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"Does Change Last?": Evaluating the Strengths-Based Intervention for Families Raising Children with Autism

Abstract

The study evaluated the effectiveness of the intervention for families raising children with autism aimed to improve the family's quality of life, strengthen its capacity, and expand rights and opportunities. The experimental intervention was implemented at the Educational and Rehabilitation Center for Children with Autism "Trust" (Lviv, Ukraine). It had one experimental group (30 people) and two control groups (60 people). The effectiveness and duration of the intervention effects were assessed using a before/after study design with the same questionnaire. Findings from the survey evidence the effectiveness of the intervention, in particular, for expanding the family's capabilities, its capacity, improving relationships in family subsystems, increasing parental competence, and improving well-being. Limitations of the intervention are discussed.

Keywords: autism, parents, strengths-based approach, family social work, social work intervention

Introduction

Children with autism, like any other kids, must be brought up in a caring environment. However, studies evidence that families raising children with autism have high levels of stress and depression (Hoffman et al., 2009; Izadi-Mazidi et al., 2015) and reduced vitality (Pakenham et al., 2005). Consequently, they need empow-

erment, restoration of social mobility (Anthony & Campbell, 2020; Avendano & Cho, 2020) and social support (Pozo et al., 2014; Zuna et al., 2009). In Ukraine, families raising children with mental health problems experience numerous social problems and discrimination (Semigina & Chistyakova, 2020).

At the same time, researchers (Bayat, 2007; Pakenham et al., 2011) argue that despite the many challenges families face, building on their strengths allows them to be resilient. Therefore, it is recommended to include a strengths-based perspective in educational programmes for parents of a child with autism (Steiner & Gengoux, 2018; Parker et al., 2020). This approach to social work interventions puts the strengths and resources of individuals, families, communities, and their environments, rather than their deficit needs, problems and pathologies, at the centre of the helping process. The approach enables people to see themselves at their best and to cope with the challenges based on the resources and opportunities that the family possesses (Shochet et al., 2019).

In the Ukrainian academic discourse, no evidence could provide grounds for using the strengths-based perspective in family social work interventions, particularly with families raising children with autism.

The study's objective is to evaluate the effectiveness of using interventions based on the perspective of strengths in social work to improve the quality of life of families raising children with autism. The research object is an intervention developed based on a strengths-based approach in social work with families raising children with autism.

Research Methodology

General Background of Research

In 2021-2022, the new strengths-based intervention was developed by the authors. The experimental intervention lasted three months, which included weekly group training meetings lasting 2.5 hours each. These meetings had their own purpose, objective, methods, and tools. The training had several modules: (1) family adaptive skills; (2) family restructuring and the organizational model of the family; (3) focus on family resources and solutions.

The intervention was aimed to develop internal resources and resilience of the families raising children with autism. The family social work model (Stoliaryck et al., 2020) was employed for constructing the content and procedures of helping activities for parents.

It was implemented at the Training and Rehabilitation Center "Trust" in Lviv, Ukraine. The experimental intervention was accompanied by research aimed at evaluating its effectiveness. The study was built on a reductionist, empirical-analytical philosophical basis within the framework of the positivist research paradigm in social work using quantitative research methods.

Research Sample

The research sample consisted of three groups formed by random selection:

- two control groups ("K1" families who are under the supervision of the social services centre; "K2" families whose children are at the rehabilitation centre "Trust")
- one experimental ("E1" families receiving services at the advisory and informational resource centre at the centre "Trust"),

Criteria for inclusion of respondents were: 1) having a child under the age of 18 with an officially registered diagnosis of autism; 2) being a client (recipient) of services; c) a written consent to participate in the study.

Table 1 contains the data on respondents from these control and experimental groups.

Table 1. Socio-demographic	characteristics of the contro	ol and experimental groups

Total quantity (n=90)	E1 (n=30)	K1 (n=30)	K2 (n=30)	
Sex				
Men	11	14	13	
Women	19	16	17	
Residence				
City	12	25	22	
Village	16	2	3	
Urban village	2	3	5	
Age				
18-24	1	-	2	
25-34	8	6	8	
35–44	18	17	16	
45-60	3	7	4	

Research Instruments and Instrument and Data Analysis

The research design included (Figure 1):

- 1. a pre-intervention survey based on the author's questionnaire for assessing the quality of life of the families of three groups of participants E1, K1, and K2;
- 2. 3-month-long participation of the experimental group E1 in the intervention developed based on the approach focused on the client's strengths;
- 3. a post-intervention survey based on the author's questionnaire immediately after the end of the intervention;
- 4. the comparison of pre-intervention and post-intervention survey results using the Student's t-test analysis for the dependent sample;
- 5. a repeat post-intervention survey of the participants of experimental group E1 three months later and the comparison with the results of the experimental intervention.

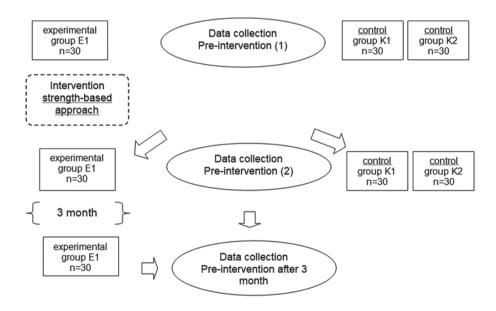


Figure 1. Procedure of the experimental study to evaluate the effectiveness of an intervention developed based on the strengths approach

The effectiveness of the intervention was evaluated using the questionnaire to assess the quality of life of a family raising a child with autism. This questionnaire contains key areas of family well-being defined by Zuna's et al. (2009) theory of family quality of life: characteristics of the child; availability of services; social mobility and activity of the family, family relations and interaction; parental competence; social support; resources; socio-demographic characteristics.

The obtained results were processed using the comparative analysis of the data by paired-samples t-test for the dependent sample using Microsoft Excel and the SPSS-22 statistical package.

Research Results

Comparison of the findings from the survey in the pre-intervention and post-intervention periods in the experimental group E1 show statistically significant differences that indicate the changes in the assessment of the parameters of the families' quality of life. At the same time, no changes were found in the two control groups, K1 and K2. Participants of the experimental group E1 demonstrate significantly higher indicators of the quality of life of the family according to the following parameters:

- Expanding the rights and opportunities of the family. Statistically significant differences in the direction of growth ($p \le .05$) can be traced in the scales: consideration of the recommendations of specialists by the family ($\sigma = .11$, t-criterion = 3.52, p = .001), cooperation between the family and the institution ($\sigma = .13$, t-test = 3.26, p = .003), an increase in the assessment of available social services in the region ($\sigma = .18$, t-test = 5.47, p = .000); delegation of interests ($\sigma = .23$, t-test = 3.20, p = .003); participation in the social activities ($\sigma = .19$, t-test = 9.81, p = .000), increasing knowledge of available services related to autism ($\sigma = .19$, t-test = 6.06, p = .000).
- Social activity and family mobility. There was a significant increase in the following indicators: participation in the community life (σ = .16, t-test = 4.42, p = .000); feeling of social inclusion (σ = .17, t-test = 4.02, p = .000); the opportunity to engage in professional activities (σ = .17, t-test = 4.26, p = .000); decrease in lack of time for self-realization (σ = .13, t-test = 3.02, p = .005), communication with social contacts (σ = .89, t-test = 4.09, p = .000); decrease in the feeling of stigma (σ = .16, t-test = 3.04, p = .005); decrease in the need for segregation (σ = .17, t-test = 4.02, p = .000) (Table 2).

Table 2. Assessment indicators of the parameters of the quality of family life in three groups of participants during the pre-intervention and post-intervention periods

		Factor Loading					
Family quality of life parameters	Value -	Pre-intervention (1*)		Post-intervention (2*)			
parameters		К1	К2	E1	К1	К2	E1
	The measure of satisfaction with services in the region	1.96	2.00	1.43	2.03	2.03	2.46
Family	Information about services	2.33	2.33	2.50	2.33	2.33	3.66
capacity	Delegation of rights and responsibilities	2.13	2.16	2.23	2.13	2.20	3.20
Social	A feeling of lack of communication	3.40	2.46	2.60	3.40	2.53	2.16
mobility	Involvement in community life	.76	2.10	2.16	2.03	2.10	2.90
,	Lack of time for self-realization	1.33	2.36	2.63	1.33	2.36	2.03
Marital relations	Focusing family life on the needs of the child	3.36	3.20	3.10	3.36	3.26	1.60
	The presence of hidden resentment against the partner	.80	1.93	2.16	.83	1.93	1.40
	Lack of attention and care from the partner	.86	2.30	3.00	.86	2.30	1.50
Parental	Personalized guilt	1.30	2.20	2.03	1.30	2.20	1.36
competence	Loss of self-control	2.53	2.80	2.80	2.53	2.83	1.60
•	Low parental competence	2.76	2.56	2.63	2.76	2.56	1.36
Social support	Absence of stigmatization and prejudice	1.36	2.10	2.13	1.43	2.10	3.06
	The family's ability to receive social support	1.20	2.40	2.30	1.23	2.40	3.23
	The influence of social support on the quality of family life	2.16	2.50	2.10	2.16	2.50	2.53
Resource	Low adaptive skills	2.23	2.56	3.00	2.23	2.56	1.56
	Readiness and responsibility	2.06	2.40	2.80	2.06	2.40	2.00
	Isolation and avoidance of difficulties	3.50	3.76	3.90	3.50	3.76	1.80

- Relationships in the family subsystems. There were significant changes in the direction of a decrease (↓) of indicators, which shows an improvement in the following parameters ($p \le .05$): a decrease in the focus of family life on the needs of a child with autism (t-test = 7.04, p = .000); reduction of conflicts (t-test = 9.40, p = .000); improvement of self-control (t-test = 6.88, p = .000); improvement of the quality of the partners' sexual life (t-test = 5.57, p = .000); normalization of the family microclimate (t-test = 5.57, p = .000), increased care and attention from the partner (t-test = 10.01, p = .000), reduction of hidden images (t-test = 4.32, p = .000)).
- *Parental competence*. A comparative analysis of the indicators of the experimental group E1 indicates statistically significant differences in the direction of decline (\downarrow) in the following parameters of the author's questionnaire (p ≤ .05): reduction of self-stigma (t-test = 2.76, p = .010); decrease in dependence on the child (t-test = 3.59, p = .001), decrease in the personalization of guilt (t-test = 2.76, p = .010), reduction of the fixation on the past in search of the cause of the diagnosis (t-test = 6.48, p = .000) and fear of the future (t-test = 2.73, p = .011).
- *Social support*. There are statistically significant differences in the E1 group, in particular, in the following parameters: increase in external assistance (t-test = 4.53, p = .000); advocacy of care duties (t-test = 4.78, p = .000); delegation of authority (t-test = 4.20, p = .000); a sense of unbiased attitude (t-test = 5.88, p = .000); increasing the ability to accept social support (t-test = 5.88, p = .000).
- Resources: reduction of anxiety (t-test = 9.33, p = .000), improvement of psychosomatics (t-test = 4.63, p = .000), reduction of isolation, avoidance of difficulties (t-test = 15.15, p = .000). At the same time, there was an increase in indicators (\uparrow) which represent a flexible response to a change in the social situation (t-test = 10.78, p = .000) and readiness for changes and responsibility for them (t-test = 5.44, p = .000).

A secondary post-intervention survey was conducted with the experimental group of subjects three months after participation in the intervention to determine the duration and sustainability of changes. Such a period provides an opportunity to determine the stability of the changes that have taken place. Indicators of the comparative analysis of the average values of the second and third measurements, carried out in the experimental group of E1 subjects according to the Student's Paired Samples T-Test for the dependent sample, show the following results (Table 3):

Table 3. Indicators of the comparative analysis of the average values of the second and third measurements carried out in the experimental group of E1 subjects according to the Student's Paired Samples T-Test for the dependent sample

Family quality	quality of life Value		Factor Loading (E1)		
of life parameters			M2	М3	
	Assessment of satisfaction of the child's needs in the institution	1,93	2,83	2,51	
Family capacity	Consideration of staff recommendations	3,33	3,73	2,93	
	Advocacy of interests	2,23	3,20	2,33	
	Difficulties accessing services	2,83	3,23	3,03	
Social mobility	The need for help	2,26	1,50	2,01	
	Fatigue	2,73	2,83	2,13	
inodinty	Participation in community life	2,16	2,90	2,40	
Marital relations	Loss of self-control	2,70	1,36	2,01	
	The centre of communication is the child's needs	2,90	1,36	2,13	
	Joint distribution of responsibilities between spouses	2,53	1,46	2,40	
Parental	Hyperopia in raising a child	2,60	1,63	2,01	
compe- tence	Dependence on the child	2,23	1,60	2,13	
	Fear of the future, blurred prospects	2,76	3,13	3,63	
Social support	Delegation of duties	3,40	2,56	2,01	
	The influence of social support on the quality of family life	1,50	2,83	2,13	
Resource	A feeling of anxiety	2,80	1,26	1,56	
	Psychosomatic diseases	2,53	1,70	1,96	

Statistically significant differences in the direction of decreasing indicators (\downarrow) were found as follows (p \leq .05): "satisfaction of the child's needs" – (measurement 2: M = 2.83 \rightarrow measurement 3: M = 2.51, σ = .20); "taking staff recommendations into account" – (M2 = 3.73 \rightarrow M3 = 2.93, σ = .17); "use of the social service representing the interests of the child and family" – (M2 = 3.20 \rightarrow M3 = 2.33, σ = .21); "difficulties in accessing services" – (M2 = 3.23 \rightarrow M3 = 3.03, σ = .33), and in the direction of growth (\uparrow) according to the indicator: "availability of help" – (M2 = 1.10 \rightarrow M3 = 1.84, σ = .17). A comparative analysis of the averaged values of the second and third measurements of the results in the block "Social activity and family mobility" in the experimental group of subjects E1 shows differences according to these parameters (p \leq .05): (\uparrow) need for help – (M2 = 1.50 \rightarrow M3 = 2.01, σ = .15); (\uparrow) fatigue – (M2 = 2.83 \rightarrow M3 = 2.13, σ = .23); (\downarrow) number of trips, incl. and for recreation –

 $(M2=1.16 \rightarrow M3=1.39, \sigma=.25); (\downarrow)$ involvement in community life – $(M2=2.90 \rightarrow M3=2.40, \sigma=.15)$. The identified differences demonstrate that the researched experimental group still has an urgent need for assistance and help, the lack of which can affect fatigue from joint leisure time, the ability to travel and participation in the life of a cultural, religious or territorial community.

The comparison of the average values of indicators of the "Family relations" block of the second and third measurements shows differences according to the scales (p \leq .05): (↑) loss of self-control – (M2 = 1.36 \rightarrow M3 = 2.01, σ = .15); (↑) the centre of communication – the child's needs – (M2 = 2.83 \rightarrow M3 = 2.13, σ = .23); (↓) assessment of the spouses' fulfilment of parental duties – (M2 = 1.26 \rightarrow M3 = 1.39, σ = .25) and (↓) joint division of responsibilities between the spouses – (M2 = 2.90 \rightarrow M3 = 2.40, σ = .15).

The data support the results of the indicators of the "Relationships with the child" block of the second and third measurements, in which significant differences in the direction of growth were found according to the parameters (p \leq .05): (↑) hyperbolised care – (M2 = 1.63 \rightarrow M3 = 2.01, σ = .15); (↑) dependence on the child – (M2 = 1.60 \rightarrow M3 = 2.13, σ = .23); (↑) fear of the future, blurred prospects – (M2 = 3.13 \rightarrow M3 = 3.63, σ = .23).

Significant differences were found in the block "Social support" ($p \le .05$): (\downarrow) delegation of duties – ($M2 = 2.56 \rightarrow M3 = 2.01$, $\sigma = .15$); (\downarrow) estimates of the impact of social support on the quality of family life – ($M2 = 2.83 \rightarrow M3 = 2.13$, $\sigma = .23$).

Significant differences were found in the analysis of the indicators of subjective assessment of the resource potential by the subjects of the experimental group (p \leq .05): (†) feeling of anxiety, panic – (M2 = 1.26 \rightarrow M3 = 1.56, σ = .23); (†) psychosomatic diseases – (M2 = 1.70 \rightarrow M3 = 1.96, σ = .29). However, it is necessary to understand that in addition to the daily routines of caring for a child with autism and the needs they determine, the family has other vital functions that can determine their psychological well-being and affect the psychosomatics of the body. Therefore, such disagreements are justified and may arise as a result of the daily routines of the family.

Discussion

The comparison of findings before the intervention, right after participation and three months later shows that the respondents experienced sustained changes in the subjective assessment of the following aspects of their life: interaction with public institutions, social activity and mobility, relationships in the family subsystems, received/demanded social support, resource potential, which proves the effectiveness of the approach focused on family strengths and confirms the results of the study by Steiner and Gengoux (2018). However, some parameters showed a decrease after the end of the participation in the intervention, which indicates certain limitations in its practical application.

It was found that three months after the intervention, the evaluation of services and indicators of family consideration of the recommendations of service providers decreased among the experimental group E1. It can be observed that the indicators of the use of the service "representation of the interests of the child and family" provided by the social services have decreased among the participants, which probably indicates an increase in the families' activity and initiative in solving specific issues independently without the involvement of external support.

The discrepancies when comparing the indicators in the pre-intervention, post-intervention and follow-up evaluation indicate that without regular reinforcement of the resource potential of the family, the subjects can lose control over their own behaviour. It is probably due to the decrease in the division of the family responsibilities, the assessment of their fulfilment and, at the same time, the growth of excessive attention on the needs of a child with autism. The participants' tendency to focus the family's attention exclusively on the needs of a child with autism determines the occurrence of hyper-awareness in upbringing, which confirms the findings of Trigueros's (2018) research. It indicates the need to include in social interventions the techniques that stimulate the development of autonomy of the partners from the child when this is possible. For the experimental group subjects, the question of the future of the child with autism, which determines the growth of fear and anxiety, which probably decreased during participation in the intervention, is still relevant.

The decrease in the willingness of the respondents to delegate their authority to care for the child can probably be explained by the increase in their resource capacity to solve life situations independently. It makes it possible to determine and evaluate the influence of the available social support on the self-assessment of the quality of life of the family because in the case when parents can make an informed choice and bear responsibility for it, their own strengths are mobilized in the direction of the family's needs. They feel less need for external assistance, which now seems less relevant and in less demand, which confirms the opinion of Bayat (2007) and Pakenham et al. (2011).

Conclusions

Research findings from the attested experimental strengths-based intervention with the families raising children with autism suggest positive changes in improving the quality of life for these families. However, a follow-up evaluation conducted three months later demonstrates a decrease in assessing specific parameters of the families' quality of life. Findings evidence that the families' quality of life remains sensitive to the influence of (1) environmental factors, including changes in the eco-social niche; (2) social policy, which includes the provision of services and their availability. The families' empowerment to use their strengths requires systematic long-term work and outside feedback to give them a sense of the correctness of their actions.

Our findings also reveal the necessity to maintain a reasonable balance, as the existing weaknesses of the client (a family raising a child with a mental health problem) should not be completely underestimated. If weaknesses are not sufficiently explored and addressed, as well as the adverse external or internal contextual impacts, they may negatively affect the family's quality of life.

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