

Family Social Work and the Holistic Development of Children with Mental Health Problems: Validation of an Intervention Model

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Abstract

Early detection and management of problems in children have proved to be an effective strategy to reduce biological, psychological, social and academic deficits and to optimise their potentials. Professionally competent school social workers leading health oriented school systems can assess, diagnose and manage children within school settings. Professional social workers are extensively employed in schools but their interventions lack visibility due to fragmented efforts and inadequate documentation. This research aims to develop an integrated care model, implemented in three tiers; universal (entire school), selective (for children with issues) and indicative (children diagnosed), corresponding to levels of prevention; primary, secondary and tertiary respectively. Using a quasi-experimental design, children in the intervention group were selected by teachers. A socio demographic profile, the Mayer-Gross psychiatric assessment format, a psychotherapy file, social skills tool and a child behavioral checklist were used to collect data. Baseline data indicates that environmental, familial and social vulnerabilities were significantly high in the households of these children and intervention was to reduce impact of these risk factors. The pre-post scores revealed that intervention improved social skills and academic performance in children.

Keywords

family, social work, children, mental health, intervention

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Introduction and Background

Mental health among children is a crucial area to be intervened by social workers and public health specialists due to its lifelong impact on holistic development and mental health outcomes. Emotional and behavioural problems are increasingly being reported among children of school-going age, especially boys (Nair et al., 2017). Reasons for these problems be they family situations, physical troubles or peer problems at the end result in low self-esteem and diminished confidence in the students leading to lifelong deficit (Nair et. al., 2017). More than 75 per cent of adult mental disorders have their onset in adolescence and 50 per cent of metal disorders can be detected by the age of 14 and 80 per cent by the age before 18 years (Kessler et al., 2005). In childhood, 40 per cent of mental disorders can be cured if detected early and bio-psycho-social interventions are given in time by the mental health team. Another 40 per cent will require continuous treatment as and when relapse occur, while 20 per cent will require long-term treatment and rehabilitation strategies to ensure optimal levels of social functioning across the life span (Beddington et al., 2008). School based social work interventions become significant in this context whereby trained professionals assess, diagnose and manage these mental health conditions in children. The family is the most important resource for the holistic development of children especially in a country like India, where the social security measures are inadequate due to poor budgetary allocation.

Mental Health Issues among Children

Mental health conditions affect children from every walk of life irrespective of the gender, socio-economic status or any other factors even though variations are more or less common. The mental health issues were found to increase with age due to emotional disturbances caused by early adolescence or the increasing burden of studies with increased age (Bansal and Barman, 2011). Mental health issues and conditions are often accompanied by scholastic backwardness, depressed mood and attention, and concentration issues which are triggered through the familial factors of parental alcoholism, lack of employment, the education level of parents or a family history of any mental illness (Haneesh et al., 2013).

Biopsychosocial Causation of Mental Health Problems in Children

Children suffering from social, emotional and behaviuoral issues have risen rapidly over the years and it can be largely attributed to the risk factors in

the family (Shonkoff and Garner, 2012) as parenting is considered as the best predictor of child development (Gardner and Shaw, 2008). Biological factors: The impact of the poor quality of childhood experience in the parents can be transmitted to their children through their DNA which is one of the factors contributing to mental health problems in children (Tremblay 2010).

Psychological factors: Poor academic performance is associated with psychological factors of motivation, social control, and self-regulation (Shah, 2005) where both teachers and parents have a crucial role in the child's development as, in addition to parental support, constant support and motivation from teachers is found to improve scholastic performance in the students (Srinivas and Venkatkrishnan, 2016).

Social factors: The familial risk factors are some of the crucial factors that shape the future of students in terms of their development. Parental unemployment, parental stress, family violence, poor family management, lack of prenatal care, antisocial activities within the families, low socioeconomic status and drug use (Singh et al., 2017) among family members all trigger mental health conditions in students with visible manifestations of poor academic performance and social withdrawal (Nag and Snowling, 2012). Family disharmony due to conflicts, quarrels and alcohol consumption are also found to be associated with poor scholastic performance (Srinivas and Venkatkrishnan, 2016).

Economic factors: Students from government schools are comparatively found to be more depressed than students from private schools which can be largely attributed to the socio-economic status associated with them (Singh et al., 2017).

Environmental factors: High levels of anxiety and depression are seen among students with increasing age which can be attributed to higher exams stress, peer pressure and parental expectations (Singh et al., 2017).

Family: A Basic Component of Child Development

The family has a very crucial role to play in the character and personality formation of children (Berry et al., 2006) and this can be clearly explained based on family system theory. Every interaction and communication is determined by the attachment patterns the child developed in his/her early stages of development. Inadequate parenting or a lack of intimate and warm care for children results in negative impacts on children like bullying

(Baldry, 2003), lack of concentration, scholastic backwardness (Haneesh et al., 2013) and substance abuse in children. Insensitive parenting and harsh discipline techniques are found to have negative impacts on the behavioural aspects of the child (Miner and Clarke-Stewart, 2008). Interventions that focus on parenting can significantly reduce problems in emotional, social and behavioural dimensions and a recent study demonstrating parental interventions had significant impact on the reduction of emotional problems, conduct problem and hyperactivity (Doyle et al., 2018). Parenting interventions stressing parent-child interactions and increasing communication skills are found to improve the mental health of children (Kaminski et al., 2008).

School Social Work Interventions for Children

Due to their theoretical foundations, practice skills and value based approach, social workers are experts in the area of family interventions. Social work interventions focusing on the partnership between family and school, works better for the development of the children because the children spend a substantial amount of their time in these institutions, and they acquire the foundations of intellectual, physical, social, emotional and ethical values from these institutions. School and family are complementary and school can act as a buffer system for all the inadequacies of the families, provided the school system is sensitive enough to identify the children with disturbances within the school setting and make use of evidence-based culturally appropriate, cost effective methods of interventions without any delay. Studies have proved that interventions at an early age have better outcomes and are most cost effective. Child focused interventions, especially for the promotion of primary and secondary prevention, have great scope and importance (McCormick et al., 2006).

There are many risk factors that operate in society which make the children vulnerable for mental health issues. Apart from the genetic factors, many other nurturing aspects play a significant role in the mental health of the population. The risk factors vary from maternal nutrition, inadequate knowledge and skills in parenting, sleep, exercise, nutritional, childhood trauma, inadequate attachments, inadequate parenting skills, lower childhood stimulation, inadequate learning opportunities, negative media influence, drugs and alcohol, poverty and insufficient resources, negative peer influence, unhealthy physical environment, impulsivity and demotivating environment are but some of them.

Levels of Intervention

The levels of school social work intervention were designed in three levels; universal where the focus is on preventive and promotive intervention (school level); selective, the developmental intervention (group level) and indicative—curative intervention (Individual Level) (Stormont et al., 2012).

The major objective of this research was to validate the intervention model of family social work and holistic development of children with mental health problems.

Methodology

Baseline Assessment of Intervention Group and Comparison Group

The study design is quasi-experimental which included a pre- and post-assessment of the intervention group to find out the effectiveness of family social work for the holistic development of children with various issues. The inclusion criteria for children in the Intervention Group (127) were children with low academic performance, having behavioural and emotional disturbances, children who disturb the normal classroom functioning and fail to abide by the school norms, children under the influence of alcohol and drugs, children addicted to pornographic materials, children with inappropriate sexual behaviours and children frequently taking leave. They were identified by teachers who had been trained in assessment schedules in a training program delivered by the author. The Comparison Group (139) was selected based on their academic performance and included children who scored above 80 per cent (distinction) from each of the divisions, from first standard to tenth. Academic performance was taken as an important variable assuming that it is a valid indicator of good mental health. The respondents for the study were the children enrolled in the registers of St. Theresa's High School, Manappuram, Alappuzha, Kerala.

The tools of data collection included the psychotherapy file developed by Anthony Ryle and Ian Kerr (Ryle and Kerr, 2002), which comprised major components of traps, dilemmas to self and others and snags, Mayer gross format of psychiatric assessment (Mayer-Gross et al., 1960) and child behavioural checklist (Achenbach et al., 1987). Baseline data was collected from both the intervention and comparison groups at the beginning of the study, followed by intervention development and implementation through the mechanisms of supervision and coordination and post-intervention assessment. The data was analysed using SPSS version 21.

Outcome Measures for Intervention Group

The primary outcome measure- Psychotherapy File: The psychotherapy file was developed by Anthony Ryle and Ian B Kerr in 2002, it includes assessments of traps, dilemmas and snags. Traps included the fear of hurting others trap, depressed thinking trap, trying to please trap, avoidance trap, social isolation trap and the low self-esteem trap (Ryle and Kerr, 2002). Dilemmas included two broad categories which are dilemmas to ourselves and dilemmas to others. Dilemma to oneself include eight sets of statements of dilemmas, while relating to others had 10 statements that are used for the assessment. A set of seven statements was used to measure and record Snags.

Secondary outcome 1- Personality Structure questionnaire: The personality structure questionnaire included a set of 8 statements and ratings on a five-point scale.

Secondary outcome 2- Social Skill Checklist: The social skill checklist is a set of 17 statements that are dual responsive and it measures the levels of interaction of the students with the larger group.

Secondary outcome 3: Child Behaviour Checklist: It was developed by TM Achenbach in 2001 and is intended to have a comprehensive multi-informant evaluation of a child's behaviour. It is a 114-item testing tool with internal consistency and one-week test retest coefficients above 0.89.

Results

The major findings are presented in three phases; analysis of the baseline data and post Intervention Assessment.

Table 1. Demographic Variables

<i>Variables</i>	<i>Intervention group (128)</i>	<i>Comparison group (139)</i>	<i>Tests</i>
Age (Mean, S.D)	12.383, 2.730	10.007, 2.145	t=7.9, p=0.001
<i>Gender</i>			
Male	66 (51.6%)	92 (66.2%)	$\chi^2=5.8$ p=0.01
Female	62 (48.4%)	47 (33.8%)	
<i>Religion</i>			
Hindu	95 (74.2%)	96(69.1)	$\chi^2=2.0$ p=0.35
Christian	28(21.9%)	32(23%)	
Muslim	5(3.9%)	11(7.9%)	

<i>Class of study</i>			
1-4 Std	38(29.7%)	38(27.3%)	
5-7 Std	37(28.9%)	49(35.3%)	
8-10 Std	53(41.4%)	52(37.4%)	
<i>Type of family</i>			
Joint family	5(4%)	2(1%)	$\chi^2=9.832$
Extended family	24(19%)	47(34%)	$p=0.020$
Nuclear family	99(77%)	89(64%)	
<i>Type of house</i>			
Concrete	62(48%)	79(57%)	$\chi^2=5.314$
Tiled	58(45%)	51(37%)	$p=0.148$
Thatched	8(6%)	6(4%)	
Any other	0	3(2%)	
<i>Occupation of father</i>			
Unemployed	5(3.9%)	8(5.6%)	
Coolie	44(34.4%)	37(26.6%)	
Self-employed with very low income	48(37.5%)	35(25.3%)	
Self-employed with average income	18(14.1%)	16(11.5%)	
Self-employed with high income	1(0.8)	5(3.6%)	
Private with poor salary	1(0.8)	8(5.8%)	
Private with good salary	4(3.1%)	10(7.2%)	
Government part time	1(0.8%)	9(6.5%)	
Government employee	6(4.6%)	11(7.9%)	
<i>Academic performance of students</i>			
40-59%	95(74.2%)	0(0%)	
60-79%	32(25%)	0(0%)	
Above 80%	1(0.8%)	139(100%)	

The average age of the study participants was 12.383±2.730 and 10.007 ± 2.145 in the intervention and comparison group respectively. The percentage of girls (48.4%) is slightly lower than of boys (51.6%) in the intervention group. The participants were mainly from high school classes in both intervention (41.4%) and comparison (37.4%) groups. The majority of the children in the intervention and comparison group were Hindus (74.2% and 69.1% respectively) and were living in nuclear families (77% and 64%

respectively). Both parents of children from the intervention and comparison group had stable jobs.

Table 2. Risk Factors

<i>Domains</i>	<i>Risk factors</i>	<i>Interventional group</i>	<i>Comparison group</i>	<i>tests</i>
	Family history of mental illness-yes	20(15.6%)	11(7.9%)	$\chi^2=3.8, p=0.04$
	History of epilepsy	15(11.7%)	4(2.8%)	$\chi^2=7.8, p=0.005$
	<i>Condition of mother during pregnancy</i>			
	Very high stress	2(1.6%)	4(2.87%)	$t=11.276,$
	High stress	57(44.5%)	45(34.88%)	$p=0.000$
Biological factors	Moderate stress	33(25.8%)	26(18.70%)	
	Minor stress	31(24.2%)	48(34.53%)	
	Happy	5(3.9%)	16(11.51%)	
	<i>Type of birth</i>			
	Normal	63(49%)	85(61%)	$\chi^2=5.519,$
	Forceps birth	2(2%)	0(0%)	$p=0.063$
	C section	63(49%)	54(39%)	
	History of suicide attempts-yes	19(14.8%)	10(7.2%)	$\chi^2=4.0, p=0.04$
	<i>Attachment patterns of children</i>			
	Very good attachment	0(0%)	73(52.5%)	
	Average attachment	27(21.1%)	31(22.3%)	
	Poor attachment	70(54.7%)	13(9.4%)	$t=12.085, 0.000$
	Very poor attachment	31(24.2%)	22(15.8%)	
	<i>Family interaction pattern</i>			
Familial factors	Highly pathogenic	39(30.5%)	10(7.2%)	
	Pathogenic interaction	29(22.7%)	17(12.2%)	
	Moderately healthy	52(40.6%)	81(58.3%)	
	Healthy interaction	8(6.2%)	31(22.3%)	
	<i>Intensity of expressed emotions(EE)</i>			
	Moderate EE	4(3.1%)	39(28.1%)	
	Mild EE	58(45.3%)	84(60.4%)	
	Severe EE	66(51.6%)	16(11.5%)	
	<i>Alcohol consumption of father</i>	M=3.17, S.D=0.852	M=2.16, SD=1.26	$t=7.57, p=0.000$
	<i>Quality of interpersonal relationship</i>			
Social factors	High level	3(2.3%)	43(30.9%)	
	Moderate level	11(8.7%)	68(48.9%)	
	Low level	73(57.0%)	24(17.3%)	
	Very low level	41(32.0)	4(2.9%)	
	<i>Age at which schooling started</i>			
Environmental factors	4 Years	75(59%)	48(35%)	$t=5.871, p=0.000$
	5 Years	53(41%)	61(44%)	
	6 Years	0(0)	30(22%)	

Family history of mental illness (15.6%), epilepsy (11.7%) and the personal history of suicide attempts (14.8%) were significantly more in the intervention group compared to the comparison group (7.9%, 2.8% and 7.2% respectively). Alcohol consumption in fathers was significantly higher in the intervention group (3.17 ± 0.852) than in the comparison group (2.16 ± 1.26). The mothers from the intervention group had higher level of stress during pregnancy (44.5%) than the comparison group (34.88%). The intervention group had significantly poorer attachment with their immediate caregiver (78.9%), a higher pathological family interaction pattern (53.2%) and higher expressed emotions (51.6%) than those from the comparison group (25.2%, 17.4% and 11.5% respectively). Children from the comparison group had significantly higher levels of social skills (79.8%) than the intervention group (11.0%).

Table 3. Social Risk Factors of Mental Health in Children

	<i>Group I Mean</i>	<i>Group C Mean</i>	<i>Exp B; 95 CI; p - Value</i>	<i>Interpretation: Children with issues;</i>
Low Income	3.21	1.87	0.141 (0.021-0.950) 0.044	- were from low income.
Impoverishment	4.10	2.70	29.181 (4.976-171.123) 0.00	-had higher risk of impoverishment
Single parent	1.96	0.039	29.90 (4.765-187.598) 0.00	- had Single parenting households
High family conflict	2.39	0.97	150.58 (23.48-965.67) 0.00	- had high family conflict in their households
Neighbourhood mobility	3.91	0.9	8.899 (1.204-65.787) 0.032	- had high neighbourhood mobility
Family history of alcohol or drug abuse	2.23	0.98	18.034 (4.162-78.139) 0.000	- had high family history of alcohol and drug abuse
Peer Rejection	1.79	1.51	1.021 (0.186-5.595) 0.98	- Peer rejection was not a significant predictor

Environmental, familial and social risk factors were significantly high in the households of children with issues; low income households, impoverished families, single parent homes, high familial conflicts, neighbourhood mobility, family history of alcohol and drug abuse and peer rejection.

Table 4. Effectiveness of Social Work Interventions on Mental Health Outcomes

<i>Outcome</i>	<i>Pre assessment vs post assessment</i>		
	<i>Model 1 unadjusted odds ratio (95% CI)</i>	<i>Model 2 adjusted + odds ratio</i>	<i>Model 3 ++ odds ratio</i>
Social skills (mean, SD)	0.3 (0.2- 0.4), <i>p</i> ≤0.001	0.2 (0.1- 0.3), <i>p</i> ≤0.001	0.003 (0.0- 0.006), <i>p</i> ≤0.35
Psychotherapy file Traps	1.2(1.1- 1.4), <i>p</i> ≤0.001		
Snag	1.2(1.1- 1.3), <i>p</i> ≤0.001	0.5 (0.4- 0.7), <i>p</i> ≤0.001	0.5 (0.3- 0.8), <i>p</i> =0.002
Dilemma self	1.3(1.2- 1.4), <i>p</i> ≤0.001	0.3(0.2- 0.5), <i>p</i> ≤0.001	0.2(0.1- 0.5), <i>p</i> ≤0.001
Dilemma other	1.1(1.0- 1.2), <i>p</i> =0.01	0.06(0.02- 0.2), <i>p</i> ≤0.001	0.1(0.03- 0.34), <i>p</i> ≤0.001

School Social Work Intervention had statistically significant greater odds of improvement in social skills in the intervention group. School social work intervention had statistically significant greater odds of improvement in traps, snag, dilemma to self, dilemma to others.

Discussion

Risk factors in children with issues were environment specific and were driven by social factors. More of risk factors and scarcity of protective factors increases the likelihood of mental health problems and developmental disabilities (Richter, 2003). Poverty and its associated psychosocial stressors, such as violence, unemployment, and insecurity, are correlated with the onset of adult mental disorder (Patel and KleinmanII, 2003). Risk factors in poor children's families and communities combine with scarcity of

protective factors to increase the likelihood of mental health problems and developmental disabilities (Richter et al., 2003). Maternal stress, poor history of breast feeding, unstable jobs for parents, inadequate role functioning were parenting vulnerabilities. Biological and psychological vulnerabilities like childhood neurotic complaints, childhood infections, poor attachments with primary attachment figure in the family and defective communication in the family make them unprotected against mental ill health. Highly expressed emotions of hostility, critical comments and over-involvement together with poor social skills make them susceptible to emotional and behavioural issues. Children with issues had significantly higher levels of cognitive traps, snags and dilemma related to self and others.

Impact of Social Work Intervention

The pre- and post- mean changes in the Intervention Group showed that the intervention was effective and the results were statistically significant. School social work intervention had a statistically significant greater likelihood of improving social skills, traps, snags dilemma to self and others in the intervention group.

Academic performance in terms of yearly examination marks of children from the intervention group improved significantly after the intervention and more children were promoted to higher grades. School social work enables schools and family to offer the child a secure base which is essential for the holistic development of children. There is compelling evidence to prove that the quality of relationships between parent and worker was positively correlated with effectiveness (Nowak and Heinrichs, 2008) of any child related interventions and social and behavioural interventions lead to improved behaviour, school success and persistence (Bernal et al., 2009). The interventions in early childhood (Walker et al., 2005) can have sustained cognitive and school achievement benefits (Daniels and Adair, 2004). Early intervention is a cost effective intervention with very high effectiveness and has a better rate of return than programmes introduced later in life (Heckman, 2006). Disadvantaged children are destined not only to be less educated and have poor cognitive function than their peers but also to be less productive.

The prevention of dropping out or failure is more sustainable in terms of survival, growth and development of the children in the future. School level interventions are always a school-family partnership programme, where social workers act as mental health consultants to modify and alter the

patterns and processes of these systems in favour of the child in various developmental needs.

Conclusion

Customised and cost effective evidence-based models of school social work intervention, that is theoretically sound, culturally appropriate, socially acceptable and economically viable, for promotion, primary, secondary and tertiary prevention in school children to ensure their holistic development is possible within the school system. The school social work models are effective in improving social skills, positive thinking patterns, interpersonal relationships and academic performance of the school children that ultimately make them contributing citizens of the country. The intervention ensures quality services to the children from low income households who are exposed to too many risk factors and have limited access to the necessary protective factors. It should open the eyes of policy makers to appoint more and more social workers and inspire school social workers to develop evidence-based practice models. They could then set standards of school social work practice and guide the future researchers to test more and more culturally acceptable, affordable and plausible models of school social work interventions.

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