

Behavioral and Emotional Problems Among Adolescents of Jamaica and the United States: Parent, Teacher, and Self-Reports for Ages 12 to 18

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UNDERSTANDING ADOLESCENT psychopathology involves observations across environmental contexts and societal settings. Environmental milieu, including home and school, the standards set by adults interacting with adolescents in these contexts, and variations in their perspectives, may contribute to differences between sources of information about behavior (Achenbach, 1991a). Within a given society, comprehensive assessment of adolescents therefore warrants multiple sources of data, as each source contributes a different perspective on functioning (Achenbach, Bird, et al., 1990).

Rigorous cross-national comparisons of behavioral and emotional problems require procedures that can be calibrated for comparisons across different nationalities. The present study was designed to compare the prevalence of problems assessed by a standardized procedure in general population samples of adolescents ages 12 to 18 residing in Jamaica and the United States. It builds on three recent studies done in Jamaica and the United States. The first study surveyed child and adolescent problems that Jamaican and U.S. parents reported to clinicians during intake interviews (Lambert, Weisz, & Knight, 1989). It revealed no differences in the total number of

Nonreferred adolescent samples for ages 12 to 18 from Jamaica and the United States were compared via syndromes, syndrome groupings, and total problem scores on the Child Behavior Checklist (CBCL), Teacher's Report Form, and Youth Self-Report. No significant total problem score differences were found between Jamaican and U.S. adolescents in reports by any informants. However, adolescents in both societies reported significantly more problems than their parents or teachers. Jamaican adolescents received and endorsed higher problem ratings for the Withdrawn and Somatic Complaints syndromes and on internalizing scores. These findings suggest that by virtue of the time spent in their society, Jamaican adolescents may develop problems their country facilitates. The results further indicate the need to test whether similar CBCL-based syndromes and syndrome groupings are evident in the Jamaican youth population. If such groupings are identified for Jamaican adolescents, different clinical cutpoints on some scores may be needed for Jamaican than for U.S. adolescents.

problems for Jamaican versus U.S. youngsters, but Jamaican parents reported more internalizing (e.g., depression, anxiety) and less externalizing (e.g., fighting, stealing) problems than U.S. parents did. The authors inferred that the findings emerged because of the African-British ethos of respect for authority in Jamaica and its focus on suppressing externalizing and encouraging internalizing behavior. These Jamaican customs, they noted, contrast with those within the United States, which admire youth and expect a certain amount of brashness from its citizens, especially adolescents.

The other two studies focused on general population samples of children ages 6 to 11 in Jamaican and U.S. societies (Lambert, Knight, Taylor, &

Achenbach, 1994, 1996). These studies used the same standardized methodology as the present study to obtain parent reports and teacher reports on randomly selected children who were not recipients of mental health services in the year preceding the study. Cross-national findings for parent reports on problems that 6 to 11-year-old Jamaican and U.S. children presented revealed that children in each nation had types of problems that were scored higher than those of the children in the other nation; however, the number of occurrences was virtually the same. Like the clinic study, parents in one nation did not rate children significantly higher on total problem scores than parents in the other. However, unlike the clinic study, no significant problem type differences (i.e.,

internalizing vs. externalizing) emerged across both nations.

Jamaican teachers rated their pupils significantly higher than did their U.S. counterparts on most individual problems for which significant nationality differences emerged. The same trend was evident for internalizing, externalizing, and total problem scores. Therefore, irrespective of problem type, Jamaican teachers scored their pupils consistently higher than did their U.S. counterparts. Considered together, neither of the general population studies revealed the Nationality \times Problem Type differences observed in the clinic study. The differences across the studies may have emerged for three reasons:

1. The absence of adolescents in the general population studies may have led to age biases, as adolescents experience lengthier exposure to their respective societies than children. Thus, the younger children on which the previous studies focused would not have experienced the lengthy societal effects that may lead to the nationality differences observed in the clinic study.
2. Biases emerging from the use of unstandardized parent reports in the clinic study, like the questions clinicians asked and parents' response to them, could also contribute to differences across studies.
3. The reliance on one set of informants in each study may have revealed informant biases regarding youngsters' functioning.

The differences in findings for teacher reports versus parent reports on general child populations across Jamaica and the United States underscore the need for obtaining information from multiple informants in cross-national comparisons. Modest correlations have been reported between parent, teacher, and self-report ratings of adolescent behavioral and emotional problems, probably reflecting differences in informants' perceptions of adolescents' behavior and the variations in this behavior across context (e.g., home vs. school; see Achen-

bach, McConaughy, & Howell, 1987). Thus, lacking any gold standard based on information from any one type of informant, we chose to obtain information from parents, teachers, and the adolescents themselves. We included adolescents' self-reports because we believe they can provide information on variables such as emotional states that other raters cannot.

One goal of the present study was to learn whether findings that emerged from the clinic study would emerge in the general population sample of Jamaican versus U.S. adolescents. A second goal was to learn whether the findings would reflect those that emerged for parent versus teacher ratings of Jamaican and U.S. children. Therefore, like the previous parent and teacher child studies, the present adolescent study focused on total problem score, eight empirically derived syndromes, and internalizing versus externalizing groupings of syndromes. Another goal was to compare findings from the present study with those obtained in other cross-national comparisons (see Verhulst & Achenbach, 1995, for a review). Most of the earlier studies focused on parent or teacher reports considered separately. In their comparisons of teacher reports from six different societies (i.e., Jamaica, China, Thailand, Holland, Puerto Rico, and the United States) Lambert et al. (1996) found considerable similarity in problems perceived by teachers across cultures that differ on numerous dimensions. Similar findings emerged for studies involving parents' reports in comparisons involving U.S. children with children from Holland (Achenbach, Verhulst, Baron, & Akkerhuis, 1987) and Thailand (Weisz et al., 1987). However, significantly higher parent report scores were found in Puerto Rican, Australian, and French samples than demographically matched U.S. samples (Achenbach, Bird, et al., 1990; Achenbach, Hensley, Phares, & Grayson, 1990; Stranger, Fombonne, & Achenbach, 1994).

As in the earlier cross-national studies, assessment instruments for the present study included the Child Behavior Checklist (CBCL; Achenbach, 1991b),

which is designed to obtain standardized parent reports on problems and competencies, the closely related Teacher's Report Form (TRF; Achenbach, 1991c), and the Youth Self-Report (YSR; Achenbach, 1991d). Also included were parent, teacher, and self-report Jamaican instruments. The three Jamaican instruments are analogous to the U.S. instruments. However, some items were modified to reflect idiomatic expressions in Jamaica. Problem items deemed clinically relevant for Jamaican children were also added to the Jamaican instruments. To facilitate comparisons across the two nations, the present study focused only on the items common to the following pairs of instruments: Jamaican Youth Checklist (JYC, i.e., parent form) and the CBCL; the Jamaican Teacher's Report Form (JTRF) and the TRF; and the Jamaican Youth Self-Report (JYSR) form and the YSR.

The psychometric properties of the CBCL, TRF, and YSR have been well documented (Achenbach, 1991a, 1991b, 1991c, 1991d). Principal component analyses of the three instruments have yielded eight cross-informant syndrome scales for both genders and different age groups. The syndromes are designated as Withdrawn, Somatic Complaints, Anxious/Depressed, Social Problems, Thought Problems, Attention Problems, Delinquent Behavior, and Aggressive Behavior. Second-order principal factor analyses of these syndrome scales have yielded broadband internalizing and externalizing groupings of the syndromes. Although the Jamaican instruments are not fully standardized on the Jamaican population, analyses of the reliability of the JYC and JTRF and criterion-related validity of the JYC revealed similar psychometric properties to those documented for their matching CBCL and TRF counterparts (see Lambert et al., 1994, 1996). Test-retest reliability of the JYSR total problem scores for 20 Jamaican adolescents over 1- to 2-week intervals (mean number of days = 9), yielded a Pearson r of .91, $p < .01$.

The overarching goal of the present study was to use multi-informant data sources to address two specific questions:

1. Will Jamaican and U.S. adolescents receive similar ratings on parent and teacher reports in the general population and from parent reports on child and adolescent clinic samples from both nations?
2. Will the findings differ from parent, teacher, and self-reports on general population samples involving the United States and other nations?

Also, few studies have examined cross-informant syndromes in adolescents across different societies. Therefore, a secondary goal was to test whether ratings on the cross-informant syndromes differed across Jamaican and U.S. societies.

METHOD

Sample Descriptions

The *U.S. sample* was collected in 1989 and consisted of subjects in a 3-year follow-up assessment. The completion rate of the initial survey was 92.1%, and the completion rate of the follow up was 90.7%. The sample was selected to represent the U.S. population with respect to ethnicity, socioeconomic status (SES), geographic region (northeast, north central, south, western), and area of residence (urban, suburban, rural). Adolescents were excluded from the study if they were mentally retarded or physically disabled, or if no English-speaking parent or parent surrogate was available for the interview (see Achenbach, 1991b; McConaughy, Stanger, & Achenbach, 1992). The sample included three types of respondents: the adolescent, the adolescent's parent or parent surrogate, and the adolescent's teacher. U.S. adolescents ages 12 to 18 with completed parent, teacher, and self-reports, were matched with the Jamaican adolescent sample according to age and gender.

To obtain the *Jamaican sample*, we employed procedures used by Weisz et al. (1989). A sample of adolescents from 16 schools in urban and suburban environments in Kingston and Montego Bay and in rural areas throughout Jamaica was obtained in 1994. From each

school, classes from each grade level were randomly selected. A maximum of one adolescent was randomly selected from each class (e.g., "the ninth adolescent on the alphabetical list"). The selected adolescents, their parents (or guardians), and their teachers were asked to participate; of those contacted, 90%, 76%, and 85%, respectively, took part.

Instruments

CBCL and JYC. The CBCL includes 20 competence items and 118 behavior/problem items described elsewhere (Achenbach, 1991b). Beside the 118 items that refer to specific problems, an open-ended item requests that parents describe any other physical problems without known medical cause, and another item asks parents to describe any other problems. The parent scores each problem item by circling a 0 if the item is *not true* of the child, 1 if it is *somewhat or sometimes true*, and 2 if it is *very true or often true*. The JYC includes the same competence items as the CBCL except that the question of whether the child is in a special class was omitted because Jamaican schools do not have special classes. Beside the CBCL problem items, 35 items deemed clinically relevant for Jamaican children were added to the JYC (Lambert et al., 1994). The JYC, CBCL, JYSR, and YSR were designed to be self-administered by parents and adolescents who have at least fifth-grade reading skills, but they can also be administered orally by an interviewer.

TRF and JTRF. The TRF includes items for rating academic performance, 4 adaptive characteristics, 118 specific behavioral and emotional problems, and 2 open-ended items like those on the CBCL for additional problems. Problem items are scored like those on the CBCL. Ninety-three TRF items have counterparts on the CBCL, although the wording differs slightly (e.g., referring to "pupils" instead of "children"). Twenty-five CBCL items were replaced on the TRF with items that are more appropriate for teachers, as detailed by Achenbach (1991c). The JTRF paral-

lels the TRF, with modifications of some items to match idiomatic expressions in Jamaica and the addition of 32 items clinically relevant for Jamaican pupils.

YSR and JYSR. The YSR includes 17 of the same competence items and 102 of the same problem items as the CBCL, 89 of the same problem items as the TRF, and an open-ended item for adding other physical problems without known medical cause. The YSR items are worded in the first person and differ in minor ways from those of the CBCL and TRF, as detailed by Achenbach (1991d). Sixteen of the CBCL problem items judged to be inappropriate for adolescents were replaced on the YSR with socially desirable items endorsed by most adolescents. Like the U.S. and Jamaican parent and teacher instruments, the JYSR parallels the YSR except for minor modifications of wording and the addition of 29 items that were clinically relevant for Jamaican adolescents.

Data Collection Procedures

U.S. parent data were collected via interviews conducted in the subjects' homes; Jamaican interviews were conducted at each adolescent's home or school (depending on parent preference) by a trained Jamaican interviewer. The interviewer determined whether the adolescent had been referred for any mental health-related services during the previous year. Jamaican and U.S. adolescents for whom the answer was yes were excluded from the sample. Parents who agreed to participate were given a copy of the parent report instrument. The interviewers read aloud each item on the instrument. As the parent answered each question, the interviewer recorded the answers.

In both countries, parents were asked permission for their adolescent and their adolescent's teacher to complete the teacher and self-report forms, respectively. If the parent granted permission, a teacher form and a cover letter offering \$10 were mailed to U.S. teachers who knew the adolescent best. In Jamaica, the teacher forms were delivered and retrieved by research assistants.

If reading ability permitted, adolescents in both countries completed the self-report forms. Adolescents who had reading difficulties completed the instrument via oral administration.

Participants and Research Design. The total sample included 365 Jamaican and 365 U.S. adolescents who were matched according to age and gender, and their parents and teachers. This formed a 2 (Nationality) \times 2 (Gender) \times 4 (Age Groups: 12–13, 14–15, 16–17, and 18) factorial design for analyses involving parent, teacher, and self-reports.

Respondent Characteristics. For the parent reports, 65% of the Jamaican respondents were mothers, 13% were fathers, and 22% were others, such as grandparents and guardians. In the U.S. sample, the corresponding figures were 83%, 15%, and 2%. Eight-five percent of the Jamaican sample was of African descent. One percent did not provide information on their racial backgrounds. Other groups, such as Chinese and East Indians, made up the remaining 14%. The U.S. sample was 78% Caucasian, 12% of African descent, and 10% other.

For U.S. adolescents, SES was scored according to Hollingshead's (1975) 9-step scale of occupation that yielded a mean score of 5.8, $SD = 2.2$, where 9 = highest SES. For Jamaican adolescents, SES groupings were derived from a 5-step Jamaican scale (Smith, 1984) that yielded a mean of 2.9, $SD = .9$, where 5 = highest SES, 1 = lowest SES. The 5-step Jamaican SES scale was divided into the following three categories: lower SES = 1 to 2.0, middle SES = 2.5 to 3.5, and upper SES = 4 to 6. To facilitate our calibration of the U.S. SES scale with the Jamaican SES scale, the 9-step U.S. scale was divided into the following three categories: lower SES = 1 to 4.0, middle SES = 4.5 to 6.5, and upper SES = 7 to 9. Half steps, such as 4.5, reflect the fact that the occupations that were not clearly scorable were given the mean of the scores that seemed most appropriate.

To compare the U.S. and Jamaican SES scales, we scored 61 randomly se-

lected Jamaican adolescents from our sample on the 3-step versions of both scales. The two scales correlated significantly ($r = .73, p < .001$), but also showed a significant difference of .44 in mean scores ($p < .0001$). Our analyses took account of SES by covarying the respective SES 3-step scales. Therefore, we compared the regression slopes for the SES covariates in the Jamaican and U.S. samples. We computed a repeated-measures ANCOVA with informant as the repeated-measures factor, SES as the covariate, and nationality as the independent variable on total problem score (i.e., on items common to all checklists). Our analysis revealed a Nationality \times SES Between-Subjects interaction. Because this finding showed differences between the regression of Jamaican and U.S. problem scores on SES, we report results from ANCOVAs that used different regression slopes for each nationality.

RESULTS

By using repeated-measures ANCOVAs with informant as the repeated factor, we compared scores on total problems, eight cross-informant syndromes and internalizing and externalizing grouping of syndromes. The sample was divided according to the following three independent variables: Jamaica versus United States; boys versus girls; and four age levels: 12 to 13, 14 to 15, 16 to 17, and 18. Because the large sample sizes provided high statistical power, only those effects that were $p \leq .01$ were accepted as significant. Also, Cohen's (1988) criteria were used in judging effect sizes (ESs) of ANCOVA results as small, medium, or large if they accounted for 1.0% to 5.9%, 5.9% to 13.8%, and $> 13.8\%$ of the variance, respectively. The chance of type I error was reduced by identifying the 2 smallest significant effects, where 2 is the number expected by chance in a set of 11 similar analyses using a $p < .01$ protection level (Feild & Armenakis, 1974). The analyses focused on the eight cross-informant syndromes, internalizing and externalizing problems, and total problem score. The means and standard de-

viations for total problem, internalizing, externalizing, and each syndrome scores for each informant in Jamaica and the United States are listed in Table 1.

Nationality Differences

Total Problem Scores. The repeated-measures ANCOVA revealed no significant Between-Subjects main effects for nationality. However, a significant Within-Subject \times Nationality interaction occurred, $F(2, 1368), p < .0003$. With the alpha set at .01, a Tukey's HSD statistic was used to test the components of Within-Subjects interactions. Analyses of the Reporter \times Total Problem Score interaction revealed no differences between total problem scores obtained from parents and teachers in either the Jamaican or U.S. samples. However, as Table 1 shows, adolescents in both countries reported more problems than either their parents or teachers ($ps < .01$).

Syndrome Scores. Between-Subjects effects reflecting significantly higher scores for Jamaican adolescents occurred on the Withdrawn and Somatic Complaints cross-informant syndromes, $F_s > 25, ps < .0001$ (ES = 4% and 5%, respectively) for the two scales. These two cross-informant syndromes are included in the internalizing grouping (Achenbach, 1991d). U.S. adolescents obtained significantly higher scores on the cross-informant Attention Problems $F(1, 683) = 8.95, p = .003$, (ES = 1%). The Somatic Complaints and Attention Problems effects were moderated by Within-Subjects effects reflecting significantly higher self-ratings than parent and teacher ratings within each country ($ps < .01$). The Within-Subjects effects reflected the cross-informant differences ratings documented by Achenbach (1991a). For example, in each country adolescents self-reported significantly more Somatic Complaints than their parents, who in turn rated them significantly higher than their teachers.

From the other direction, significant Nationality effects reflected higher parent ($F = 28.0, p < .0001$), teacher ($F = 17.01, p < .0001$), and self ($F = 37.61,$

$p < .0001$) ratings on Somatic Complaints for Jamaican than U.S. adolescents. U.S. adolescent self-ratings were significantly higher than those of their Jamaican counterparts on Attention Problems ($F = 28.01, p < .0001$). No significant cross-national effects emerged for parent or teacher reports on this variable.

Internalizing and Externalizing Problem Scores. Separate repeated-measures ANCOVAs were computed on cross-informant total internalizing and total externalizing scores with nationality, gender, and age as independent variables, and informant as a Repeated-Measures factor. SES was partialled out

as a covariate. No Between-Subjects Nationality effects emerged for externalizing scores. However, Jamaican adolescents obtained higher internalizing scores, $F(1, 684) = 27.84, p < .0001$ ($ES = 5\%$). This effect was moderated by Nationality \times Informant Within-Subject effects. Analysis of the components of this interaction revealed higher self-reported internalizing problems than parent- or teacher-reported problems within each country ($p < .05$). No significant difference between parent and teacher reports emerged in separate analyses of the Jamaican sample. However, U.S. parents rated their adolescents significantly higher on internalizing than did teachers. Jamaican

internalizing scores were significantly higher than U.S. scores for parent, teacher, and self-reports, $F_s = 10.4, 29.6,$ and $33.8,$ respectively; $ps < .002,$ ($ES_s = 1\%, 4\%,$ and $4\%,$ respectively.)

Gender Differences

Differences between boys and girls in parent and teacher reports across several nations have been reported (Lambert et al., 1994, 1996; Verhulst & Achenbach, 1995). However, data from three different informants in Jamaican and U.S. samples provided a test of the consistency of gender differences across the two societies.

Syndrome Scores. Boys obtained significantly higher scores than girls on the Attention Problems and Delinquent Behavior syndromes and on externalizing problems across all informants. Conversely, girls scored higher than boys on the Somatic Complaints and Anxious Depressed syndromes, and internalizing problems, $F_s > 10.8, ps < .001$ ($ES_s = 3\%, 4\%,$ and $3\%,$ respectively) across the three informants. A Within-Subjects Gender \times Informant interaction emerged for the Anxious Depressed syndrome only, reflecting the fact that self-ratings were the highest, parent ratings intermediate, and teacher ratings the lowest for boys ($ps < .01$). For girls, self-ratings were higher than parent and teacher ratings, but parent and teacher ratings did not differ from one another.

Total Problem, Internalizing, and Externalizing Scores. No significant cross-informant gender differences emerged for total problem score. Boys obtained significantly higher cross-informant externalizing scores, $F(1, 684) = 10.8, p < .0011$ ($ES = 2$), and girls obtained significantly higher internalizing scores across the three informants, $F(1, 684) = 22.36, p < .0001$ ($ES = 3$) with no Within-Subjects interactions.

SES Effects

By using SES as a covariate in our repeated-measures ANCOVAs, we

TABLE I
Comparison of Total Problem and Scale Scores on the CBCL, TRF, and YSR for Jamaican and U.S. Adolescents

Syndrome	Parent report (CBCL)		Teacher report (TRF)		Self-report (YSR)	
	\bar{X}	SD	\bar{X}	SD	\bar{X}	SD
Jamaican adolescents						
Total Problems	15.81	9.45	14.79	11.72	35.09	14.4
Internalizing	6.81	4.29	6.31	5.09	12.52	6.04
Externalizing	5.12	4.19	6.66	7.06	8.00	5.13
Withdrawn	2.36	1.69	2.06	2.04	3.86	1.68
Somatic Complaints	1.64	1.66	.58	1.14	3.13	2.34
Anxious/Depressed	2.54	2.11	2.20	2.29	5.75	3.21
Social Problems	1.24	1.27	1.18	1.47	2.51	1.75
Thought Problems	.13	.38	.34	.69	1.62	1.61
Attention Problems	2.16	1.94	2.70	2.34	3.68	2.27
Delinquent Behaviors	.98	1.28	1.40	1.69	2.36	1.86
Aggressive Behavior	4.12	3.28	3.55	4.09	5.67	3.67
U.S. adolescents						
Total Problems	17.21	11.48	11.1	11.82	34.15	13.9
Internalizing	6.16	4.79	4.56	5.23	9.87	6.00
Externalizing	6.20	4.75	4.60	6.48	9.53	4.97
Withdrawn	1.91	1.59	1.50	1.96	3.16	1.77
Somatic Complaints	1.17	1.50	.38	.94	2.18	2.07
Anxious/Depressed	3.04	2.74	1.87	2.55	4.72	3.47
Social Problems	1.47	1.58	1.04	1.57	2.13	1.72
Thought Problems	.35	.59	.24	.59	1.45	1.38
Attention Problems	2.52	2.21	2.40	2.54	4.43	2.50
Delinquent Behaviors	1.18	1.42	.93	1.49	2.71	1.97
Aggressive Behavior	5.03	3.79	2.45	3.78	7.04	3.79

Note. $N = 365$ for each nationality. The results are based on the 89 cross-informant items. Means have been adjusted for SES by ANCOVA. CBCL = Child Behavior Checklist (Achenbach, 1991a, b); TRF = Teacher's Report Form (Achenbach, 1991c); YSR = Youth Self-Report (Achenbach, 1991d).

partialled SES effects out of the other effects. However, lower SES children obtained higher scores on internalizing and externalizing scores and all syndromes. The attention problems and externalizing scores were moderated by SES \times Informant interactions, indicating that lower SES adolescents scored themselves higher than their teachers and parents scored them. However, teachers rated lower SES adolescents significantly higher than did parents ($ps < .01$).

Cross-Informant Correlations

Cross-informant agreement between informants in the United States and Jamaica was tested on total problem score. Table 2 shows that in the Jamaican and U.S. samples, parent reports correlated higher with self-reports than with teacher reports, and teacher reports correlated higher with parent reports than with self-reports (all $ps < .01$ by Fisher's Z test). There were no significant nationality differences between the cross-informant correlations ($p > .01$).

DISCUSSION

Our cross-national comparisons revealed no significant nationality differences for parent, teacher, and self-reports on total problem scores for adolescents surveyed in Jamaica versus the United States. Total problem scores for Jamaican adolescents are thus similar to those obtained in the United States across all three informants. These findings are similar to those obtained in comparisons of parent reports for clinic-referred Jamaican versus U.S. youth ages 6 to 17. They also matched the findings of nonclinic parent reports for U.S. versus Jamaican children ages 6 to 11 (Lambert et al., 1994) and U.S. versus Dutch (Achenbach, Verhulst, et al., 1987), and Thai children (Weisz et al., 1987). The self-report scores are also similar to those found in comparisons of U.S. adolescents with adolescents in Germany and Puerto Rico (see Achenbach, Bird, et al., 1990). As in our study, adolescents across these societies reported significantly higher total problem scores

TABLE 2
Cross-Informant Correlations for Different Nationalities

Sample	Parent \times Teacher	Parent \times Self	Teacher \times Self
Jamaican adolescents	.22	.23	.03
U.S. adolescents	.30	.35	.13

than their parents. Differences in societal customs and ethnicities across these societies make the broad similarities intriguing. They may reflect the existence of common processes that influence behavior problems and informant ratings across these different societies. However, Verhulst, Achenbach, Ferdinand, and Kasius (1993) found much lower YSR scores for Dutch adolescents.

Although the cross-national similarities are salient, certain cross-national differences are also noteworthy. Like our earlier studies of clinical samples ages 6 to 17 and nonclinical samples ages 6 to 11 (Lambert et al., 1989, 1994), Jamaican adolescents in the current study received higher scores on the Withdrawn and Somatic Complaints syndromes and internalizing scores than U.S. adolescents. The higher scores suggest that adolescents' long-term exposure to the customs and socializing effects of their respective societies may foster differential development of internalizing problems in Jamaican versus U.S. adolescents. Specifically, it underscores that the Jamaican custom of facilitating internalizing problems in youth is particularly evident in Jamaican adolescents. This inference does not explain the lack of difference in externalizing scores between nonreferred Jamaican and U.S. adolescents and children (Lambert et al., 1994) and the significantly higher externalizing scores for U.S. children and adolescents in our earlier clinic study (Lambert et al., 1989). However, these studies suggest that, irrespective of age, Jamaican children and adolescents who exhibit severe enough problems to warrant referral for mental health services are more likely to express these as internalizing problems. Longitudinal studies that follow children from early childhood through late adolescence in both

societies can further clarify this issue. These studies can track the problems children and adolescents exhibit at various points in their lives and suggest steps that might ameliorate these problems.

The cross-national problem differences observed for some constructs (e.g., Withdrawn) may reflect cross-national base rate differences. Therefore, the findings may indicate the need to establish different clinical cutpoints for Jamaican versus U.S. adolescents. However, the inconsistencies across the different studies on Jamaican youth referenced here may reflect methodological differences (e.g., clinical interviews versus standard instruments) across studies. They may also indicate a broader problem regarding our lack of knowledge about the CBCL-based constructs for the Jamaican youth population. That is, we have no information on the existence of the CBCL syndromes in Jamaica. Moreover, if the syndromes exist, we do not know whether their format is identical to those observed in the United States. Further studies on large Jamaican clinical samples are needed. From these studies one can test whether the CBCL syndromes are replicated in Jamaica.

Focusing on gender effects, our present findings of higher internalizing scores for girls and higher externalizing for boys match previous findings for Thai, Jamaican, and U.S. referred and nonreferred children (Lambert et al., 1989, 1994; Weisz et al., 1987). They also suggest that common processes may generate gender differences in child and adolescent problems across different societies.

The high ratio of boys to girls in Jamaican and U.S. clinic populations should be considered in interpreting the differences in scores (see Lambert

et al., 1989). Adults such as parents and teachers are often the gatekeepers who determine whether children are referred for mental health services. The present findings indicate that nonreferred girls report levels of subjective emotional distress and behavior problems at the same rate as boys. However, Jamaican girls are half as likely as boys to be referred for psychological intervention. The disruptive nature of Attention Problems and Delinquent Behavior syndromes on which boys score higher versus the Withdrawn and Somatic Complaints syndromes on which girls score higher, may lead to higher clinic referral rates for boys than girls. This inference may be buttressed or refuted by methodology developed by Weisz and Weiss (1991). To assess referral bias, their methodology uses a referability index that can compare U.S. and Jamaican clinic-referral rates of boys versus girls according to problem type (e.g., internalizing vs. externalizing) and prevalence rates in general populations of both nations.

To summarize, the lack of significant nationality and gender differences in total problem scores obtained from parent, teacher, and self-ratings of Jamaican and U.S. adolescents indicates important similarities between the two nations. Nevertheless, ratings from most and sometimes all informants showed higher Withdrawn, Somatic Complaints, and internalizing scores for Jamaican than U.S. adolescents. In contrast to their younger counterparts, Jamaican nonreferred adolescents experience lengthier exposure to the mores of their society. That is, by virtue of their sensitivity toward externalizing behavior, Jamaican adults may suppress this type of problem throughout their offsprings' childhood and adolescent years (Lambert et al., 1989). Adolescents may therefore assimilate more of their society's customs than younger children. Unlike their younger counterparts, these adolescents are more inclined to exhibit behavior problems (i.e., internalizing) that their society facilitates (Lambert et al., 1989, 1992).

Our earlier findings for clinical samples suggested that despite age, children and adolescents who exhibit behavioral

and emotional problems that are severe enough to warrant clinical attention may exhibit these problems according to behavior types encouraged or tolerated by adults in their respective societies. Fully understanding these phenomena requires longitudinal studies that track large groups of children across Jamaican and U.S. societies. Longitudinal studies of Jamaican and U.S. children can determine the types of problems these children and adolescents exhibit as they develop. They can also detect how long their behavior problem rates remain similar and at what age nationality differences emerge. The findings also suggest that clinical cutpoints on some CBCL, TRF, and YSR problem scales might be similar for Jamaican and U.S. adolescents. However, they underscore the need to test whether CBCL-based syndromes are replicated for Jamaican adolescents.

About the Authors

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Authors' Notes

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