

Behavioral Problems in Children: A Systematic Review of Research Literature in Pakistan

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Children are becoming a focus of contemporary research due to alarming rise in behavioral problems. This rise is a matter of concern for Western countries and Asian countries like Pakistan. Objective of this article was to review research literature for studies regarding behavioral problems of children less than 18 years. Studies published in Pakistani journals and abstract booklets from 1970's to 2014 were reviewed. Review of these studies revealed that researchers initially showed interest in aggression among male children and role of socioeconomic status and cultural factors. Gradually, focus narrowed down to Attention Deficit Hyperactivity Disorder and its correlates. Contemporary studies are exploring myriad of factors associated with behavioral problems of children along with adaptation and validation of behavioral problems' scales. Trend of carrying out intervention studies is quite recent. Implications of this review are discussed.

Keywords: Behavioral problems, children, internalizing behaviors, externalizing behaviors, emotional problems

Behavioral problems in children have been the focus of research for a number of reasons (Walsh, Murrell, Scherbarth, & Kubiak, 2009). First, they effect child's academic, social and personal functioning. Second, they have been on alarming rise (Merikangas, et al., 2010). The prevalence of behavioral problems in the U. S has been reported to be 3.5% to 6.8% (Mental health surveillance among children: United States, 2005-2011). However, studies in the developing countries have reported a higher prevalence in the behavioral problems of children than in U.S (Hussein, 2008; 2010; Syed, Hussein, & Haidry, 2009).

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Children's behaviors fall on a continuum and there is no specific point that separates worrisome behavior from a serious behavioral problem. There are many diagnostic categories of behavioral problems and all emphasize that chronicity, frequency and severity of behaviors determine whether they fall under the umbrella of normal behavioral variations or behavioral problems. National Mental Health and Special Education Coalition (Forness & Knitzer, 1992 as cited in Kenneth, Forness & Mostert, 2004) define behavioral problems as "a disability characterized by emotional or behavioral responses in school programs that are inappropriate for child's age, culture or ethnic norms and adversely effects child's educational performance. Such a disability is not a transient and expected response to stressful events in the environment, is consistently exhibited in two different settings and is unresponsive to direct intervention in general educational setting." Achenbach (1966) defines behavioral problems as internalizing (depression or anxiety) or externalizing problems (acting out) (Achenbach & Ruffle, 2000).

Although definitions of behavioral problems vary but they all agree that behavioral problems adversely effect child's functioning and are usually diagnosed when they become severe, frequent and chronic.

Prevalence of Behavioral Problems in Pakistan

There is dearth of research on this area in Pakistan and only few studies have been carried out to assess prevalence of behavioral problems in children. Javed, Kundi, and Khan (1992) estimated the prevalence of behavioral problems in primary school children to be 9.3% and identified antisocial behaviors to be commonest. A study by Syed, Hussein, and Haidery (2009) conducted in schools of Karachi suggested that 34.4% parents and 35.8% teachers rated children as showing behavioral problems, as measured by Strengths and Difficulties Questionnaire. Gender differences were observed with boys more likely to externalize problems and girls to internalize problems. The percentage of prevalence of behavioral problems identified by Pakistani researchers is high than the rates quoted for West (Syed, Hussein, & Haidery, 2009).

Behavioral Problems: Indigenous Psychosocial and Cultural Issues

Researches indicate that behavioral problems are triggered, maintained and exacerbated by several psychosocial factors such as maternal psychopathology (Khan, Hanif, & Tariq, 2014), parental-acceptance rejection (Anjum & Kausar, 2009), familial discord (Sabah,

Gilani, Kamal, & Batool, 2012), and socioeconomic status (Kazmi & Hassan, 1980).

Parents in Pakistan are becoming increasingly aware of pediatric physical health of their children but are still neglecting their children's mental health (Khan & Naqvi, 2013). This is mainly due to stigma and lack of awareness. Moreover, scarcity of mental health facilities makes it harder to get timely and appropriate services for children with behavioral problems. Proper training in child psychiatry is lacking and there is one child psychiatrist for every 100 adult psychiatrists (Khan & Naqvi, 2013). This result in making some professionals erroneously assumes that interventions for adults can be used with children (Husseini, 2009).

More recently it is observed that private educational institutions that cater for children of higher socioeconomic strata have started acknowledging the need for addressing behavioral problems of school going children. For this purpose some schools have appointed school psychologists. Unfortunately, such privileged schools cater for a very small section of society and mental health needs of a large percentage of children is not attended. Behavioral problems in children are still attributed to evil spirits, attention-seeking behavior and neglected or spoiled children (Chaudhry, 2010). These perceptions results in management strategies that are negative and are more likely to increase the vulnerability of behavioral problems in children. This is reflected also in high dropout rates of children, 50% of which occurs during the first five years of schooling (Interface, 2012).

Behavioral Problems: Measurement Issues

Lack of appropriate and indigenous assessment tools is also attributed to the absence of epidemiological studies of children's behavioral problems. The developed world has produced a number of structured tests and scales for the measurement of behavioral problems of school going children. Prominent among them are Child Behavior Checklist (Achenbach & Ruffle, 2000), Strengths and Difficulties Questionnaire (Goodman, 1999) and Conner's Rating Scale-Revised (Conners, Parker, Sitarenios, & Epstein, 1998). However, application of these scales/tests for Pakistani children is limited. Researches who have employed scales developed in the U.S also emphasize the dire need for indigenous measures. Professionals in Pakistan have started addressing this issue more recently. Some of the indigenous measures developed in Pakistan are Self-esteem Scale for Pakistani children (Saleem & Mahmood, 2011a); Translation, Adaptation, and Validation of Children's

Action Tendency Scale (Zahid & Pervez, 2009), and Disruptive Behavior Disorder Rating Scale (Loona & Kamal, 2011), etc. However, these scales are limited in their scope and there is a need to develop indigenous measures of behavioral problems for Pakistani school aged children that can be used for broad age range and are able to tap cultural diversity.

Method

Major journals of psychology and psychiatry were reviewed to identify articles for this study based on the criteria given below:

Inclusion Criteria. Those studies were included that (1) were conducted in Pakistan, (2) were conducted from 1970s till 2014 (3) were published in Pakistani journals such as Journal of Pakistan Medical Association, Journal of the College of Physicians and Surgeons Pakistan, Pakistan Journal of Psychological Research, Journal of Behavioral Sciences, Pakistan Journal of Psychology, Pakistan Journal of Clinical Psychology, Pakistan Journal of Social and Clinical Psychology, Pakistan Journal of Professional Psychology Research and Practice, Bahria Journal of Psychology, Pakistan Journal of Social Sciences, (4) were published in Psychological Abstracts (University of the Punjab), Beaconhouse National University Abstracts and Pakistan Psychological Abstracts (NIP), (5) comprised of sample of children (participants aged less than 18 years) (Mental Health Surveillance Among Children-United States, 2005–2011). It is important to mention here that some studies that had sample ranging from childhood to adolescence (aged 12-17 years) were also included in the review as they were related to major focus of study, i.e., children. Studies with titles or abstracts that referred to children and problem behaviors were reviewed in greater detail. After this initial scrutiny, abstracts, introductions and result sections of remaining articles were studied to determine if articles (1) fulfilled the inclusion criteria described above or (2) included references to other articles that might meet inclusion criteria. Examples of excluded studies are those that focused on (1) childhood issues not relating to behavioral problems such as self esteem of children, underachievement, and learning disabilities, and (2) adolescents participants only.

Detailed review of literature from 1970s to 2014 yielded 45 studies that met the criteria outlined earlier. 33 of these were published full text articles and 12 were studies from abstract booklets. Review of these articles reveals changing trends in research from 1970's to 2014.

Research Trends During Mid 70's to 80's

Review of literature related to behavioral problems of children from mid 70's to 80's focused on exploring differences between self concept of deviant and non-deviant children. Findings suggested that both groups differ on the aspects of self-concept, confidence, home atmosphere, and acting out behaviors (Merchant & Anwar, 1975). An interesting trend researched during this period was aggression among males. Sadiq and Hassan (1975) did a study on aggression among Balochistani children and Punjabi children. They found out no differences between the two groups based on cultural differences but on parental education levels. Two independent studies examined the aggression behaviors among male children across different socioeconomic classes (Kazmi & Hassan, 1980; Khalil & Najam, 1984). These researches supported the assumption that children from lower socioeconomic status would show more aggression compared to children from middle and upper socioeconomic status. This finding was attributed to frequent use of physical punishment by parents from lower socioeconomic status.

A study by Khatoon & Khalid (1981) highlighted the role of teachers' training in handling behavioral problems of children by showing that professionally trained teachers were more effective in dealing with behavioral problems of children. No studies related to behavioral problems of children carried out in mid and late 80's were found in reviewed Pakistani journals and abstract booklets.

Research Trends During 90's to Mid 2000's

After exploring the role of culture, gender and teachers' training in shaping behavioral problems of children, researchers attempted to estimate prevalence of emotional and behavioral problems among children (Javed et al., 1992). Although findings suggested 9.3% children showing antisocial behaviors but this must be kept in mind that information about children was collected from teachers only. When assessing problem behaviors of children in clinical practice, it is desirable to have dual informant ratings to rule out personal biases.

With time awareness increased among mental health professionals that maternal psychopathology (depression) can make mothers vulnerable to perceive their children's behaviors as more problematic (Khalid, 2001).

Table 1
Research Trends During Mid 70's to 80's

Sr. No	Author(s) & Year	Title	Design	Sample	Results
1	Merchant and Anwar (1975)	Self-concept of deviant and non-deviant students	Comparative survey	N=150 students	Significant differences between deviant and non-deviant students
2	Sadiq and Hassan (1975)	Aggression in Baluchistani and Punjabi children	Comparative survey	N=200	Non significant differences in the manifestation of aggression between Baluchistani and Punjabi children.
3	Kazmi and Hassan (1980)	Socioeconomic status and aggressive behavior of male children	Cross Sectional Survey	N=100 children	Children from lower socioeconomic group show more aggressive behavior
4	Khatoon and Khalid (1981)	Attitudes of trained and untrained primary teachers towards handling their students' behavioral problems	Comparative survey	-	Professionally trained teachers are more effective in dealing with conduct, and behavioral problems of the children.
5	Khalil and Najam (1984)	Expression of aggression of male children from different socioeconomic classes	Comparative survey	N=120	There were significant differences in all three social classes of children.

Note. (-) indicates information not mentioned in the abstract booklet

Table 2
Research Trends During 90's to Mid 2000's

Sr. No	Author & Year	Title	Design	Sample	Behavioral problems scale used	Results
1	Javed, Kundi, and Khan (1992)	Emotional and behavioral problems among school children in Pakistan	Survey	N=225 (9-11 years)	Rutter's children behavioral questionnaire Child Behavior Checklist	9.3% children showed antisocial behaviors.
2	Khalid (2001)	Depressed mother's perception of children's behavioral problems	Survey	N=40		Depressed group of mothers perceives significantly higher levels of behavioral problems in children.
3	Loona and Kamal (2002)	Gender differences among ADHD children on social behavior	Cross sectional Survey	N=468	Diagnostic scale for ADHD	Only significant differences on the Hyperactivity subscales.
4	Loona (2002)	Academic performance and school social behavior of ADHD and non-ADHD children	Comparative study	N=468	School Social Behavior Scale	Gender differences proved significantly for Impulsivity subscale for the total sample
5	Qureshi and Thaver (2003)	Cross Sectional Review of Children with ADHD	Cross sectional survey	N=26 children	No scale used	Combined subtype was the most commonly diagnosed subtype. A large percentage of children (53.8%) were mentally retarded
6	Loona and Kamal (2004)	Academic performance and school social behavior of ADHD and non-ADHD children	Comparative survey	N=468	Diagnostic scale for ADHD	Low scorers and problematic children scored significantly high on DS-ADHD as compared to high scorers
7	Khan, Asad, Mahmud, and Rozi (2005)	Relationship of attributional styles and self concept with depression in children	Correlational study	N=80 (11-16 years)	Children's depression inventory	Children's scores on attributional styles were not related to depression.
8	Munaf and Hasan (2005)	Parental divorce and psychological well being of children	Comparative study	6-12 years	Children Apperception Test	The mean aggression and depressed mood scores were significantly higher in the children of divorced women.

Moreover, effect of parental divorce on children's psychological well-being was highlighted with the finding that depression and aggression levels are higher in children of divorced women (Munaf & Hasan, 2005). Understanding of Attention Deficit Hyperactivity Disorder (ADHD) among professionals and teachers was enhanced with the studies comparing academic performance and social behaviors of ADHD children with normal children (Loona, 2002; Loona & Kamal, 2004), presentation of ADHD in clinical settings (Qureshi & Thaver, 2003) and gender differences in manifestation of ADHD (Loona & Kamal, 2002). These studies showed that non-ADHD children were more socially competent and less likely to show antisocial behaviors than children with ADHD. Significant gender differences existed only for impulsivity domain of ADHD and ADHD combined type was found to be the most commonly reported form of ADHD comorbid with mental retardation.

In the collectivist culture of Pakistan where children attribute problems to external events, a study by Khan, Asad, Mahmud, and Rozi (2005) showed that attributional styles and self-concept play no significant role in childhood depression.

Research Trends during late 2000's

During this period, several universities started offering MPhil and MS programs in Clinical Psychology. This resulted in introducing a number of research dissertations that focused on scales' adaptation and validation for children. Scales adapted in late 2000's for children were Children's Action Tendency Scale (Zahid & Pervez, 2009), Disruptive Behavior Disorder Scale (Loona & Kamal, 2011), Spence Child Anxiety Scale (Loona & Kamal, 2013) and Illinois Bullying Scale (Shujja & Atta, 2011).

Working children and non-working children (Bandeali et al., 2008), children attending different types of schools (Hussein, 2008), children living in orphanages (Lassi, Mahmud, & Syed, 2011), abused and non-abused children (Malik, Gul, & Humphreys, 2010), street children and non-street children (Abid & Aslam, 2011) became the focus of researches. These studies showed that children from less privileged backgrounds, children studying in public schools and children victim of abuse showed more behavioral problems than normal children. Studies for assessing behavioral problems of the children also used the terms "internalizing" and "externalizing" problems. This suggests increasing insight that behavioral problems include both emotional and disruptive behaviors (Abid & Aslam, 2011).

With reference to correlates of behavioral problems, researchers found that behavioral problems in children are significantly positively correlated with perceived parental-acceptance rejection (Majeed & Najam, 2008; Saleem & Kausar, 2009), single parenting (Siddiqui & Sultana, 2011), parental mental health problems (Khan et al., 2014), parental punishment (Yousaf & Masood, 2008), household chaos (Sabah & Gillani, 2011; Sabah et al., 2012), harsh and punitive parenting styles (Akhtar, Hanif, Tariq, & Atta, 2011; Jamil, Khalid, & Nadeem, 2011; Sheraz & Najam, 2013), low cohesiveness in the families (Noon, Arsalan, Nadeem, & Khalid, 2012) and low emotional quotient of the mothers. Psychological burden of having a child with behavioral problems on caregivers was also recognized with the finding that mothers' of children with ADHD have more parental stress and resulting use more harsh and punitive disciplinary strategies (Anjum & Malik, 2010). Recently, interest in intrinsic factors of behavioral problems is emerging. A study by Goraya and Sabah (2013) has showed that children's hostile social information processing of environmental cues make them vulnerable to behave aggressively.

Major research advancement during late 2000's was change in focus from identification of problems towards management. Two independent intervention studies for management of behavioral problems in children were carried out. One was on play therapy (Zadeh & Alwy, 2008) and other on role of parent training in reduction of ADHD (Malik & Tariq, 2014). Findings of both the studies showed that they were promising in reducing behavioral problems of children.

Table 3
Research Trends During Late 2000's

Sr. No	Author & Year	Title	Design	Sample	Behavioral problems scale used	Results
1	Majeed and Najam (2008)	Depression and Attachment in Children and Adolescents	Survey	N=60 (12-19 years)	Child Depression Inventory	Significant relationship between depression and attachment in children and adolescents.
2	Bandeali et al. (2008)	Prevalence of behavioral and psychological problems in working children	Cross sectional study	N=225 (11-16 years)	Strengths and difficulty scale	9.8% working children have behavioral problems.
3	Yousaf and Masood (2008)	Parental Punishment and the Conduct Disorder in School Children	Survey	N=150 school children	Eyeberg Behavior Inventory	Significant positive correlation between reported parental punishment and conduct disorder in school children
4	Hussein (2008)	Behavioral Problems among children	Survey	N= 675 parents	Strengths & Difficulties scale	Children attending private schools more likely to be rated as normal compared to community school children. Myriad of benefits of play therapy
5	Zadeh and Alwy (2008)	Play therapy for children with behavioral and school problems	Qualitative Study	N=26 (5-12 years)	-	Children's acting tendency scale is a reliable and valid instrument for Pakistani children.
6	Zahid and Pervez (2009)	Adaptation of Children's Action Tendency Scale	Multiphasic survey	N=88 children	-	Negative correlation between perceived quality of parent-child relationship and level of aggression in adolescents. Gender differences in moral disengagement, victimization and bullying toward others.
7	Saleem and Kausar (2009)	Parental Acceptance Rejection and Behavioral Problems in Children	Survey	N=512 (255 boys and 257 girls)	Aggression scale	Significant differences of behavioral problems across abused and nonabused group
8	Shoukat and Tariq (2009)	Moral Disengagement and Bullying Behavior among School Children	Cross sectional survey	N=100	Bullying Questionnaire	Parents rated 48.5% of children under the "abnormal" category
9	Malik, Gul, and Humphreys (2010)	Behavioral and emotional problems in abused and nonabused children	Cross-sectional survey	N=100	Behavior Rating Scale for children	
10	Hussein (2010)	Dual informant rating of children's emotional behavioral problems	Epidemiological Survey	N=1761	Strengths and Difficulties Scale	

Table 3 continued

Sr. No	Author & Year	Title	Design	Sample	Behavioral problems scale used	Results
11	Anjum and Malik (2010)	Parenting practices in mothers of children with ADHD	Multiphasic Survey	N=60 (4-12 years)	Conner's rating scale	Significant correlation between child behavioral problems, maternal stress and parenting practices.
12	Abid and Aslam (2011)	Internalizing/ Externalizing Problems of street children	Comparative study	N=300		Street children show more internalizing and externalizing Problems
13	Lassi, Mahmud, and Syed (2011)	Behavioral problems among children living in orphanage facilities	Survey	N=330 children	Strengths and Difficulties Scale	The overall prevalence of behavioral problems was 33%
14	Sabah and Gillani (2011b)	Household chaos, Attention and School Problems in Primary School Children	Comparative Study	N=101	Behavioral assessment system-2 for children	Children from high chaotic families exhibit significantly more attention and school problems
15	Akhtar, Hanif, Tariq, and Atta (2011)	Parenting styles as predictors of behavior problems among children	Multiphasic Survey	N=400	Child problem checklist	Authoritarian parenting styles predict internalizing and externalizing behavior problems of children.
16	Siddiqui and Sultana (2011)	Single parenting and depression in adolescents	Survey	N=240 adolescents, 12-17 years	Child Anxiety & Depression Scale	Significant differences in level of depression between adolescents living with both parents and single parent groups.
17	Loona and Kamal (2011)	Translation and Adaptation of Disruptive Behavior Disorder Rating Scale	Survey	N=280 primary class children	Disruptive Behavior Disorder Rating Scale	Factor analysis yielded four factor solution
18	Sabah and Gillani (2011a)	Conduct Problems, Social Skills, Study Skills, and Home Chaos in School Children	Survey	N=203 (91 boys & 112 girls)	Behavioral assessment system for children	Significant positive relationship between home chaos and conduct problems of children
19	Jamil, Khalid, and Nadeem (2011)	Relationship between parenting and children's behavioral problems	Correlational Study	N=60	Child Behavior Checklist	Significant positive relationship between authoritarian parenting style and behavioral problems.
20	Shujia and Atta (2011)	Translation and Validation of Illinois Bullying Scale		N=536	Illinois Bullying Scale	Valid measure of bullying and victimization in Pakistani children and adolescents

Table 3 continued

Sr. No	Author & Year	Title	Design	Sample	Behavioral problems scale used	Results
21	Sabah, Gilani, Kamal, and Batool (2012)	Chaotic Home Conditions and Children's Adjustment	Survey	N=150	Behavioral assessment system	Significant effect of home chaos on adjustment problems of children
22	Azam and Aftab (2012)	Social problem solving styles and aggression in children	Survey	N=150	-	Significant mean differences between boys and girls
23	Noon, Arsalan, Nadeem, and Khalid (2012)	Impact of family cohesiveness on behavioral problems in children	Survey	110 (8 to 12 years)	Child Behavior Checklist	Behavioral problems in children are more prevalent in families having low cohesion.
24	Akram and Khalid (2012)	Relationship between mothers' emotional quotient & children's behavior problems	Survey	60 mothers	Child Behavior Checklist	Inverse relationship between emotional quotient of mothers and behavior problems in children.
25	Sheraz and Najam (2013)	Parenting Styles and Oppositional Behaviour among boys	Correlational Study	55 boys	Disruptive Behaviour inventory	Parenting styles have relationship with boys' oppositional behavior especially in home settings.
26	Najam and Majeed (2012)	Relationship between depression and attachment in children	Correlational survey	60 children	Parental acceptance rejection scale	Significant relationship between depression and perception of rejection in children.
27	Soomro and Clarbour (2013)	Emotional behavior and academic achievement in middle school children	Correlational study	146 (12-15 years)	Emotional behavioral scale	Social self-esteem to partially mediate the relationship between malevolent aggression and academic achievement.
28	Goraya and Sabah (2013)	Parenting, children's behavioral problems and the social information processing	Survey	N=106 (8-11 years)	Child Behavior Checklist	Harsh physical discipline by parents and children's hostile and aggressive attributions are predictors of children's externalizing problems.
29	Loona and Kamal (2013)	Translation and Validation of Spence Child Anxiety Scale - Parent version		N=100 (7-13 years)		The total alpha reliability coefficients of subscales of SCAS-P (Urdu version) was .92.
30	Saleem and Mehmood (2013)	Risk and Protective Factors of Emotional and Behavioral Problems	Survey	N=5053	Children Problem Scale	Girls and older children are at risk of developing emotional problems.

Table 3 continued

Sr. No	Author & Year	Title	Design	Sample	Behavioral problems scale used	Results
31	Khan, Hanif, and Tariq (2014)	Relationship of Parental Mental Health with Children's Behavioral Problems: Role of Social Support and Resilience	Correlational study	80 parents and their 80 children	Child Problem Checklist (CPCL)	Parental mental illness had positive relationship with child behavioral problems.
32	Malik and Tariq (2014)	Parent Training in Reduction of ADHD and Oppositional Defiant Disorder Symptoms in Children	Pre-post design	N=55 (4-12 years)	Disruptive Behavior Rating Scale	Reduction rates of symptoms on pre and post measures were noticeable for inattention, ODD, and for conduct disorder.

Conclusion

Review of research work carried out from 1970's to 2014 shows that interest in factors related to behavioral problems in children has evolved from general to specific. During 70's and 80's, studies explored cultural and gender role in aggressive behaviors of children. From 90's to mid 2000's, ADHD became the focus of interest. In late 2000s, several correlates of behavioral problems were studied and hostile social information processing of children was considered an important determinant of behavioral problems. Recent research trends also reflect shift in focus from assessment to management with intervention studies on play therapy and parent training for ADHD.

Limitations, Recommendations & Implications

The majority of research conducted in Pakistan in the area of behavioral problems among school children have following short forms:

1. Most studies from 1970's to date have focused on extrinsic factors that play role in development or exacerbation of behavioral problems. Research regarding role of intrinsic factors (e.g., child's difficult temperament, negative perception of environment) in development of behavioral problems is very recent and limited. There is dire need to carry out work in this domain to increase the awareness that children's intrinsic characteristics (e.g., information processing) can also lead to behavioral problems. This would help mental health professionals, teachers and caretakers to focus their efforts on devising strategies that restructure children's cognitions positively and prosocially.

2. Recently, some researchers have developed indigenous tools for assessing behavioral problems of school children but their limitations are norms for adolescents (Saleem & Mehmood, 2011b). There is need to develop scales that have norms for broad age range, are generalizable to children of different schools systems and can assess children's strengths too.

3. Behavioral problems become serious matter of concern when they occur in more than one setting. Therefore, it is pertinent from the assessment point of view to get information from both the parents and the teachers. Prevalence estimate of behavioral problems of children based on dual information ratings from clinical settings (e.g., hospitals, clinics) is scarce. Therefore, it is important that dual informant studies are carried out in clinical settings (e.g., hospitals, private clinics) so accurate estimates of behavioral problems can be obtained.

4. Evidence based intervention is considered most promising for guiding professionals, parents and teachers. In Pakistan, more intervention studies for behavioral problems of children need to be carried out. This would lead to application of therapeutic techniques that are empirically effective in reducing problem behaviors of children.

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