisfaction has an important place. Indeed, life satisfaction has been reported to be associated with important psychological aspects such as psychiatric disorders (eg, depressive disorders) and suicidal ideation (Kamdi et al., 2020). With the use of social platforms during the pandemic period, individuals tended to both acquire hobbies and share these hobbies on social media. In this way, it is thought that these hobbies have an important place for individuals to enjoy life and have a positive mood during the difficult period they are in.

23.5% of the individuals participating in the study found the opportunity to do many things they wanted to do during the pandemic period for which they could not find opportunities before. 15.1% of participants stated that the pandemic was an opportunity to discover themselves, 14.1 % had the opportunity to spend more time with their family/ strengthened their family ties (table 6), 31.7% stated that they had the opportunity to learn new things by making good use of the process and 11.7 % had the opportunity to share and experience more as a family and (Table 7). In the intensity of daily life, individuals can sometimes come to a state that they do not know what they want. Instead of finding an occupation that will make him happy and help him enjoy life, the individual spends his time doing what others do or doing what others want him to do. This causes the individual to feel existential emptiness (Frankle, 2019). However, the individual, who has to stay away from the people with whom he has to spend time in his social life during the pandemic period, has had the opportunity to discover what his own wishes and desires are by turning to himself. It is thought that the experience and pleasure gained by the individual during this process causes him to pass the pandemic period more easily and to see it as an opportunity to realize his long-delayed wishes. In addition to these, it is seen that the pandemic process contributes to the fact that the participants spend more time with their families and thus to the strengthening of family ties. Changes in social and economic conditions are reflected in parallel with families in the society. Quality time spent in the family will contribute to the strengthening of the individual's relationship with his family, and it will also cause the individual who is happy and valued in the family to feel valuable in the society.

In addition, 18.5% of the participants stated that their perspectives on the use of technology during the

pandemic period changed positively (Table 7), 79.4% of them stated that they participated in online sports training (Table 4) and 47.8% stated that they participated in online cultural / artistic activities to acquire new hobbies. In addition, 72.9% of the participants stated that they thought that the hobbies they acquired during the pandemic would contribute positively to their lives after the pandemic (Table 8). From this point of view, it can be said that the use of technology makes our lives easier, destroys our prejudices, and reduces the negative effects of the pandemic in the process of gaining knowledge and experience.

When the results obtained from the research are evaluated in general, it is seen that the pandemic process has an important effect on the realization of interests that have been postponed due to lack of time, in the process of self-discovery of individuals and in having new experiences, and in breaking the prejudice against the use of technology.

The last 3 steps of the hierarchy of needs (Love and Belonging, Dignity and Self-Realization) are seen as the stages that are directly related to recreation. With recreational activities that can be carried out outside of working hours, the individual can become a person respected by the group he is in, and in this way, his self-respect can increase and he can become a person respected by others through appreciation. While recreational activities instill a sense of self-confidence by nature, they have the effect of instilling self-esteem by saving the individual from monotony through activities. In this way, the individual can meet the need for dignity and move forward on the path of being the only human being (self-realization).

Conclusion

The results obtained from this research also show that; Individuals who have to spend time in their homes due to the pandemic can pass this difficult process with positive gains and easier thanks to indoor recreation activities and online education. In fact, it can be said that they can turn this difficult process into an opportunity in order to make positive changes in their lives.

Recommendations

Considering the results obtained from the research, the following recommendations can be made:

1) Reduction of intensive working time can contribute to the self-discovery of individuals by finding the opportunity to focus on their special interests. Hence, an increase can be seen in the productivity relating with the work.

2) With the help of gradual or remote working options, it is possible to reduce the time spent especially in traffic, allowing individuals to use more time for themselves.

3) Recreational activities can be designed in workplaces for employees to take a break from work stress.

4) Number of online courses and events can be increased. Hence, while accessibility will increase, the cost will decrease, which will provide an opportunity for individuals to acquire new interests.

5) The use of online education in formal or informal training will save time and space, and thus, provide ease of access to information at any time. For this reason, it is an important issue for administrations and educational institutions to give importance to accessibility and diversity in the training programs they will offer. In this way, individuals will have the opportunity to develop themselves in line with their interests.

CONFLICT OF INTERESTS

The author has not declared any conflict of interests.

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Full Length Research Paper

Parental and special education teachers' influence on psychological adjustment of pupils with learning disabilities in inclusive primary schools in Kenya

Cornilla Wanja Obare¹ and Maureen Adhiambo Winga^{2*}

¹Department of Psychology, Faculty of Arts, Maseno University, Kenya.

²Department of Education Psychology, Faculty of Education, Maseno University, Kenya.

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Learning disabilities (LDs) encompass a very extensive range of academic problems which can give rise to social and psychological problems. Apart from experiencing academic problems, pupils with LDs experience strong feelings of frustrations, sadness and shame as a result of repeated failure and this can lead to psychological difficulties. These psychological problems are experienced at home and at school and if not addressed, they add to the burden of the condition and could find their way into adulthood. The study was guided by the following objectives: to determine the influence of parent child relationships on pupils' psychological adjustment and to examine the influence of teacher pupil relationships on psychological adjustment of pupils with LDs. Mixed methods research design was used. Saturated and purposive sampling techniques were used to select participants. The sample size was 116 which comprised of 96 pupils, 10 parents and 10 special education teachers. Questionnaires and interview schedules were used as data collection instruments. Parent child relationships were found to be positively correlated with psychological adjustment with a Pearson's R-value of 0.375 with parents explaining 14.1% of the relationship. Teacher pupil relationships were found to have influence on psychological adjustment of pupils with LDs with a Pearson's R-value of 0.571** with teachers explaining 32.6 % of the relationship.**

Key words: Learning disabilities, psychological adjustment, inclusive primary schools, pupils, special education teachers, parental influence, teacher influence.

INTRODUCTION

A growing body of research increasingly recognizes the importance of addressing influence of school and family environment on academic development of children (Papanastasiou, 2017; Heiman and Berger 2008; Barkauskiene, 2009; Kinyua, 2008; Bariroh, 2018). While

previous research has shown the impact of parent-child relationship and teacher-child relationship on psychological adjustment of typical learning children (Rueger et al., 2010; Sarkova et al 2014), few studies have investigated the influence of these variables on

*Corresponding author. E-mail: wingamaureen71@gmail.com.

psychological adjustment of children with LDs. An understanding of the role of these variables in a population with LDs may have significant implication for psychological interventions. Parent-child relationship and teacher-child relationship are likely to be useful targets for programs aimed at enhancing psychological adjustment among children with LDs. However, prior to the utilization of these variables in such interventions, increased knowledge on their impact on psychological adjustment of children with LDs is needed.

Researchers in Kenya have focused on awareness and remedial interventions for LDs. A study by Gateru (2010) to assess the teacher awareness and intervention for children reported that 79% of teachers had identified pupils with LDs in their schools, while 64% of teachers had interventions for children with LDs. Kinyua (2008) while looking ways of promoting teacher-parent collaboration in the education of pupils with LDs found that teachers were reluctant to work with parents in schools. Whereas identification, awareness and remedial interventions for children with LDs are important, psychological adjustment of children with LDs requires attention since it is an important aspect of children's development. This study therefore seeks to investigate the influence of parent-child and teacher-child relationships on psychological adjustment of children with LDs in inclusive schools in Kisumu East Sub County, Kenya.

Psychological adjustment is defined as general feelings of well-being and satisfaction an individual comes to experience because of reduction of the stress in their everyday lives (Jackson et al. 2008). According to Ward and Kennedy (1999) psychological adjustment is defined in terms of emotional and affective outcomes. It has a number of mental health outcomes such as depressive symptoms, mood disturbances, general well-being and satisfaction with life. In assessing psychological adjustment among children with LDs, four indicators namely depressive symptoms, self-esteem, anxiety and anger were used in this study.

Statement of the problem

Children with LDs recognize the importance of school and often desire to be successful, making their frequent difficulties and feelings of failure all the more stressful and damaging. Furthermore, when expectations from both the individuals and important people in their lives are high, feelings of inadequate performance can be experienced as stressful. The increase in demand to focus on academic achievement leaves little room for time or resources to be allocated to other aspects of the child's life. While all challenges faced by children are stressful, feelings of failure and inadequacy that stem from poor academic performance may have the greatest impact on their psychological adjustment. Children with

LDs are a vulnerable population both inside and outside of the school environment and it is essential to understand their experiences in order to provide them with the level of support that they need. This study therefore sought to establish the contextual influence of parents and special education teachers on psychological adjustment of children with LDs in inclusive primary schools in Kisumu East Sub County, Kenya.

Objectives of study

The study aims to determine the influence of parent-child relationship on psychological adjustment of children with LDs and to examine the influence of special education teachers on psychological adjustment of children with LDs in inclusive primary schools.

LITERATURE REVIEW

Influence of parent-child relationship on pupil's psychological adjustment

Parent-child relationships are generally believed to play a crucial role in shaping children's development and adjustment. Parental involvement and affection is a major factor in the emotional and social development of the child, which in turn affects the psychological self-assessment of the child. In relation to child development, it is important that children are raised in a supportive environment, with appropriate parenting and social support from others. The parent-child relationship can be viewed as being positive or conflicting (Pianta, 1992). Positive parent-child relationships are characterized by responsiveness, sensitivity and availability. Parents' responsiveness consists of warm, accepting and affectionate behavior (Karreman et al., 2006; Spinrad et al., 2007). On the other hand, parents' conflictual relationships with their children are marked by low levels of sensitivity and availability.

Social scientists in general and psychologists in particular, largely agree that parent-child relationships play a crucial role in shaping children's development and adjustment. Research literature shows evidence that the quality of both mother and father and child relationships remains the most reliable predictor of individual differences in psychological, social and cognitive adjustment in children (Lamb and Lewis, 2011; Thompson, 2006). Parent-child relationships are significantly related to both children's and adolescents' levels of externalizing and internalizing behaviors. Specifically, children and adolescents with good parent-child relationships experience lower levels of depression (Demir et al., 2011). In addition, close parent-child relationships increased children's and adolescents' self-esteem (Ackard et al., 2006). Other studies show that

family conflicts, hostility and rejection have all been linked to a later diagnosis of depression, while deficits in family communication were also related to substance use, suicide, depression, low self-esteem and maladaptive eating patterns (Ghanizadeh and Shams, 2007). Yap et al. (2014) found that parental warmth, emotional support and autonomy granting reduce the risk of depression and anxiety.

While recognizing that both parents play significant roles in the nurturing and the raising of their children, there are conflicting findings on effects of mother-child and father-child relationships on the development and adjustment of children. Some studies have shown that mothers' relationships with children are more closely linked to children's mental health than relationships with fathers (Gryczkowski et al., 2010; Sandler et al., 2008). These results support those found by Branje et al. (2010) on parent-child relationship and depression that indicated that relationship quality with mothers was a predictor of more depressive symptoms reported in adolescents. Relationship quality with fathers also predicted depressive symptoms, but only for boys. On the other hand, recent research suggests father-child relationships are as influential on children's and adolescents' mental health as mother-child relationships (Stafford et al., 2016; Gryczkowski et al., 2010; Mallers et al., 2010). These studies were carried out on normally achieving and typically developing children. The current study focused on parental relationships with children with LDs.

Several studies (Dyson, 2003; Dervishalaj, 2013; Aldosari and Pufpaff, 2014) indicate that mothers and fathers of school-age children with disabilities experience greater and more frequent stress because of their parenting demands than parents of children without disabilities. LD, a hidden and unexpected handicap in a child with normal intelligence, presents a great parental stress and creates difficulties in the relationship between parents and children (Amerongen and Mishna, 2004). Once a child has been diagnosed with LD, the parents' main concern is usually on how to help the child improve in his/her academic performance. It appears that relentless focus on the child's academic failures can undermine family relationships and impact on the quality of the parent interactions with the child. Wiener (2003) suggests some parents may place such value on achievement that they are unable to accept the existence, extent of, or implications of their children's LDs. Even though they provide support for learning, their children may experience high levels of anxiety because they can never measure up to their parent's expectations. Children with LDs need support as they come to terms with their disability. The value of parental support for children with LDs may lie in the quality of emotional support rather than practical support. Graziano et al. (2009) examined the role of parental support on depressive feelings and social and academic self-efficacy and indicated that high levels of perceived support from

both parents were related to lower levels of depressive feelings and higher levels of social and academic self-efficacy. In another study, self-esteem was associated with family characteristics and routines as well as parent-child relationship quality. Thus children who perceive the presence of supportive family have high self-esteem and that an increase in the quality of parent child relationship is always paired with higher self-esteem among children (Lian and Yusoof, 2009). Shehu et al. (2015) also studied the impact of quality social relationships on self-esteem of children with dyslexia. The data analysis identified a positive correlation between healthy parent-child relationship and high level of self-esteem in dyslexic children.

Open parent-child communication is one aspect of good parent-child relationships that plays a critical role in maintaining the healthy function of the family system and children's development. Ochoa et al. (2007) found a link between open communication between parents and children's positive family self-concept, which in turn related to a positive academic self-concept. Bireda and Pillay (2017) found that parents would continue to influence children's psychological adjustment through their continuous interactions and quality of communication. The findings thus show that open communication with parents protects children from experiencing school adjustment problems, low self-esteem and depression. A study was conducted by Emam and Abu-Serei (2014) to investigate whether family functioning can predict the self-concept and self-esteem of LDs students in Oman regardless of parent education level and gender status. Results showed that family functioning was a strong contributory factor of self-concept for both children with and without LDs, although the two groups differed in terms of the significant family functioning predictors.

Another study by Chohan and Khan (2010) revealed there is significant impact of parental support on the academic achievement as well as on the development of self-concept of the children. This study examined the impact of educational support given by the parents on the academic achievement and on the self-concept of grade 4 public school students. The findings of the study by Chohan and Khan (2010) are in agreement with the study conducted by Rueger et al. (2010) who found that there were significant associations between all sources of support with depressive symptoms, anxiety, self-esteem and academic adjustment with parental support as a robust unique predictor of adjustment for both boys and girls. Despite the many studies done on parent child relationships and psychological adjustment, there remains need to investigate this area since most of the studies have been carried out in Europe and America. The current study was carried out in Kenya and parent child relationship was conceptualized in terms of single and intact families comprising of parental support and parent child communication.

Influence of special education teachers on psychological adjustment

Literature examining teacher-child relationships consistently points to a positive association between good teacher-child relationships and children's academic, social-emotional and mental health outcomes (Demaray and Malecki, 2002; Hamre and Pianta, 2001; Reddy et al., 2003). This has been demonstrated in both regular and special education classes in community settings throughout the developmental stages. For example, children's relationships with their kindergarten teachers predicted grades and standardized-test scores through fourth grade and positive child-teacher relationships are associated with fewer disciplinary actions and increased work habits through middle school (Hamre and Pianta, 2001). In middle school, children's perceived teacher support has corresponded to increases in self-esteem and decreases in depressive symptoms Reddy et al., 2003) and teachers' ratings of relationship quality has been linked to student risky behavior (Rudasill et al., 2010).

In high school, feelings of relatedness with teachers are associated with positive school attitudes, including motivation, success expectations and interest in school (Roeser et al., 1998; Wentzel et al., 2010) as well as improved achievement and self-esteem (Martin et al., 2007) and fewer depressive symptoms (Possel et al., 2013). Teachers have significant lifelong impact on all their students; impact that involves academic skill and fostering psychological wellbeing. Therefore, the influence of teacher-child relationship on psychological adjustment of pupils with LDs was an important element of this study.

As children enter formal school settings, relationships with teachers provide the foundation for successful adaptation to the social and academic environment. From the first day of school, young children must rely on teachers to provide them with the understanding and support that will allow them to get the most out of their daily interactions in the classroom. Children who form close relationships with teachers enjoy school more and get along better with peers. Positive relationships with teachers can also serve as a secure base for young children; they are better able to play and work on their own because they know that if things get difficult or if they are upset, they can count on their teacher to recognize and respond to these problems (Hamre and Pianta, 2001). Children's relationships with their teachers have shown to be important predictors of adjustment. Indeed, schools are interpersonal settings, in which relationships influence children's motivation, academic performance and psychosocial adjustment. Relationships with teachers can be particularly important to children with LDs, who are often undergoing profound shifts in their sense of self and are struggling to negotiate changing relationships with their parents and peers. An

increasingly large number of theorists and specialists acknowledge the therapeutic role of the educator in dealing with children with serious problems or difficulties (Elliott and Place, 2012; Kourkoutas, 2012).

In the past, many studies have explored the influence of the teacher-child relationship quality on the adequate development of typically developing children (Murray and Greenberg, 2006; Murray and Pianta, 2007). The few existing studies on close relationships with teachers of children with disabilities revealed the role of these relationships as a protective factor for the children's social and emotional adaptive functioning (Al-Yagon, 2009; Arthur, 2003). Most of the existing studies indicate that, compared to teacher-child relationships of typically developing children, those of children with disabilities are characterized by a higher level of rejection and dissatisfaction and lower levels of acceptance and closeness. Moreover, teachers in general have difficulty establishing optimal relationships with children with disabilities (Al-Yagon and Mikulincer, 2004). Wang and Eccles (2013) found that teacher acceptance is associated with student psychological adjustment in both boys and girls and has protective roles against depressive symptoms, behavioural problems and promotes resilience and academic achievement. This corroborates a study carried out earlier by (Rohner, 2010), which was a cross-cultural meta-analysis that tested the contribution of teachers' and parents' acceptance to youth's psychological adjustment and school conduct. It was based on nine studies involving 2,422 school-going youth in 12 nations. Results showed that both parental and teacher acceptance correlate significantly in all countries with psychological adjustment and school conduct of children, regardless of gender differences.

Given that children spend a good deal of their lives at school, it seems reasonable that supportive relationships with teachers could benefit their emotional well-being. Reddy and colleagues found that changes in perceptions of teachers' support reliably predicted changes in self-esteem and depression in both boys and girls (Reddy et al., 2003). A five years longitudinal study on the associations between teacher emotional support and depressive symptoms in Australian adolescents found that children of both sexes with average and high numbers of stressful events benefit from teacher support (Possel et al., 2013). Teachers undoubtedly play a substantial role in taking action to prevent children from developing further psychological problems. Of course teachers are not trained to be experts in psychological difficulties and interventions; however they are often involved in intense interaction with these children; as they spend a substantial amount of time with them, teachers can provide vital information regarding their behaviour and functioning and help professionals in designing appropriate interventions (Kauffman and Landrum, 2013).

Majority of studies on teacher pupil relationship have

Table 1. Internal reliabilities results.

Questionnaire Section	Cronbach's Alpha	Range	Label
Psychological adjustment 39-item scale	0.65	0.60 < α < 0.70	Moderate
Parent-pupil relationship 8-item scale	0.72	0.70 < α < 0.80	Good
Teacher-pupil relationships 8-item scale	0.66	0.60 < α < 0.70	Moderate

focused on typically developing and normally achieving children. The results from these studies have shown that teacher pupils' relationships are associated with increased motivation and learning. The current study examined the teacher pupil relationship between special education teachers and pupils with LDs. The focus was on how this relationship influenced psychological adjustment.

This study is significant because psychological adjustment of children with LDs has not received much attention in Kenya and it is an important aspect of children's development.

Therefore, this study is significant to parents, government and teachers. Parents of pupils with LDs will have better understanding of the impact of parent child relationships on their children and hence they will be helped to relate with their children appropriately. Special education teachers will be exposed to the impact of teacher pupil and peer relationships on the psychological adjustment of pupils with LDs and will see the need to foster healthy relationships with pupils in the classroom for positive adjustment of all.

METHODOLOGY

Research design

Mixed method research approach was used for this study. Mixed method research is a research design whose central premise is that the use of quantitative and qualitative approaches in combination provides a better understanding of research problems.

Sample

Ninety six (96) children with LDs participated in the study; 53 boys (51.1%) and 43 girls (48.1%). All were from the ten (10) inclusive primary schools in Kisumu East Sub County, Kenya and lived with one or both parents. Their ages ranged from 11-16 years. Ten (10) (6 ladies and 4 men) special education teachers with Diploma in Special Needs Education were interviewed. Ten (10) parents (5 mothers and 5 fathers) whose ages ranged between 32 and 54 years were also interviewed.

Instruments

Questionnaire

Children relationship with parents was measured using eight (8) items in the questionnaire which focused on parental support and parent-child communication. Children relationship with special education teachers was measured using seven (7) items in the

questionnaire that focused on teacher acceptance and support. A five point Likert scale was used for scoring the responses. The questionnaire was administered to children with LDs.

Validity and reliability

The researcher subjected the instruments to content validity. Cronbach's alpha coefficient analysis was used to measure the internal consistency of the instruments, because it is the most consistent test of inter-item consistency reliability for Likert scaled or rating scaled questionnaires. The reliability for multi-item opinion items were computed separately for all the subscales in the students' questionnaires and the coefficient alpha of these variables were reported. All the sub-scales met the required level of internal consistency of reliability. Table 1 shows different multi-item scale and the produced Cronbach's Alphas. The three Cronbach's alpha values fall in the ranges depicted in Table 1. According to Hejase and Hejase (2013, p. 570), "the generally agreed upon lower limit for Cronbach's alpha is 0.70, although it may decrease to 0.60 in exploratory research." This indicates an adequate strength of association and "proves that the selection of the questions is suitable for the questionnaire purpose" (Chehimi et al., 2019, p.1915).

Interview

The interview was structured and based on predetermined questions. Face to face interview was used for the study where the interviewer asked the interviewees oral questions with regard to the objectives of the study. This was mainly used to get more information regarding the topic of the study and cross check questionnaire responses to enhance reliability of data collected. Credibility which is often called internal validity refers to the believability and trustworthiness of the findings. To assure credibility triangulation was employed. Triangulation was used to cross validate the study findings. To ensure dependability, which is also now as reliability, the researcher used triangulation and also verified participants' response uniformity. There were two interviews; one for the special education teachers and the other for the parents of the children with LDs.

Data collection procedure

After obtaining approval and relevant authorization, the indulgence of the schools head teachers was sought on the logistics of carrying out the research especially in regard to identification of the children with LDs and their parents. Data from children with LDs and special education teachers was collected during games time. The parents were accessed during their weekly support group meetings. The purpose of the research was explained adequately to the respondents and sufficient clarification made where concerns arose. The researcher personally administered the questionnaires to the pupils and conducted face to face interviews with the special education teachers and parents. Each questionnaire took 10 minutes to complete while each interview lasted 20 minutes.

Table 2. Relationship with parents and psychological adjustment.

Variable		Psychological adjustment	Relationship with parents
Psychological adjustment	Pearson correlation	1	0.375**
	Sig. (2-tailed)		0.000
	N	96	96
Relationship with parents	Pearson correlation	0.375**	1
	Sig. (2-tailed)	0.000	
	N	96	96

** . Correlation is significant at the 0.05 level (2-tailed).

RESULTS AND DISCUSSION

Demographics

The respondents were distributed as follows: 45.8% were in the 13-14 years age bracket. The participants of 12 years and below age bracket constituted 32.3%, while 21.9% of the study population was made up of 15 years and above bracket. The distribution shows that 46.6% of the respondents lived with the mothers only, 35.4% with both parents and 17.7% lived with fathers alone.

Influence of parent child relationship on psychological adjustment of children with LDs

Findings of the study showed that children with both parents had a healthier relationship with their parents (mean =28.50; SD=6.32) than children with single parents. However, the findings of the study revealed that psychological adjustment of children with mothers (mean=26.98; SD = 7.03) was much better than that of the children with fathers only. (Mean = 25.29; SD 9.24.)The findings suggest that children brought up with both parents enjoyed healthy parent-child relationship which led to positive outcomes for the children and the family. These findings concur with studies that reveal that mothers' relationships with children are more closely linked to children's mental health than relationships with fathers (Gryczkowski et al., 2010; Sandler et al., 2008). Furthermore, Branje et al. (2010) indicated that relationship quality to mothers was a predictor of more depressive symptoms reported in adolescents. Therefore, family structure is an important aspect in psychological adjustment of children with LDs. The parent-child relationship was conceptualized by the level of communication and support between parents and their children with LDs. In the study it was found that pupils who enjoyed supportive relationships and open communication with their parents were better adjusted. In other words they had low scores on depression, self-esteem, anxiety and anger. In concurrence, Chohan and

Khan (2010) revealed there is significant impact of parental support on the children. Supportive relationships may involve checking on the child's progress in school, helping with the homework and showing concern for the children's wellbeing. Open communication encourages the child to share concerns with the parent. This in turn makes the child feel valued and cared for leading to positive psychological adjustment.

Pearson's Product Moment Correlation Coefficient was computed, with overall scores on indicators of parent-child relationship as independent variable and psychological adjustment among the children with LDs as dependent variable. Average scores were calculated for each sub-scale so that high scores indicate high levels of relationships and high levels of psychological adjustment. The scores of the variables were computed from frequency of responses and converted into continuous data by computing mean responses per respondents. The p-value was set at .05. The results of correlation analysis are shown in Table 2. The finding of the study showed that there was a positive correlation ($r=0.375$, $n=96$, $p < .05$) between relationship with parents and psychological adjustment. It was therefore concluded that children with LDs adjust better when they have a strong positive relationship with the parents. To estimate the level of influence of parent-child relationship on overall psychological adjustment, a coefficient of determination (R^2) was computed. This was done using regression analysis and the result was as shown in Table 3.

The model shows that parent-child relationship accounted for 14.1 and 13.2%, as signified by coefficient $R^2 = 0.141$ and Adjusted $R^2 = 0.132$ (here Adjusted coefficient of determination is adopted due to its insensitivity to number of independent variables and sample size), of the variation in psychological adjustment among learners with LDs. This finding implies that about 13% of variability in psychological adjustment among learners with LDs is explained by parent-child relationship alone. Furthermore, a regression model on the association between parent-child relationships and psychological adjustment of pupils was developed. Table 4 shows the coefficient value of the model. From the

Table 3. Model summary on regression analysis of influence of parent child relationship on psychological adjustment.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.375 ^a	0.141	0.132	.06732

a. Predictors: (Constant), Relationship with parents.

Table 4. Coefficient output: parent-child relationships on psychological adjustment.

Model	Unstandardized coefficients		Standardized coefficients	t	Sig.	95.0% Confidence Interval for B	
	B	Std. error	Beta			Lower Bound	Upper Bound
(Constant)	2.673	0.269		9.948	0.000	2.139	3.206
Relationship with parent	0.300	0.076	0.375	3.926	0.000	0.148	0.451

a. Dependent variable: Psychological adjustment.

model, the standardized coefficient which is equal to 0.375 means that for each one unit improvement in parent-child relationship, there is an increase in psychological adjustment of 0.375 units. Findings on the influence of parent-child relationship on psychological adjustment of pupils with LDs show that there was positive relationship between general parent child relationship and psychological adjustment of children with LDs. That means that positive parent-child relationship is associated with overall psychological adjustment. LDs diagnosis causes stress and anxiety to parents and this can in turn cause parent child relationships to be strained.

In concurrence with the current study, Yap et al. (2014) found that emotional support from parents may reduce symptoms of depression and anxiety in children. Another study by Lian and Yusoo (2009) also found that children who perceive the presence of supportive family possess high self-esteem and that an increase in the quality of family functioning is always paired with higher self-esteem among children. This is important for parents because they can improve their relationships with their children with LDs by being supportive. The findings of the current study also concur with that of Jackson et al. (2008) who found that there were significant associations between all sources of support with depressive symptoms, anxiety, self-esteem and academic adjustment with parental support as a robust unique predictor of adjustment for both boys and girls. Thus, providing children with LDs with social support may be a useful intervention strategy in order to increase self-esteem of these children.

Communication is an important aspect of parent-child relationship. A study by Bireda and Pillay (2017) found that both perceived maternal and paternal communication significantly predicted children's well-being as measured by self-reported scores of depression, school adjustment,

substance use and self-esteem. This study specifically studied parent child communication. Although a study by Branje et al. (2010) established gender differences on the effect of parent-child communication, present findings are in agreement with Bireda and Pillay (2017) that parent child communication is not influenced by the gender of the parent. Nevertheless, paternal and maternal communication influences children's well-being. The findings were further supported by the views of the parents who were interviewed. Ten parents were interviewed on their relationship with their children with LDs. Most of the parents (7 out of 10) who were interviewed said that relationships with their children were good. Below are some verbatim from some of them:

P6: "Relationship with my son is good; I was taught how to relate with him by the British group. We communicate very well; he is free with me and shares most of his concerns with me".

However, three (3) parents had different perspectives on relationships with their children with LDs. *P5: "I have two daughters with LDs and my relationship with them is not good. At times I don't even want to talk to them".*

Influence of special education teachers on psychological adjustment of children with LDs in inclusive primary schools

Pearson's Product Moment Correlation analysis was computed, with overall scores on indicators of special education teacher relationship as independent variable and psychological adjustment among the pupils with LDs as dependent variable. Table 5 shows the correlation analysis results. The finding of the study indicated that there was a statistically significant positive correlation ($r=0.571$, $n=96$, $p<0.05$) between teacher-child relationship

Table 5. Relationship with teacher and psychological adjustment.

Variable		Psychological adjustment	Relationship with parents
Psychological adjustment	Pearson correlation	1	0.571**
	Sig. (2-tailed)		0.000
	N	96	96
Relationship with teachers	Pearson correlation	0.571**	1
	Sig. (2-tailed)	0.000	
	N	96	96

** . Correlation is significant at the 0.01 level (2-tailed).

Table 6. Model summary on regression analysis of influence of teacher relationship on psychological adjustment.

Model	R	R Square	Adjusted R square	Std. error of the estimate
1	0.571 ^a	0.326	0.319	0.05964

a. Predictors: (constant), relationship with teachers.

Table 7. Coefficient output: teacher relationships on psychological adjustment of pupils with LDs.

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. error	Beta			Lower bound	Upper bound
1	(Constant)	1.581	0.319		4.953	0.000	0.947	2.215
	Relationship with teachers	0.530	0.079	0.571	6.739	0.000	0.374	0.687

a. Dependent variable: psychological adjustment.

and psychological adjustment. This implies that teachers play an important role in the psychological adjustment of children with LDs and that a strong positive teacher-child relationship is a predictor of positive adjustment. This could be explained by Pianta (1992) while referring to the psychological needs in the Self Determination Theory suggested that teacher-student relationships are the media through which these psychological needs are met. Wang and Eccles (2013) in agreement noted that teacher acceptance is associated with student psychological adjustment. To estimate the level of influence of teacher relationship on overall psychological adjustment of pupils with LDs, a coefficient of determination was computed. This was done using regression analysis and the result was as shown in Table 6.

The model summary shows that teacher relationship accounted for 32.6% ($R^2 = .326$) and 31.9% (Adjusted $R^2 = .319$) (here Adjusted coefficient of determination is adopted due to its insensitivity to number of independent variables and sample size) of the variation in psychological adjustment among children with LDs. The

implication of this is that, teacher-child relationship explains about 31.9% of the variability of psychological adjustment among children with LDs, meaning that in about one out of every three children with LDs their level of psychological adjustment is influenced by their relationship with their teacher. Furthermore, a regression model on the relationship between teacher relationships and psychological adjustment of children with LDs was developed. Table 7 shows the coefficient value of the model. From the model, the standardized coefficient which is equal to .571 means that for each one unit improvement in teacher-child relationship, there is an increase in psychological adjustment of .571 units. This implies that more improvement in teacher-child relationship results into improved psychological adjustment of the child.

The teacher-child relationship is important because it mediates the parent-child relationship and the peer-child relationships. The teacher-child relationship can be seen as an extension of the parent-child relationship, while the peer-child relationship may be influenced by the child's perception of the teacher's relationship with other

children. Thus children who experience positive relationships with teachers are more likely to have positive relationships with peers. The possible explanation for the trust that children place on their teachers can influence other relationships in their lives. It is hypothesized that teacher family communication that promotes children's sense of competence and enhances feelings of relatedness to the teacher or school can foster high levels of motivation (Thompson, 2006).

The findings that teacher-child relationships influence psychological adjustment of children with LDs are consistent with research findings by Murray and Pianta (2007) who found that overall teacher-child relationships are significantly positively related to psychological adjustment of adolescents. This implies that teacher acceptance and supportive relationships provide some psychological cushion against maladjustment in school. This is supported by Wang and Eccless (2013) and Rohner (2010) who found that teacher acceptance and supportive relationships were associated with children psychological adjustment in both boys and girls and have protective roles against depressive symptoms. Teacher-child relationship is important, especially in inclusive schools because of the stigma and frustrations children with LDs suffer when they compare themselves to the typical learners. Kourkoutas (2012) postulated that teachers play a therapeutic role in dealing with children with difficulties. Relationships with teachers can be particularly important to children with LDs, who are often undergoing profound shifts in their sense of self and are struggling to negotiate changing relationships with their parents and peers.

Schools are interpersonal settings, in which relationships influence children's motivation, academic performance and teach psychosocial adjustment. This may be explained by theory of Self-determination by Deci and Ryan (2012), which postulates that the support children receive from the socializing environment, promotes or undermines the children's intrinsic motivation towards psychological growth and development. That means teacher-child relationship that is characterized by acceptance and support is important for the psychological wellbeing of children with LDs.

To get the views of the special education teachers, the researcher conducted a face to face interview with 10 special education teachers. They were asked to describe their relationship with pupils with LD. The responses given were; try to be close and friendly to the pupils, paying keen interest and making follow up on the pupils. The interviewees were asked to share on how they showed support and acceptance to pupils with LD. Some of their responses are as stated below:

T3: "I sensitize other learners to accept and give them support. I offer them support by breaking class work into manageable units and giving them extra time to complete their work".

Another teacher had the following to say:

T8: "I give them activities according to their abilities and give them more attention".

The findings from both the analysis and interviews reveal that special education teachers in the inclusive schools under study had a positive relationship with the pupils with LD. This is evident from the responses they gave on how they related with the pupils. It is thus important for teachers to engage in positive relationships with their pupils in school. One way this has been achieved in Kisumu East Sub County is through the programs by Leonard Cheshire Disability Organization, which provides teachers with training on how to foster positive relationships with their pupils.

Conclusion

From the findings on the influence of parent-child relationship on psychological adjustment of children with LDs, it was concluded that children with both parents have a healthier relationship with their parents than children with single parents. It was also concluded that children with mothers alone adjust better psychologically than children with fathers alone. However, it was generally concluded that strong parental relationship with a child with LDs always results into overall psychological adjustment irrespective of the gender of the parent; that is, children with LDs adjust better when they have a strong positive relationship with the parents. On the relationship with teachers and psychological adjustment, it was concluded that with improved cordial teacher-child relationship there is an increase in overall psychological adjustment. This was concluded to mean that children with LDs adjust better when they have a strong positive relationship with their teachers.

Recommendations

Given that parent-child relationship has an influence on psychological adjustment, it is recommended that awareness creation and sensitization on prevalence and manifestations of LDs be encouraged so that more parents can take their children for assessment and develop positive relationships with them. Even though special education teachers seem to be offering support to the children with LDs, the study recommends that the government trains and posts more special education teachers to the inclusive schools for children with LDs to benefit more.

Limitation

The participants of this study were pupils with LDs, their

parents and special education teachers of public inclusive primary schools. Thus views of head teachers, regular teachers and school counselors were overlooked due to financial constraints and other logistics such as time. Another limitation is limited generalization of the study. The study was carried out in Kisumu East Sub County; an area which has received a lot of sensitization on LDs; making it difficult to generalize the findings to mainstream schools and other Sub Counties.

CONFLICT OF INTERESTS

The authors have not declared any conflict of interest.

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