

Over- and Undercontrolled Referral Problems Among Children and Adolescents From Thailand and the United States: The *Wat* and *Wai* of Cultural Differences

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To understand children's psychological problems and corresponding clinic referral patterns, we need to consider the impact of culture. Culturally mediated values and socialization practices may suppress development of some problems and foster others. Consider Thailand, a Buddhist nation, in which children's aggression and other undercontrolled behaviors are disapproved and discouraged, whereas their inhibition and other overcontrolled behaviors may often be condoned or even encouraged. We compared Thailand to the United States, where undercontrolled behavior among children seems more likely to be condoned. We recorded the behavior problems reported by parents in both countries ($N = 760$) when they referred their child or adolescent for clinic treatment. Overcontrolled problems (e. g., somaticizing, fearfulness, nervous movements, worrying) were reported much more often for Thai than for U.S. youngsters; undercontrolled problems (e. g., disobedience, fighting, lying, arguing) were reported much more often for U.S. youth than for Thais. Overcontrolled problems were noted especially often among Thai adolescents, the group most exposed to traditional Buddhist teaching and most encouraged to inhibit outward expression of feelings. The findings suggest that culture, developmental level, and their interplay may be linked to substantial differences in the problems for which youngsters are referred for treatment.

For years, researchers have known that culture can influence psychopathology and disturbed behavior, but most relevant research has been focused on adults (see Al-Issa, 1982; Draguns, 1982; Marsella, 1979). This is surprising because for most people the impact of culture is almost certain to be felt before the adult years. Culturally mediated values and expectations and the concomitant behavior of parents and other adults toward children and adolescents may well influence the types of behavior problems these youngsters show when they are distressed. Those same values and expectations may also color the attitudes and behavior of adults in response to various child problems when they do occur. To study these possibilities, one must meet two challenges, detailed here.

The first challenge is to identify dimensions or patterns of

children's problem behavior that are both clinically significant and relatively prevalent across cultures. Most specific problems (e. g., social isolation, cruelty to animals) or even specific diagnostic categories (e. g., gender identity disorder) would pose a problem of low base rates. By contrast, there are two empirically derived broad-band behavior problem dimensions or *syndromes* that appear to be both high in base rate (because they encompass a number of specific problems) and relatively robust across cultures: overcontrolled problems (e. g., fearfulness, sleep problems, somaticizing) and undercontrolled problems (e. g., disobedience, fighting, arguing).

These syndromes may be strong candidates for cross-cultural study. The two have emerged in more than a dozen independent factor analytic studies of children's behavior problems (see Achenbach & Edelbrock, 1978) and in research with not only Americans (e. g., Achenbach, 1978; Achenbach & Edelbrock, 1979) but also British (e. g., Collins, Maxwell, & Cameron, 1962), Sicilians (Peterson, 1965), Japanese (Hayashi, Toyama, & Quay, 1976), and Greeks, Finns, and Iranians (Quay & Parakeopoulos, 1972). The over- and undercontrolled syndromes thus appear to have considerable generality and to offer a useful focus for cross-cultural research.

The second challenge is to identify cultures that differ in ways that are relevant to the behavior problem patterns of interest. With respect to the over- and undercontrolled patterns, a particularly intriguing contrast is offered by the cultures of the United States and Thailand. Thai culture is unusually homogeneous in a number of ways that set it apart from U.S. culture. Some 800

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years as an independent, uncolonized nation have left Thai traditions relatively unsullied by outside influence, compared with such Asian nations as Japan and South Korea. Approximately 95% of the population subscribe to Thai Buddhism, a variant of the Theravada school, and their temples or *wats* dot the landscape. In this Buddhist tradition and in Thai society generally, prohibitions against aggressive, cruel, or other undercontrolled behaviors are quite strong, relative to U.S. traditions. As one observer put it:

Peacefulness and nonaggression are perhaps most frequently named by Thai as the most important of all personal values. . . . Most statements of praise or admiration for a person will include references to his peacefulness. Most statements of condemnation include comments on his belligerence and aggressiveness. . . . Buddhist monks, as paragons of peace and quietude, are the cultural ideal. (Moore, 1974, p. 182)

This cultural ideal is reflected in child rearing and socialization practices. Thai parents and other adults are very intolerant of aggressive, abusive, disrespectful, or other kinds of undercontrolled behavior in children (Gardiner & Suttipan, 1977; Moore, 1974; Suvannathat, 1979). Instead, children are taught a blend of peacefulness, politeness, and deference. This blend is symbolized by the *wai*—the deep, deferential bow, with palms joined in a prayerful position—which dominates Thai social exchange. A Thai ideal, stressed from early childhood on, is *krengchai*, an attitude of modesty and deference that aims to avoid disturbing others (National Identity Board, 1984; Phillips, 1965; Suvannathat, 1979).

If Thai culture discourages undercontrolled behavior in children, Thai youngsters who experience distress may conceivably be likely, by default, to develop problems within the overcontrolled syndrome. Moreover, a number of overcontrolled behaviors (e. g., dependency, inhibition, and anxiety) may be directly fostered by Thai child-rearing practices (Kingshill, 1960; Moore, 1974; Suvannathat, 1979). For example, in some areas, prolonged dependency in the form of breast feeding may continue well beyond infancy. In addition, Thai social values discourage strong overt expression of emotion and encourage outward displays of self-control and unemotionality (see National Identity Board, 1984). Several researchers (e. g., Boesch, 1977; Sangsingkeo, 1969) have argued that this orientation may foster psychological problems involving excessive inhibition.

Thai culture, compared to U.S. culture, thus appears to be less tolerant of undercontrolled behavior and more tolerant of overcontrolled behavior. If this is true, one important result may be differences in the kinds of child problems seen by clinicians in the two cultures. Two quite distinct patterns of cultural difference can be envisioned, however, each reflecting a seemingly plausible model of cultural impact. One possibility involves a *problem suppression-facilitation model*. The cultural patterns previously described might directly affect the incidence of over- and undercontrolled problems, with the former especially prevalent in Thai clinics, the latter in U.S. clinics. This would be consistent with Draguns' (1973) suggestion that, within a given culture, psychopathology may be "an exaggeration or a caricature of the socially shared and prevalent patterns of adaptation" (p. 33).

An alternate possibility involves an *adult distress threshold*

model. In this model, culture influences adults' attitudes toward children's behavior, helping to determine how distressing children's behavior problems will be to the adults and how likely it is that the adults will seek help through clinical intervention. Cultures may differ in their distress threshold for children's problems generally or for particular problem patterns (see Weisz, Suwanlert, & Chaiyasit, 1985, for discussion of the two possibilities; see also Draguns, 1973, p. 34, for observations on how culturally defined psychopathology may "stand in contrast to the modal behavior in its milieu"). The latter, *pattern-specific* form of the model is most relevant to the present study. One might speculate, for example, that the threshold for distress (and clinic referral) for undercontrolled problems might be set at a lower level among Thai adults than among adults in the United States, and that the reverse might be true for overcontrolled problems. One result could be a predominance of undercontrolled problems among clinic-referred Thai youngsters and a predominance of overcontrolled problems among clinic-referred U.S. youngsters. Thus, the suppression-facilitation and the distress threshold models of cultural influence lead to precisely opposite predictions regarding clinic referral problem patterns in the United States and in Thailand.

Of the two models, only the threshold model has received apparent support in the Thai-U.S. literature thus far. Phon Sangsingkeo (1969), the Thai Minister of Public Health, reported that in Thai child guidance clinics, admissions for aggressive and antisocial problems outnumbered admissions for passive, withdrawn, asocial behavior problems by a ratio of 2:1; by contrast, he cited U.S. data showing similar rates for the two problem clusters. He argued that in the strongly Buddhist culture of Thailand, "quietness, politeness, and inhibition are both expected and accepted [in children]" (p. 292), and thus that such overcontrolled behaviors are much less likely to lead to clinic referral than are aggression and other undercontrolled behaviors.

Sangsingkeo's (1969) data appear to support the threshold model, but the data may be limited in significant ways. First, his Thai data, unlike his U.S. data, represent "symptoms of children sent to mental health clinics by their classroom teachers" (p. 290); the predominance of undercontrolled problems in that particular Thai sample may thus reflect the special concerns of teachers for whom such problems would represent a threat to classroom order and discipline. Second, Sangsingkeo's analysis was focused on only a few target problems of special interest, not on the broad array of over- and undercontrolled problems that have since been identified through factor analytic research. Third, his data were collected more than 20 years ago and may not reflect current patterns.

In the present study, we built on Sangsingkeo's (1969) work comparing child clinic referral problems in Thailand and in the United States. We focused on parent (or guardian) reports from both cultures, thus unconfounding culture and type of informant. Rather than focus on a few target problems, we included the full array of problems empirically established as part of the over- or undercontrolled syndrome. Finally, we used data only from referrals in the 1980s in an effort to identify current patterns. A major objective was to test whether the suppression-facilitation model, the threshold model, or neither, provided an

appropriate framework for understanding the influence of culture on child clinic referral patterns.

A second objective was to explore the role of developmental level alone and in interaction with culture. Thai adolescents, relative to both Thai children and U.S. children and adolescents, appear to have the most pronounced exposure to Buddhist ideals. Religious and moral instruction intensifies in Thai secondary schools and many adolescent boys serve as novices, taking up temporary residence in the *wat* (see Jumsai, 1980). Moreover, in Thai society, adolescents are accorded some of the legal rights of adulthood (e. g., legal marriage age is 15 for girls, 17 for boys) and are expected to behave as adults, showing high levels of self-control and inhibiting strong expression of emotion (see Gardiner, 1968; National Identity Board, 1984; Suwanlert, 1974). Are such changes associated with disproportionate referrals of Thai adolescents for overcontrolled problems? We explored this question.

We also explored the role of sex. In the United States, undercontrolled problems are usually found to be more prevalent among boys than among girls (Achenbach & Edelbrock, 1981; Rutter & Garmezy, 1983), and there is evidence that biological factors as well as sex typing and parental behavior may foster such a difference (Maccoby & Jacklin, 1974). In Thailand, sex typing seems in some respects almost the reverse of U.S. patterns; boys receive more rigorous training than do girls in Buddhist ideals, boys often serve as novices, and young men (but not young women) are expected to be ordained and serve a period of priesthood in the *wat* prior to marriage. Are such sex differences associated with a moderating or reversal of sex differences found in the United States? If so, the trend might be reflected in the behavior for which boys and girls are referred to clinics.

Finally, we examined the relation between referral problems and urban versus rural living environment. The Thai cultural patterns previously described are less pronounced in cities than in the more traditional countryside. Thus, it seemed important to determine whether referral problems might vary with urban versus rural environment and whether that environmental factor might interact with the larger environmental factor of culture.

Method

Research Design and Sample Characteristics

The total sample included 760 clinic-referred children, 376 from Thailand and 384 from the United States. Within each culture, the sample was perfectly balanced for age group (6–11 vs. 12–17), sex, and urban versus rural place of residence, forming a $2 \times 2 \times 2 \times 2$ (Culture \times Age Group \times Sex \times Urban vs. Rural) factorial design with proportional cell sizes throughout.

The U.S. sample was drawn from clinics in Washington, DC, Charlotte, NC, and three rural counties in North Carolina and Tennessee. The Thai sample was drawn from clinics in Bangkok and two rural provinces. The Washington, Charlotte, and Bangkok clinics provided the urban samples; however, youngsters referred to those clinics who actually lived in rural areas were classified according to place of residence. The sample included clinic intakes spanning the years 1982–1984. Cases were drawn from clinic records blindly, but with the constraints that all design cells within each culture contain equal numbers

and that neither the culture, sex, nor urban–rural factors be confounded with age.

Procedure

All of the clinic data were gathered by trained recorders, two Thai recorders in Thai clinics and two American recorders in U.S. clinics. For all of the youngsters sampled, the recorders reviewed the full written report of the intake interview with parents (or guardians) and listed verbatim each of the child's problems reported to admitting clinicians during the interview. Most clinic reports in both countries were surprisingly clear in reporting problems. The two Thai recorders, working independently on 56 cases, achieved a high level of agreement on number of problems reported, $r = .96$. The corresponding figure for the two U.S. recorders, working on 56 U.S. cases, was $r = .99$.

Each problem was later coded as overcontrolled, undercontrolled, or other (see procedure below). Of all the overcontrolled problems noted by Thai Recorder A across the 56 cases, 89.3% were also noted by Thai Recorder B for the corresponding cases; the figures were 90.8% for undercontrolled and 88.0% for other. Of all the overcontrolled problems noted by Thai Recorder B, 86.8% were also noted by Thai Recorder A; the figures were 91.0% for undercontrolled and 88.7% for other. Of all the overcontrolled problems noted by U.S. Recorder A, 100% were also noted by U.S. Recorder B; the figures were also 100% for both undercontrolled and other problems. Of all the overcontrolled problems noted by U.S. Recorder B, 91.1% were also noted by U.S. Recorder A; the figures were 94.7% for undercontrolled and 95.3% for other. Thus, there was substantial agreement among the Thai recorders and among the U.S. recorders at the level of total problems and at the level of specific overcontrolled, undercontrolled, and other problems.

Thai problems were translated into English by two bilingual Thai psychologists, checking each other's work through back translation and consulting with a third bilingual expert when disagreements arose. Problems listed for Thai and U.S. youngsters were then coded as overcontrolled, undercontrolled, or other problems. To do this in an empirically acceptable manner required, first, that each problem be coded for its correspondence to any problem appearing on the Child Behavior Checklist (CBCL; Achenbach & Edelbrock, 1983). The 118-item CBCL is widely used, well validated, and evidently the best available means of classifying specific child problems into over- and undercontrolled syndromes. Principal components analyses (Achenbach, 1978; Achenbach & Edelbrock, 1979, 1983) have revealed broadband over- and undercontrolled syndromes in 6–11-year-old boys and girls, and in 12–16-year-old boys and girls, considered separately (also among 4–5-year-old boys and girls). Each syndrome includes from 41 to 51 of the CBCL problems across the various Age \times Sex groups.

Two trained U.S. coders judged whether each individual Thai or U.S. problem matched any of the 118 CBCL problems, and if so, which one. For this coding, the problems were written in English, listed individually, and not labeled as to their country of origin. Working independently on a sample of 276 problems from 75 children and adolescents, the two coders agreed on 96.7% of the problems in their judgments as to whether the problem did or did not have a CBCL equivalent. (More than 80% of the problems listed within each culture were judged to have a CBCL equivalent.) Moreover, for those problems deemed to have an equivalent, the coders agreed 95.1% of the time as to which one of the 118 CBCL problems was the appropriate match.

Once this CBCL coding was complete, we computed an overcontrolled and an undercontrolled score for each child. First, we calculated the total number of each child's problems that fit the empirically derived overcontrolled syndrome for that child's Age \times Sex group. This total was divided by the number of all problems on the CBCL that load on the syndrome; these numbers thus represented the proportion of all

possible overcontrolled problems that each youngster's list of referral problems included. These decimal values were multiplied by 100 to convert them to percentages. Finally, to correct for variations in the productivity of parents during the interviews, we divided the adjusted overcontrolled score by the total number of problems listed for the child, then multiplied by 10 (the approximate ceiling for number of problems listed). Parallel procedures were followed in computing each child's undercontrolled score.

Results

The numerous effects tested within the four-factor model posed a risk of significant findings due to chance. To minimize this risk, we applied a Bonferroni correction (Neter & Wasserman, 1974); this allowed us to accept only findings significant at or below the .001 level.

Total Problems

The total number of problems reported for each child was subjected to a $2 \times 2 \times 2 \times 2$ (Culture \times Age \times Sex \times Urban/Rural) analysis of variance (ANOVA). Two significant effects emerged, both involving culture. One was a Culture \times Age interaction, $F(1, 744) = 26.14, p < .0001$. In the United States, more problems were reported for children than for adolescents ($M_s = 5.40$ and 4.67), Tukey's honestly significant difference (HSD), $p < .05$; in Thailand, that pattern was reversed ($M_s = 4.10$ and 5.30), HSD, $p < .05$. The interaction of culture with

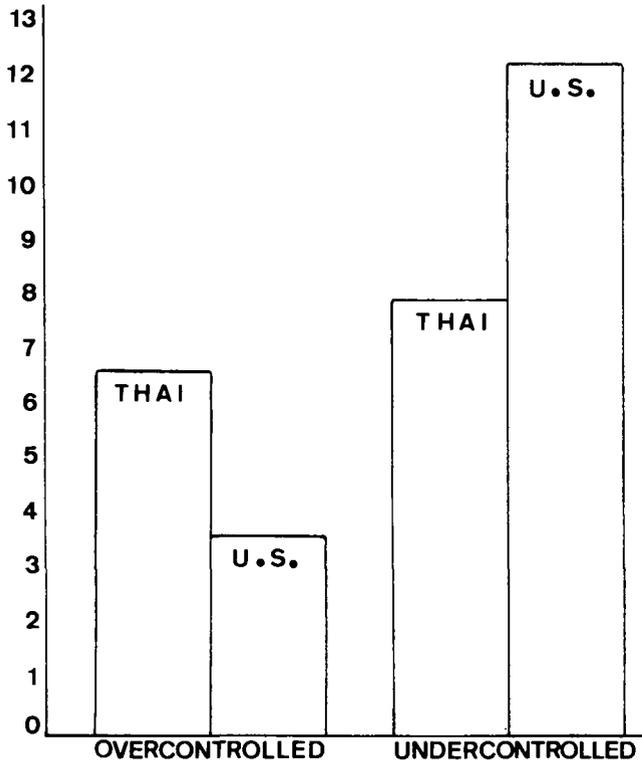


Figure 1. Mean scores for Thai and U.S. youngsters on overcontrolled and undercontrolled problems.

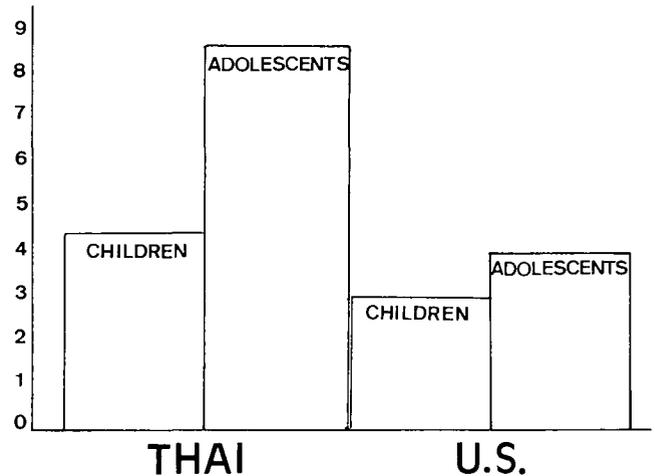


Figure 2. Relative prevalence of overcontrolled problems among children (aged 6-11) and adolescents (aged 12-17) from Thailand and from the United States.

urban versus rural place of residence was also highly significant, $F(1, 744) = 31.51, p < .0001$. In the United States, more problems were reported for urban than for rural youngsters ($M_s = 5.72$ and 4.35), HSD, $p < .05$; in Thailand, the pattern was reversed ($M_s = 4.32$ and 5.07), HSD, $p < .05$.

Overcontrolled Problems

In analyses of over- and undercontrolled problems, we initially used two approaches. Because quantitative experts disagree as to whether percentage data should be arcsine transformed before analysis (see Winer, 1971), we used both approaches. We subjected the over- and undercontrolled scores in their decimal form to an arcsine transformation (Winer, 1971) for one wave of analysis, and we used the untransformed data in a second wave. The results were strikingly similar, with the same effects significant in both waves of analysis. So, we report here the results from only the wave involving untransformed data.

The $2 \times 2 \times 2 \times 2$ ANOVA of overcontrolled problems revealed main effects of all four factors, plus a potentially important Culture \times Age interaction. As Figure 1 shows, overcontrolled problems were reported more often for Thai youngsters than for their U.S. counterparts ($M_s = 6.24$ and 3.31), $F(1, 744) = 57.52, p < .0001$. Overcontrolled problems were also reported more frequently for adolescents than for children ($M_s = 5.97$ and 3.55), $F(1, 744) = 39.27, p < .0001$; for girls than for boys ($M_s = 5.77$ and 3.75), $F(1, 744) = 27.32, p < .0001$; and for rural than for urban youngsters ($M_s = 5.73$ and 3.80), $F(1, 744) = 24.96, p < .0001$. The Culture \times Age interaction, $F(1, 744) = 16.41, p < .0001$, reflected primarily the fact that overcontrolled problems were noted especially often among Thai adolescents. In Thailand, the difference between adolescents ($M = 8.25$) and children ($M = 4.24$) was significant (HSD, $p < .05$); in the United States, the difference (3.75 vs. 2.88) was not significant (see Figure 2).

Undercontrolled Problems

Undercontrolled problems, also analyzed via a $2 \times 2 \times 2 \times 2$ ANOVA, showed three main effects. Undercontrolled problems were noted much more often for American youngsters than for Thais ($M_s = 12.04$ and 7.70), $F(1, 744) = 81.52$, $p < .0001$. Children were more often referred for undercontrolled problems than were adolescents ($M_s = 10.67$ and 9.12), $F(1, 744) = 10.41$, $p = .001$. And boys were more often referred for undercontrolled problems than were girls ($M_s = 11.30$ and 8.48), $F(1, 744) = 34.33$, $p < .0001$.

Most Common Problems in the Thai and U.S. Samples

Finally, to examine cross-national differences at the level of specific problems, we compared the most common referral problems in the two national samples. We tallied the number of children in each sample for whom each individual problem was reported, focusing on the 12 most common referral problems in Thailand and in the United States. Each problem was identified as undercontrolled (i. e., loading more frequently on the under- than on the overcontrolled syndrome, across factor analyses of male and female child and adolescent samples; see Achenbach & Edelbrock, 1983), overcontrolled, mixed (i. e., loading about equally on the two syndromes), or new (i. e., not included in the CBCL, and thus not included in factor analyses).

As Table 1 shows, the most common reason for referral in both samples was poor school performance, an undercontrolled problem. One other undercontrolled problem, temper tantrums or hot temper, appeared in the top 12 for both national samples. Beyond these two commonalities, Thai and U.S. patterns diverged markedly. All of the 12 most common U.S. referral problems were undercontrolled, and 8 of these were significantly more common in the U.S. than in the Thai sample. By contrast, 7 of the 12 Thai problems were overcontrolled, and all of these were significantly more common in the Thai than in the U.S. sample. In addition, the two non-CBCL Thai problems—absentmindedness and low motivation for study—both seem to involve internal state rather than undercontrolled behavior. Particularly striking in the Thai sample was the high frequency of somatic problems having no known physical cause; headaches, in particular, were reported for 23% of Thai youngsters. Table 1 reveals that among referral problems showing a significant Thai–United States difference, all of the most common U.S. problems were undercontrolled and none of the most common Thai problems were undercontrolled.

Discussion

Are cultural differences associated with differences in child clinical referral problems? The findings presented here suggest that the answer may be yes, at least when U.S. and Thai samples are compared. The findings appear to support a problem suppression–facilitation model, which holds that characteristics of a culture—values, beliefs, expectancies, and child-rearing practices—may suppress the development of certain types of child

behavior problems and foster or facilitate the development of others.

Our findings showed overcontrolled referral problems to be much more common in the Thai than in the U.S. sample, whereas undercontrolled referral problems were more common in the U.S. than in the Thai youngsters (Figure 1). Because these findings involve clinic-referred rather than randomly sampled Thai and U.S. youth, they do not provide direct evidence on nationwide prevalence patterns. Yet the findings are certainly in harmony with the idea that the Buddhist-influenced Thai traditions of nonaggression, politeness, and respectfulness (see our earlier discussion of the *wai*)—and associated child-rearing practices—may discourage the development of undercontrolled child behavior problems, at least in comparison with U.S. traditions and practices. The findings are also consistent with the complementary idea that the traditional Thai emphasis on quietness, inhibition, introspection, and deference (see our earlier discussion of *krengchai*)—and concomitant child-rearing practices—may foster the development of overcontrolled problems, at least in comparison with U.S. traditions and practices.

The findings and the accompanying conclusions do not support the adult distress threshold model, which holds that differences in clinic referral problems will primarily reflect culture differences in adults' levels of tolerance for various kinds of child behavior. Perhaps Sangsingkeo's (1969) findings in apparent support of that model resulted from Thai–U.S. differences in referral sources, age level, sex, or other possibly confounding factors discussed earlier. The distress threshold model remains a plausible possibility, one that may still be usefully tested in other ways. What the present findings suggest, though, is that Thai–U.S. differences in child clinic referral problems may be better understood from the perspective of the problem suppression–facilitation model.

A particularly interesting finding, in light of the suppression–facilitation model, was the Culture \times Age interaction with respect to overcontrolled problems (Figure 2). The interaction resulted largely from the fact that overcontrolled problems were noted especially often among Thai adolescents. Thai adolescents have been exposed to more Buddhist-based moral and social training in the schools and *wats* than any other group in our sample, and teen-aged Thai boys are the most likely to spend periods in residence in the *wat* as novices. Thus, whatever the effects of a Buddhist-based cultural system on problem development, those effects might well be especially pronounced during adolescence in Thailand.

Beyond the influence of Buddhism per se, Thai adolescents face significant societal pressure to be adultlike in their self-control and restraint, to inhibit expression of strong emotions (Gardiner, 1968; Suwanlert, 1974), and to adopt a nonreactive, subdued, outwardly controlled public persona. Strong public displays of emotions as varied as "dismay, despair, displeasure, disapproval, or [even] enthusiasm are frowned upon" (National Identity Board, 1984, p. 74). One consequence may be an increase during adolescence in overcontrolled problems associated with inhibition.

Two effects involving culture emerged from the analysis of total problems. First, in the United States, more problems were reported for children than for adolescents, but in Thailand the

Table 1
Twelve Most Common Referral Problems in Thailand and in the United States

Problem	Type ^a	U.S. (%)	Thai (%)	χ^2	<i>p</i>
United States					
1. Poor school work	U	33.9	35.9	0.4	<i>ns</i>
2. Disobedient at home	U	19.3	6.1	29.5	<.001
3. Temper tantrums, hot temper	U	15.4	11.7	2.2	<i>ns</i>
4. Gets into fights	U	14.3	.8	49.3	<.001
5. Disobedient at school	U	14.1	2.9	30.3	<.001
6. Physically attacks people	U	12.5	7.4	5.4	<.05
7. Lying or cheating	U	11.5	3.5	17.5	<.001
8. Steals outside the home	U	10.4	4.5	9.5	<.005
9. Can't concentrate, pay attention	U	10.2	6.4	3.6	<.10
10. Argues a lot	U	9.9	3.2	13.8	<.001
11. Demands attention	U	8.9	1.1	24.3	<.001
12. Can't sit still, hyperactive	U	8.6	5.6	2.6	<i>ns</i>
Thailand					
1. Poor school work	U	33.9	35.9	0.4	<i>ns</i>
2. Somatic problems (especially headaches) with no known physical cause	O	6.3	29.3	69.3	<.001
3. Absentminded, forgets easily	N	2.6	17.0	44.4	<.001
4. Fearful or anxious	O	3.4	12.8	22.6	<.001
5. Lacks motivation to study or learn	N	4.7	12.0	13.2	<.001
6. Sleep problems	O	1.0	11.7	36.5	<.001
7. Underactive, lacks energy	O	.5	11.7	41.6	<.001
8. Temper tantrums, hot temper	U	15.4	11.7	2.2	<i>ns</i>
9. Stubborn, sullen, irritable	M	4.7	9.8	7.5	<.01
10. Nervous movements, twitching	O	2.1	9.0	17.6	<.001
11. Strange behavior ^b	O	1.0	9.0	25.6	<.001
12. Worrying	O	2.6	7.4	9.4	<.005

^a Type of problem, as determined by factor analyses of the Child Behavior Checklist (CBCL). U = loads exclusively or predominantly on the undercontrolled syndrome; O = loads exclusively or predominantly on the overcontrolled syndrome; M = loads on both syndromes with about equal frequency across various age \times sex groups; N = not included in factor analysis, because it is not listed on CBCL.

^b This category included behavior that seemed odd to parents but did not fall into any other category. Most was of a type often associated with thought disorder. For example, one child spoke words and sentences that made no sense and another had a habit of laughing out loud for no apparent reason.

age difference was reversed. This pattern was due largely to the disproportionate prevalence of overcontrolled problems among the Thai adolescents, as discussed in the preceding paragraph.

In the second finding, more problems were listed for urban than for rural U.S. children, but more problems were listed for rural than for urban Thais. One possible interpretation is that disadvantaged and troubled people in the United States are especially likely to live in large cities, whereas such people in Thailand are more likely to live in rural areas. An alternative interpretation has to do with relative availability of clinical services. In the United States, a broad network of community mental health and child guidance centers makes mental health services readily available to most rural youngsters, but excessive demand in urban centers often means waiting lists and other logistic difficulties. In Thailand, despite an expanding mental health system, services for children continue to be more accessible in Bangkok and other cities than in rural provinces, where more complex and time-consuming transportation arrangements may need to be made. Thus, it is possible that urban youngsters in the United States and rural youngsters in Thailand may need to become especially problem ridden before adults undertake the process of getting them to a clinic.

Most cross-cultural investigators agree that there is value in identifying not only cross-cultural differences but similarities as well (Draguns, 1982; Jahoda, 1977; Triandis & Brislin, 1984). From this perspective, there may be useful information in the trends we identified that cut across these two very different cultures. For example, we found that in both cultures undercontrolled problems were more often reported for boys than for girls and that the reverse was true of overcontrolled problems. This is in harmony with previous findings on sex differences in western cultures (e.g., Achenbach & Edelbrock, 1981; Rutter & Garmezy, 1983; Rutter, Tizard, & Whitmore, 1970). However, our failure to find any sex difference on total problems does not support the stereotype that clinic-referred boys present more behavior problems than do their female counterparts; the only sex difference we could find concerned not the number of behavior problems but rather their form.

One general criticism that might be made of clinic referral data such as those used here is that they reflect subjective processes. In particular, they may reflect the biases of parents regarding which child behavior constitutes a problem and which does not. In the present case, however, such an argument would seem to be supported only by findings showing that Thai par-

ents report undercontrolled problems more and overcontrolled problems less than do U.S. parents. Our findings show precisely the opposite pattern; so, the adult bias interpretation seems difficult to support here.

Having interpreted a number of our findings, we should comment on two of their limitations. First, although we sampled several clinics in different areas of Thailand and the United States, we would certainly not claim to have represented all regions of either country. The generality of our findings can only be fairly assessed by the accumulation of data from other regions of both nations. Second, although we relied on the most current empirically sound data available in identifying problems as over- or undercontrolled, those data were from U.S. youngsters. A Thai-U.S. comparison focused on these problems certainly has theoretical and empirical value, particularly given the apparent cross-cultural generality of the over- and undercontrolled syndromes (see Achenbach & Edelbrock, 1978; Collins et al., 1962; Hayashi et al., 1976; Peterson, 1965; Quay & Parskeuopoulos, 1972), but the analysis could be more refined if data were available on the principal component structure of Thai children's behavior problems.

We intend to generate such data in a later phase of our cross-cultural investigation. The analysis of clinic referral patterns presented here was the first phase. In the second phase, the clinic data were used to develop a standardized parent-report measure of child problem behavior. In the third phase, now in progress, that measure and a parallel U.S. measure are being used to study the epidemiology of behavioral and emotional problems among randomly selected Thai and U.S. youngsters. In the fourth phase, we intend to use the Thai measure to collect standardized problem reports on clinic-referred Thai youth and to apply principal components analysis to the resulting data in an attempt to identify specific syndromes among Thai boys and girls. Of course, in principle, it would be possible to subject the present clinic-referral data to principal components analysis. However, these data are not derived from standardized procedures, and the clinic-referral base rate for most individual problems is too low to permit their inclusion in such an analysis (because low-frequency problems contribute too little variability). Because a principle components analysis of unstandardized data on a small number of problems could lead to incomplete or misleading findings, we decided to follow the more time-consuming four-step path to principal components analyses described here.

Overall, the findings generated in this first step do suggest an important possibility: The problems for which children and adolescents are seen in clinics may differ considerably from one culture to the next. Moreover, these differences may result in part from cultural differences in values, traditions, child-rearing patterns, and socialization practices, and they may have different effects at different developmental periods. We are only beginning to study how culture and development may influence child behavior problems and psychopathology, and how the two factors may interact in their influence. The complexity of culture and of development insures that such research will not be easy. The present findings, though, suggest that there may be value in the effort and that the two factors and their interplay may be too influential to ignore.

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