

Developing Emotional and Behavior Problems Scale For the United Arab Emirates

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Abstract

The objective of this study was to develop a teacher's rating scale that measures emotional and behavior problems among children and adolescents consistent with the U.A.E's culture and social context with acceptable levels of validity and reliability. A total of 1560 students without disabilities, ranging in age from 4 to 19 years old (761 boys and 799 girls), and a total of 360 children with intellectual disabilities (235 boys and 125 girls) in the same age range from U.A.E participated in this study. The process of developing the scale involved the following four phases: a) domain definition, b) items development, c) investigating the content validity, d) pilot study, and e) establishing psychometric properties of the emotional and behavior problems scale (EBPS). The findings provided strong support that each domain of the EBPS have acceptable levels of content validity, structure validity, discrimination validity, internal consistency and levels of temporal stability.

Keywords: emotional and behavior problems, scale, reliability, validity

Introduction

A child's mental health is one of the most influential factors that enhance or impede his/her well-being. Numerous studies document that children's social skills and emotional conditions have a significant effect on their daily adaptive behavior, academic performance, and the quality of their future life (Verma, Singh, Gupta & Gupta, 2001; Pardini, Bary, Lochman, 2006; Feldman, Hancock, Rielly, Minnes, & Cairns, 2000; Gunter, Coutinho, & Cade, 2002; Merino, Livia, & Digz, 2006). More specifically, social and emotional skill deficits limit the learning opportunities and social interactions with peers of all children with or without disabilities; in most cases these deficits impact their psychological adjustment as adolescents and adults (Feldman, Hancock, Rielly & Minnes, & Cairns, 2000; Philip, Martha & Tammy, 2002). Also, the academic achievement of children with emotional disturbances is significantly lower than what is expected from their age group (Cullinan, Evans, Epstein, & Ryser, 2003; Reid, Gonzalez, Nordress, Trout, & Epstrin, 2004; Nelson, Benner, Lane, & Smith, 2004). Children's emotional and behavior problems also impact their families and society (Feldman, Hancock, Rielly, Minnes & Cairns, 2000; Angold et. al., 1998; Fowler, Banks, Anhalt, Der, & Kalis, 2008).

Studies around the world have repeatedly shown that a considerable number of children experience emotional or behavioral problems (Barkmann & Schulte-Markwort 2005; Hussein 2009; Mohammadi, Alavi, Mahmoudi-Gharaei, Tehranidoost, Shahrivar, & Saadat, 2008; Ravens-Sieberer et. al., 2008). A recent review of 32 studies concerning the prevalence of emotional and behavioral problems among children by Hussein (2009) yielded an average of 12.5% without impairment and 11.1% when impairment criteria were taken into account. In the UAE three studies investigated the prevalence of emotional and behavioral problems among children; the first study found 23.9% based on parents and school physicians reports, 16.5% based on Rutte A2 for parents, and 10.4% for the entire population based on the weighted prevalence for DMS-VI disorder (Eapen, Al-Gazali, Bin-Othman, & Abou-Saleh, 1998). The second study found 11.8 % based on Rutte Parent

Questionnaire, and 10.4% based DMS-VI (Eapen, Swadi, Sabri, & Abou-Saleh, 2001). The third study found 22.2% of children to have at least one DMS-VI disorder (Eapen, Jakka, Abou-Saleh, 2003).

Identifying children with emotional and behavior problems is critical and strongly recommended by health organizations, researchers, and professionals (Verna, Singh, Gupta & Gupta, 2001; WHO, 2001; Chafouleas, Christ, Riley-Tillman, Briesch, & Chanese, 2007).

Identifying and diagnosing children with emotional and behavioral problems require reliable and valid procedures and instruments. These procedures and instruments have to be effective and efficient in obtaining data and information that assist in making decisions regarding a child's emotions and behaviors (Chafouleas, Christ, Riley-Tillman, Briesch, & Chanese, 2007). They should be easily administered, scored, and interpreted by a wide range of practitioners and researchers, and have acceptable levels of validity and reliability. Finally, these instruments should be consistent with the target population's culture and social context, because that context plays a major role in the determination, manifestation, and interpretation of emotional and behavior problems (Saleem & Mehmood, 2011; Liu, Leung, Sun, Li, & Liu, 2012; Al-Krenawi, 2005; Woo et. al., 2007; Eapen & Robertson, 2008).

There have been a number of multi-dimensional scales developed in western cultures. The most commonly used multi-dimensional scales among professionals in the U.S.A are the Behavior Assessment System for Children (Reynolds & Kamphaus, 2004) and the Child Behavior Checklist (CBCL; Achenbach & Rescorla, 2001). However, there is no single multi-dimensional scale that measures the emotional and behavior problems available in the U.A.E. of which the authors are aware. The purpose of the current study is to develop an emotional and behavior problems scale consistent with the U.A.E's culture and social context with acceptable levels of validity and reliability.

Method Participants

A total of 1560 students without disabilities with ages ranging from 4 to 19 years old (761 boys and 799 girls) from U.A.E participated in this study. The sample was selected using the following cluster-sampling

method: first, three school districts were selected randomly from the U.A.E's 10 school districts. The three districts selected were Al-Ain (272 girls & 325 boys), Sharjah (288 girls & 273 boys), and Fujairah (201 girls & 201 boys). Second, schools from each district were selected randomly. Third, classes were selected randomly from each school, and finally, each home room teacher selected 5 students randomly to participate in the study. Also, the sample included all the children with intellectual disabilities enrolled in rehabilitation centers and their parents agreed to their participation. A total of 360 children with intellectual disabilities (235 boys and 125 girls) participated in the current study.

Instrument

The objective of this study was to develop a teacher's rating scale that measures emotional and behavior problems among children and adolescents in the UAE. The process of developing the scale was guided by the American Psychological Association (1999) standards for educational and psychological testing and the recommendations of Clark and Watson (1995) in their article "Constructing Validity: Basic Issues in Objective Scale Development". The process of developing the scale involved the following four phases: a) domains definition, b) items development, c) investigating the content validity, d) pilot study, and e) establishing psychometric properties of the EBPS.

Domains Definition

The researchers reviewed the literature of the psychopathology among children and adolescents, the approaches of identifying and diagnosing emotional and behavior problems, and a number of scales developed in the USA. This review revealed: a) the categorical classification system (i.e., the Diagnostic and Statistical Manual of Mental Disorders, American Psychiatric Association, 2000) and the dimensional classification system (i.e., the Child Behavior Checklist, Achenbach, 1991; the Behavior Assessment System for Children, Reynolds & Kamphaus, 2002) are the most common approaches in assessing emotional

and problem behaviors of children and adolescents; b) the emotional and problem behaviors of children and adolescents based on the dimensional classification system are grouped into broad bands (i.e., internalizing problems, externalizing problems); and c) the broad bands encompass narrow bands (i.e., psychosomatic, anxiety, depression, conduct, aggression).

Based on the literature review eight domains were identified to represent the emotional and behavior problems among school children. The following are the domains and their definition:

1. Attention problems: distractibility and inability to maintain concentration sufficiently.
2. Academic problems: the difficulties in understanding or performing the academic tasks expected from his/ her grade level.
3. Anxiety: the tendency to be worried, fearful, tense regarding imagined or real matters.
4. Depression: feeling sad or unhappy, and stressed.
5. Psychosomatics: the oversensitivity and complaints about insignificant physical discomfort.
6. Aggression: the verbal or physical threat towards others.
7. Conduct problems: the participation in inappropriate social behavior, violation of rules and instructions, and destruction of public property.
8. Hyperactivity: over activity, impulsivity, and acting without thinking.

Items Development

A total of 287 item pool was developed based on the dimensional classification system approach of identifying and diagnosing emotional and behavior problems of children and adolescents. The items were designed to measure the eight emotional and behavior problem domains mentioned above. In this phase many items were developed specifically to measure the same behavior problem to ensure that the item pool represents all the content of all emotional and behavior problems of children and adolescents. This will allow a team of experts with a wide range of

expertise to choice of the most appropriate items that represent the target behaviors and the outcomes of statistical analysis of empirical data.

Experts rating: The content validity of the 287 items was examined by 10 experts who hold PhDs in education. All the experts were Arabs and faculty members at the UAE University who are knowledgeable about the culture, educational system, and school setting in the UAE. The experts were provided with the objective of the study, definitions of the eight domains and the items encompassed in each domain. The experts were asked to rate whether or not each item was written in simple, clear and precise language, whether or not the item measured the target domain, and finally whether or not the item was observable in the school environment. The frequencies for the experts' responses on each item according to the three criteria mentioned were calculated. The items that were rated ambiguous or not observable in the school setting, and /or does not measure the domain intended to measure by two or more experts were eliminated. The findings showed that 6 items were ambiguous, 10 items did not measure the target domain, and 8 items did not represent observable emotions or behaviors in the school setting. The results also indicated that 80% or more of experts agreed that the rest of the items were written in simple, clear and precise language, they measured the target domain intended to measure, and they encompassed observable behaviors in the school. Finally, the experts identified 103 redundant items. Based on the experts' responses and content review of the items by the researchers, 160 items were retained and used in the next phase for further analysis.

Tryout Study

The primary objective of the tryout study was to reduce the number of items in each domain of the TEBPS to a more manageable level and explore the level of internal consistency and validity for each narrow domain.

The tryout study involved 333 children with ages ranging from 6 to 19 years old. Teachers were asked to rate the students on each of the 160 items including the 5 items representing the validity scale using a 4-point

rating scale ranging from 1= never, 2 = sometimes, 3 = often, and 4 = almost always.

The principal factor analysis (PFA) was used to reduce the number of items for each domain without the 5 items representing the validity scale. The structure validity for each domain was examined independently using PFA. Based on these analyses the total number of items were reduced from 160 items to 71 items maintaining one factor that accounted for the majority of variance for each narrow domain.

The internal consistency for the 71 items was examined by computing the Cronbach's alpha and inter-item correlation matrix for each domain. The findings revealed that the Cronbach's alpha for the 8 domains were as follows: aggression (.91), conduct (.90), hyperactivity (.87), anxiety (.88), psychosomatics (.89), depression (.86), attention (.92), and academic (.92). The findings also revealed that the average inter-item correlation for the 8 domains were as follows: aggression (.51), conduct (.47), hyperactivity (.41), anxiety (.42), psychosomatic (.46), depression (.41), attention (.52), and academic problems (.54).

Results and Discussion

Evidence of Factor Structure

Expletory factor analysis (EFA) was conducted to examine the factor structure of the EBPS. The extraction method (maximum-likelihood), eigenvalues greater than 1, and the scree test and oblique rotation (direct oblimin, delta = 0) (Costello & Osborne, 2005; Ford, MacCallum & Tait, 1986) were performed on the participants' raw scores on all 71 items of the TEBPS. Parallel analysis also was utilized to determine the number factors. The focus of the parallel analysis is on the number of components that account for more variance than the components derived from random data.

The results of the Kaiser-Meyer-Olkin measure of sampling adequacy (KMO = .98) and the determinant correlation matrix (determinant = 1.14E-021) indicated that the sample size and the correlation matrix were suitable for factor analysis (Field, 2005). The results of the EFA revealed eight eigenvalues greater than one, the scree test indicated five underlying

factors, and the results of the parallel analysis revealed five factors as shown in table 1 and figure 1. The scree test is a more accurate method than eigenvalues greater than one criterion (Russell, 2002; Costello & Osborne, 2005). However, parallel analysis is superior to the previous two methods and typically yields optimal solutions to the number of components problem (Basto & Pereira, 2012; O'Connor, 2000). Based on these results five underlying factors were selected as fixed factors to be extracted. The results of the EFA revealed that the 5 factors accounted for 55.26% of the total variance: 37.03%, 7.32, 6.07%, 2.49%, and 2.36% respectively, as shown in table 2.

Table 1

Parallel Analysis: Principal Components & Random Normal Data Generation

Root	Raw Data	Means	Percentile
1.000000	26.288011	1.443960	1.476768
2.000000	5.196745	1.411552	1.435013
3.000000	4.306491	1.386456	1.408038
4.000000	1.768842	1.365503	1.385388
5.000000	1.672084	1.346488	1.364376
6.000000	1.179231	1.329239	1.346435

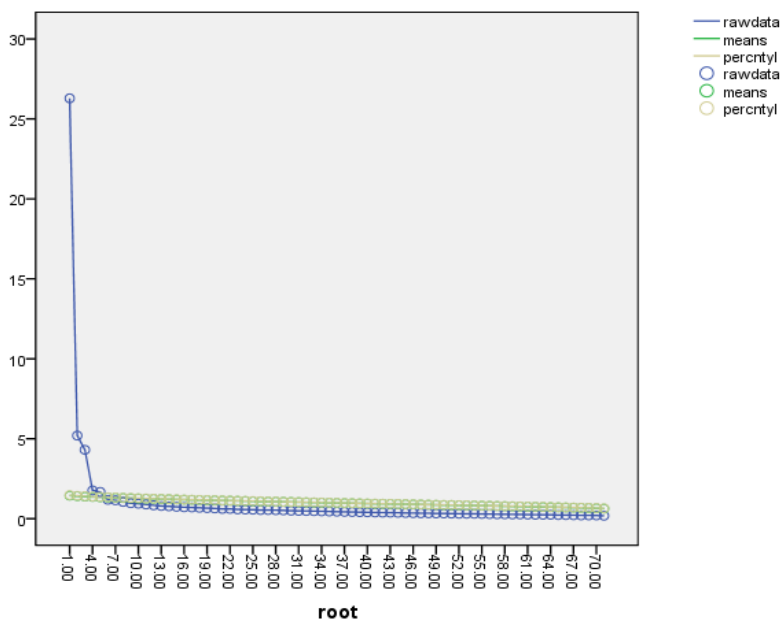


Figure 1. Sequence Plot

Table 2.
Total Variance Explained by the Factors

Factors	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	26.29	37.03	37.03	25.77	36.30	36.30	19.71
2	5.20	7.32	44.35	4.70	6.62	42.91	19.92
3	4.31	6.07	50.41	3.89	5.48	48.39	11.15
4	1.77	2.49	52.90	1.25	1.76	50.15	7.60
5	1.67	2.36	55.26	1.07	1.51	51.66	9.66

With regard to the item loadings, the items with a loading greater than .30 on a factor were considered significant and used in defining that

factor (Russell, 2002; Costello & Osborne, 2005). Any item which loaded significantly in more than one factor was assigned to the factor in which it loaded more strongly if the difference between the two loadings was greater than .10 (Guilford, 1954). However, if the difference between the two loadings was .10 or less the item was eliminated.

Table 3 shows the pattern matrix. These results indicate that 21 items were loaded significantly in factor 1. Thirteen of these items reflect aggression and eight items reflect conduct problems. The results also indicate that 19 items were loaded significantly in factor 2. Ten of these items reflect academic problems and 9 items reflect attention problems. Furthermore, the results indicate that 11 items were loaded significantly in factor 3. Eight of these items reflect psychosomatics problems, 2 items reflect depression, and 1 item reflects anxiety. The results also indicate that 5 items were loaded significantly in factor 4, and all of these items reflect hyperactivity. Also, item 61H loaded significantly in factor 1.

Finally, the results indicate that 15 items were loaded in factor 5. Nine of these items reflect anxiety and six of these items reflect depression. Thirteen of these items loaded significantly and 2 of the items loading were below .30 (28An = .28 & 6D = .23). In addition, items 44D and 47An also loaded significantly in factor 3.

The researchers reviewed the results of EFA and the content of each item. The following items: 44D 47An, 6D, 50An, 55D, and 56D were eliminated because these items loaded significantly in a factor did not reflect or loaded significantly in two factors and the difference between the two loadings was less than .10. Items 61H and 28An were retained despite their loading significantly in two factors because the content of these two items is critical for the domain intended to measure.

Based on the results of the EFA the Teacher Rating of Children Emotional Behavioral Problems Scale consists of 65 items (without the 5 items representing the validity scale). These items are distributed on 5 factors as shown in table 5.

Table 3.
Rotated Factor Pattern Coefficients Matrix

Items	Factors				
	1	2	3	4	5
40C	0.83	0.00	0.01	-0.02	-0.02
33C	0.83	-0.02	-0.05	0.03	-0.05
38Ag	0.80	-0.05	0.00	-0.06	-0.02
43Ag	0.80	0.01	-0.05	-0.03	-0.01
81C	0.79	0.04	-0.08	-0.01	-0.07
75C	0.75	0.03	-0.02	-0.04	-0.11
21C	0.75	0.05	0.16	-0.14	0.06
27Ag	0.73	-0.06	0.07	0.05	-0.01
31Ag	0.73	0.04	0.01	0.12	-0.02
4C	0.73	0.05	0.03	0.13	0.04
18Ag	0.69	0.08	0.08	0.07	0.07
11Ag	0.68	0.06	0.14	0.01	0.10
3Ag	0.60	0.07	0.16	0.16	0.04
72Ag	0.60	0.10	0.06	0.07	-0.03
52C	0.57	0.11	0.02	0.21	-0.03
54C	0.55	0.27	0.02	0.04	-0.04
76C	0.54	0.06	0.01	0.14	-0.26
77C	0.53	0.06	0.00	0.26	-0.15
19C	0.45	0.12	0.09	0.34	0.08
58C	0.42	0.09	0.01	0.38	-0.05
35C	0.41	0.27	0.21	-0.04	0.14
15AC	-0.02	0.85	0.01	-0.08	0.15
24AC	-0.04	0.81	0.02	-0.07	0.09
30AC	-0.02	0.79	-0.03	-0.04	0.08
36AC	-0.04	0.79	0.04	-0.08	-0.05
62AC	-0.07	0.79	0.03	-0.07	-0.03
49AC	0.00	0.77	-0.05	-0.01	-0.12
73AC	0.07	0.74	-0.02	0.05	-0.02

Table 3. Continued

Items	Factors				
	1	2	3	4	5
13A	0.04	0.74	0.05	0.16	0.11
45A	0.02	0.72	0.04	0.01	-0.06
41A	0.10	0.72	0.00	0.00	-0.04
7A	0.08	0.71	0.05	0.14	0.14
53AC	0.06	0.71	-0.06	0.10	-0.04
59AC	0.02	0.70	-0.04	0.07	-0.14
23A	.074	.696	.065	.081	.036
57A	-0.02	0.67	0.00	0.06	-0.13
67AC	0.00	0.67	-0.06	0.09	-0.15
66A	0.00	0.67	-0.02	-0.03	-0.23
48A	0.21	0.58	-0.02	0.11	-0.01
51A	0.21	0.56	-0.05	0.07	-0.12
46PS	-0.04	-0.02	0.68	0.03	0.05
37PS	-0.05	0.02	0.65	0.01	-0.05
26PS	0.03	-0.04	0.57	-0.06	0.01
42PS	-0.01	0.01	0.54	0.04	0.04
10PS	0.00	-0.05	0.51	0.06	0.05
17PS	-0.03	0.07	0.50	0.13	-0.14
2PS	0.14	0.24	0.50	0.00	0.09
55D	0.14	-0.07	0.46	0.04	-0.15
56D	0.10	-0.04	0.41	-0.04	-0.12
50An	-0.05	0.15	0.39	-0.10	-0.37
71PS	0.10	-0.01	0.36	-0.04	-0.05
29H	0.25	0.00	0.05	0.56	0.02
61H	0.38	0.17	-0.03	0.47	0.01
14H	0.31	0.17	0.11	0.44	0.12
8H	0.32	0.14	0.10	0.44	0.03
70H	0.14	0.12	0.07	0.37	-0.11

79An	0.18	0.18	0.03	-0.06	-0.58
78D	0.16	0.11	0.11	-0.06	-0.56
80An	0.33	0.02	0.02	0.01	-0.53
65D	0.02	0.17	0.29	-0.12	-0.45

Table 3. Continued

Items	Factors				
	1	2	3	4	5
74An	0.21	0.32	0.01	-0.16	-0.45
39An	-0.13	0.01	0.10	0.21	-0.40
63An	-0.01	0.23	0.17	0.05	-0.40
34D	0.25	0.00	0.16	0.14	-0.40
44D	-0.09	0.24	0.33	-0.11	-0.36
68An	0.15	0.18	0.25	-0.09	-0.36
47An	-0.14	0.05	0.34	0.18	-0.35
32An	0.11	-0.01	0.20	0.17	-0.33
22D	0.19	0.12	0.13	0.15	-0.32
28An	-0.12	0.07	0.11	0.28	-0.28
6D	0.07	0.14	0.19	-0.01	-0.23

Note. PS =Psychosomatic, AN = anxiety, D = depression, C= conduct, Ag =aggression, AC = Academic Problems, A = attention, H = hyperactivity

Discriminative validity

The discrimination validity of the EBPS was investigated by comparing the scores of 350 children without disabilities and the scores of 360 children with intellectual disabilities in each factor of the EBPS. One way MANOVA was performed to test for differences in the aggression and conduct problems, hyperactivity, attention and academic problems, depression and anxiety, and psychosomatics between children with intellectual and children without disabilities. The results revealed a significant main effect for the child's intellectual condition (intellectual disabilities and without disabilities), Wilks' Lambda = .82, $F = 31.04$, $df =$

(5, 704), $p < .01$. The univariate F tests showed there were significant differences between children without disabilities and children with intellectual disabilities in all domains of the TEBPS ($p < .01$). In the aggression and conduct problems $F(1, 708) = 22.78$, $p < .01$; in the hyperactivity $F(1, 706) = 40.41$, $p < .01$; in the Attention & Academic problems $F(1, 708) = 120.61$, $p < .01$; in the depression and anxiety $F(1, 708) = 8.36$, $p < .01$; and in the psychosomatic $F(1, 708) = 17.65$, $p < .01$.

Examination of the mean scores of the children without disabilities and children with intellectual disabilities in all factors of the EBPS presented in table 4 shows that children with intellectual disabilities scored significantly higher than children without disabilities in all the domains of the EBPS.

Also, t-test was used to examine the differences between children without disabilities and children with intellectual disabilities in the total score of the EBPS. The results indicate that children with intellectual disabilities ($M = 116.17$, $SD = 30.42$) scored higher than children without disabilities ($M = 97$, $SD = 31.32$), $t(708) = 8.29$, $p < .01$.

Table 4
Mean and Standard Deviation Scores on Each Domain for
Children with Intellectual Disabilities and Children without Disabilities

Domains	Groups	Mean	Std. Deviation	N
Aggression & Conduct problems	With disabilities	33.58	10.82	360
	Without disabilities	29.56	11.66	350
	Total	31.60	11.41	710
Hyperactivity	With disabilities	9.79	3.19	360
	Without disabilities	8.22	3.41	350
	Total	9.02	3.39	710
Learning problems	With disabilities	42.63	13.53	360
	Without disabilities	31.51	13.44	350
	Total	37.15	14.58	710
Depression & Anxiety	With disabilities	19.29	6.28	360
	Without disabilities	17.93	6.25	350

	Total	18.62	6.30	710
Psychosomatics	With disabilities	10.87	3.85	360
	Without disabilities	9.79	2.94	350
	Total	10.34	3.47	710

Internal consistency

The internal consistency for the 65 items was examined by computing the Cronbach's alpha and inter-item correlation matrix for each factor and total scale and presented in table 5. The findings revealed that the Cronbach's alpha for all domains and total scale were as follows: the aggression and conduct problems (.96), learning problems (.96), depression and anxiety (.88), hyperactivity (.83), psychosomatics (.79), and the total score (.97).

The findings also revealed that the mean of the inter-item correlations for all domains and total scale were as follows: the aggression and conduct problems (.57), learning problems (.58), depression and anxiety (.39), hyperactivity (.50), psychosomatics (.33), and the total score (.36). The coefficient alpha values range from .79 to .97 for EBPS, exceeding the conventional minimum of 0.7 (Nunnally and Bernstein 1994) and demonstrating high internal consistency and hence reliability of each dimension. These values, together with the strong loadings of the scale items on their corresponding factors in both EFA, support the convergent validity of the scale component dimensions.

Test-re test stability

Test-re test stability was examined by administering the EBPS to 80 students. The interval between test-retest was 14 days. Test-retest reliability coefficients for each factor and the total score were calculated and presented in table 5. The findings revealed that the Test-retest reliability coefficients for all factors and total scale were as follows: the aggression and conduct problems (.86), attention and academic problems

(.89), depression and anxiety (.77), hyperactivity (.78), psychosomatic (.77), and the total score (.89).

Test-retest reliability coefficients ranged from (.77) to (.89). These results indicate that the TEBPS has adequate levels of temporal stability. In conclusion, the final version of the EBPS includes 65 items that measure 5 factors, and 5 items represent the validity scale. The findings provide strong support that each domain and the total of the EBPS have acceptable levels of content validity, structure validity, discrimination validity, internal consistency and levels of temporal stability.

Table 5
Test-Retest Reliability Coefficients and Internal Consistency
Coefficients of the EBPS

Factors	Number of Items	Test Retest Reliability (N=80)	Cronbach's Alpha (N=1554)	Inter-item Correlations mean
Aggression & Conduct	21	.863	.964	.567
learning problems	19	.891	.963	.577
Depression & Anxiety	12	.771	.880	.391
Hyperactivity	5	.779	.834	.500
Psychosomatics	8	.772	.794	.326
validity scale	5	-	-	-
Total	70	.888	.974	.363

Implications and Limitations

The UAE has been in the process of reforming its educational system and significant efforts have been made toward achieving this goal. Assessment is critical in ensuring the success of this reform. Assessment provides educators, parents, and students with information to make informed decisions. Social, psychological, and educational decisions

based on reliable and valid data is the best approach to meet the students' needs.

The EBPS provides educators and practitioners in the UAE with a reliable and valid instrument which may be used to achieve the following: a) identifying students with emotional and behavior problems, b) determining eligibility for special education in the area of emotional disturbance, c) determining the appropriate educational placement, d) developing intervention plans, e) monitoring students' progress, and f) evaluating the effectiveness of the intervention plans. It also provides researchers with an instrument to use in studying emotional and behavior problems and relevant variables that impact students' functioning in the UAE.

Limitations

The sample did not include children with various types of disabilities or psychiatric disorders due to the lack of participants who were diagnosed with objective criteria that met the definitions of these conditions. Therefore, the investigation of the effectiveness of the TEBPS in discriminating between various types of disabilities or psychiatric disorders is highly recommended.

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تطوير مقياس للمشكلات السلوكية و الانفعالية لدولة الإمارات العربية المتحدة

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الخلاصة: استهدفت الدراسة الحالية تطوير مقياس للمشكلات السلوكية والانفعالية للأطفال و المراهقين في دولة الامارات العربية المتحدة يتمتع بدرجة مقبولة من الصدق و الثبات . تكونت عينة الدراسة من (1560) طالباً و طالبة تتراوح أعمارهم ما بين 4-19 عاماً (761 من الذكور و 799 من الإناث) و كذلك اشتملت عينة الدراسة (360) طفلاً ممن يعانون من إعاقة ذكائية . وتضمنت عملية تطوير المقاييس : تعريف أبعاد المقاييس ، تطوير عينة الفقرات ، التحقق من صدق محتوى الفقرات ، صدق البناء ، الاتساق الداخلي ، و التحقق من مدى استقرار درجات المقياس . اشارت نتائج تحليل البيانات إلى تمتع جميع أبعاد المقاييس بدرجة مقبولة من صدق المحتوى ، البناء، والصدق التمييزي ، و أشارت النتائج أيضاً إلى ان المقاييس تتمتع بدرجة عالية من الاتساق الداخلي و استقرار الدرجات .

الكلمات المفتاحية : المشكلات السلوكية و الانفعالية مقياس ، الثبات ، الصدق .