

# Thai and American Perspectives on Over- and Undercontrolled Child Behavior Problems: Exploring the Threshold Model Among Parents, Teachers, and Psychologists

John R. Weisz  
University of North Carolina at Chapel Hill

Somsong Suwanlert and Wanchai Chaiyasit  
Mental Health and Child Guidance Center of Bangkok  
Bangkok, Thailand

Bahr Weiss and Bernadette R. Walter  
University of North Carolina at Chapel Hill

Wanni Wibulswasdi Anderson  
Brown University

When a child has psychological problems, what determines whether adults will consider the problems serious or whether they will seek professional help? One determinant may be cultural: Prevailing social values may help set adult thresholds for concern over child problems. We explored this possibility, comparing adults in Thailand and the United States, two countries where social values and perspectives on childhood differ markedly. Thai and American parents, teachers, and clinical psychologists made judgments about two children, one with overcontrolled problems (e.g., shyness, fear) and one with undercontrolled problems (e.g., disobedience, fighting). Consistent with some of the literature on Thai Buddhist values, Thais (compared with Americans) rated problems of both types as less serious, less worrisome, less likely to reflect personality traits, and more likely to improve with time. Cross-national differences in perceived seriousness were more pronounced for parents and teachers than for psychologists, suggesting that professional culture may mitigate the effects of national culture. Evidently, adults' judgments about child clinical problems can differ markedly as a function of their cultural context.

So much of our research on psychopathology is based in the West, particularly in North America, that we risk what Kennedy, Scheirer, and Rogers (1984) called a "monocultural science." This risk is significant because research on psychopathology is both the study of the actual behavior of individuals and the study of the lens through which society views that behavior. Because identical behavior is often viewed differently in different societies, judgments about whether a particular behavior pattern represents a serious problem or pathology may be shaped by the cultural context in which the behavior occurs.

This phenomenon warrants special attention in research on child psychopathology. In contrast to adults, children rarely consider themselves disturbed and rarely refer themselves for treatment. Instead, parents, teachers, and mental health professionals play these roles, serving, in effect, as gatekeepers to child mental health care. Consequently, the degree of distress adults

experience in response to a child's problems often determines whether intervention will follow (cf. Walker, Bettes, & Ceci, 1984; White, 1982). Child problems that adults do not consider serious are not likely to receive clinical attention, even if they are quite distressing to the child. Given the central role played by adults, it is important to understand what determines their level of concern. One factor may be cultural.

We explored this possibility by comparing adults' views in two cultures that differ in theoretically important ways: Thailand and the United States. We focused on child problems within the two most common empirically derived syndromes: overcontrolled problems (e.g., anxiety, social withdrawal) and undercontrolled problems (e.g., disobedience, aggression) (for reviews, see Achenbach & Edelbrock, 1978; Quay, 1979). Our research design was based on a threshold model of cultural influence. According to the model, one effect of culture is to set adult thresholds for distress over child problems, thus influencing whether such problems are considered serious and influencing which actions will be taken in response. This model has two forms, both relevant to a Thai-United States comparison (see Weisz, Suwanlert, & Chaiyasit, 1985).

A general form of the model holds that cultures may differ in their threshold for child problems generally. That this may be true of Thailand and the United States is suggested by Suvannathat's (1979) analysis of child-rearing research. Suvannathat concluded that Thai adults are relatively unperturbed by a broad range of child behavior: "Many behavioral variations among Thai children were widely accepted so long as the child's behavior . . . remain[ed] within the vague definition of what

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Correspondence concerning this article should be addressed to John R. Weisz, Department of Psychology, Davie Hall 013A, University of North Carolina, Chapel Hill, North Carolina 27514.

was considered a 'real' Thai child" (pp. 477-478). This attitude may be reinforced by certain core teachings of Thai Buddhism (see Jumsai, 1980), to which 95% of the population subscribes (Thai National Statistical Office, 1984). These teachings propose (a) that everyone experiences dissatisfaction or unhappiness; (b) that every condition is in flux, and nothing will remain as it is; and (c) that an individual's behavior does not reflect an enduring personality. Such teachings, if taken seriously, might mitigate adults' distress over child problems. A child's unhappiness, although it is certainly not desirable, might at least be viewed as a universal condition that all must experience (Teaching a), and a child's misbehavior might be less distressing if adults believe that it is certain to change (Teaching b) and that it does not reflect an enduring personality or trait (Teaching c). Moreover, Thai adults tend to apply an optimistic twist to the concept of impermanence by adding the notion that change, when it does occur, will be for the better, especially among children (see Anderson & Anderson, 1986).

Adult concern over child problems may also be influenced by exposure to child psychology. Because Americans are so thoroughly exposed through academic courses and the media, they may be sensitized to child problems that are viewed with less gravity in other cultures. Thus, Americans, compared with Thais, might generally show a lower distress threshold for child problems.

A pattern-specific form of the threshold model can also be advanced: Cultures may vary differentially, with certain types of child problem behavior arousing greater concern in some cultures than in others. Consider over- versus undercontrolled problems. A prominent Thai researcher and former Minister of Public Health (Sangsingkeo, 1969) argued that, partly because of the Buddhist influence in Thai society, "quietness, politeness, and inhibition are both expected and accepted [in children]" (p. 292) and that such overcontrolled behavior is much less distressing to adults than is undercontrolled behavior. Suvannathat (1979) added that, despite their overall tolerance, "Thai parents usually disapprove of any type of aggression" (p. 480). (See also Gardiner, 1968; Gardiner & Suttipan, 1977.) It is possible, then, that for Thai adults, more than for U.S. adults, undercontrolled child problems are more distressing than overcontrolled child problems.

In the present study, we tested both the general and the pattern-specific forms of the threshold model. Adults in Thailand and in the United States read vignettes describing two children, one with overcontrolled problems and one with undercontrolled problems. For each child, the adults rated the seriousness of the problems, their probable level of concern if they were the child's parent or teacher, and the likelihood that the child's behavior would improve with time. We also asked the adults to designate which child had a greater need for help from a specialist. In this design, main effects of culture would support the general form of the threshold model, and Culture  $\times$  Problem Type interactions would support the pattern-specific form. Within each culture, we compared three adult groups whose judgments are central to the child referral process: parents, teachers, and clinical psychologists. In addition, we investigated the impact of child gender by featuring boys in half of the vignettes and girls in the other half.

## Method

### *Experimental Design and Subjects*

In the  $2 \times 3 \times 2 \times 2 \times 2 \times 2$  (Culture  $\times$  Adult Group  $\times$  Problem Type  $\times$  Sex of Child  $\times$  Context Information  $\times$  Order) experimental design, problem type was a within-subjects factor. Thai and American parents, teachers, and clinical psychologists read two vignettes; one described a child with overcontrolled problems and the other described a child with undercontrolled problems. Half of the adults received vignettes about boys and half received girl vignettes. For half of the adults, the overcontrolled child was placed in Context A (described in the Materials and Procedures section) and the undercontrolled child was placed in Context B; for the other half, this pairing was reversed. Order was counterbalanced; half of the subjects received the overcontrolled vignette first and half received the undercontrolled.

*U.S. recruitment.* For the U.S. sample, parents and teachers of elementary school children were recruited through schools in the mid-Atlantic area. Using statewide school directories, we arranged for nine randomly selected city schools to participate: three in Virginia and two each from Maryland, North Carolina, and Tennessee. As part of this arrangement, we gave \$100 to the Parent Teacher Association of each participating school. (No parent, teacher, or psychologist in either country received payment for participating.) From each school, we selected eight teachers and eight parents to be included. We chose teachers randomly from the faculty roster. We chose parents randomly by reference to their children (e.g., parents of the fourth child on the teacher's class roster). One constraint was that the adults selected not be teachers or parents of children in special education programs for the mentally retarded, physically handicapped, or emotionally disturbed. Of the 72 teachers we selected, 58 (81%) agreed to participate; of 72 parents selected, 62 (86%) agreed to participate. Psychologists were randomly selected from cities in the same states by using the *National Register of Health Service Providers in Psychology* (Council for the National Register of Health Service Providers in Psychology, 1985). We used only those psychologists whose listing of ages served included children in the elementary school range. Addresses were unstable for this group, however: Of the 156 who we believe received our mailing, 113 (72%) participated.

*Thai recruitment.* Thai parents and teachers were recruited from 10 randomly selected schools in Bangkok. Eight teachers and eight parents were randomly selected from each school, using the U.S. method. The reading required for vignettes led us to include only adults who had at least a primary school education. The 73 teachers who participated represented a 90% return rate; the 75 parents, a 94% rate. Clinical psychologists who worked in Bangkok or in other Thai cities and whose practice included elementary-age children were randomly selected from the Thai Psychologists Association roster; 80 participated, representing an 87% return rate.

*Sample demographics.* The demographics of the national samples reflected the characteristics of their respective populations. For example, the mean age was higher in the U.S. sample than in the Thai sample (mean years = 43.35 and 35.61, *SDs* = 10.55 and 7.64,  $p < .001$ ) because Americans wait later than Thais to have children. The U.S. sample reported more years of education than the Thai sample (mean years = 18.45 and 15.33, *SDs* = 3.34 and 2.32,  $p < .001$ ). As for religious affiliation, 95% of the Thai subjects described themselves as Buddhist, whereas most U.S. subjects subscribed to Christianity or Judaism (75%) or to no religion (22%),  $p < .0001$ . There was no significant gender difference (63% and 79% women in U.S. and Thai samples, respectively).<sup>1</sup>

<sup>1</sup> Within the Thai sample, the three adult groups (parents, teachers, psychologists) differed significantly in age (mean years = 37.80, 35.53, 32.29; *SDs* = 6.99, 8.01, 6.90;  $p < .001$ ) and education (mean years =

The demographic differences appeared to be fair representations of true population differences. Nonetheless, we did test whether the culture effects found in the study might have resulted from cross-national differences in age or education (but not religion because the distributions were virtually nonoverlapping).

### Materials and Procedures

Each adult received a three-page packet. Pages 1 and 2 each contained a vignette, plus questions, concerning a 9-year-old school child. We used a school setting (instead of home) to minimize Thai–United States differences in setting-specific role expectations for children. On page 3, the adult was asked to compare the two children.

In each packet, one vignette described a child with overcontrolled problems and the other described a child with undercontrolled problems. Over- and undercontrolled problems were empirically derived from principal-components analyses of the Child Behavior Checklist (see Achenbach & Edelbrock, 1983). Overcontrolled vignettes contained eight problems loading on that factor for both boys and girls aged 6–11 years: arguing, cruelty to others, getting into fights, disobedience in school, lying, physically attacking people, teasing, and threatening. Undercontrolled vignettes also contained eight problems loading on that factor for both boys and girls aged 6–11 years: dependency on adults, fear of going to school, nervousness, anxiety, refusal to talk, shyness and timidity, sadness and depression, and worrying.

The over- and undercontrolled problems were embedded in either Context A or Context B. These contexts provided additional information on the child's strengths and on the impact of the child's problems. Context A indicated that the child (a) works well alone and takes pride in accomplishments, (b) cooperates during team games, (c) makes below-ability-level grades, and (d) needs special help from the teacher almost every day. Context B indicated that the child (a) tries hard once an activity has been started, (b) has one close friend, (c) gets left out of group activities, and (d) has fallen behind the class in most subjects. These contexts were designed to provide the kind of information mix that adults confront in real life and to permit a check on whether adults actually attend to contextual information when they judge the seriousness of child problem behavior.

After each vignette, several questions were posed using 7-point Likert scales. Questions of interest included (a) "How serious is this child's problem?" (b) "If you were this child's parent, how worried would you be about his (her) behavior?" (c) "If you were this child's teacher, how worried would you be about his (her) behavior?" (d) "Do you think this child's behavior will improve in a year or two?" and (e) "Compared to other primary school students in general, how unusual is this child?"<sup>2</sup> Some open-ended questions followed, and two are of interest here: (a) "What do you think is the major cause of this child's behavior problems?" and (b) "What methods could be used at home to assist this child?" Finally, on page 3, respondents were asked a treatment priority question: "Comparing the two children you just read about, which child has a greater need to be taken to a specialist for counseling or help?" "Why?"<sup>3</sup>

*Translation procedures.* All materials underwent three waves of

translation into Thai and back translation into English. One wave involved a professional translation agency; two waves involved two bilingual psychologists and a bilingual anthropologist. Translators aimed for conceptual equivalence and culturally appropriate content across languages and for simplicity of wording within each language.

*Coding for open-ended questions.* Coding systems were developed for open-ended questions. Answers regarding the major cause of the child's problems were classified as (a) medical/biological; (b) faulty child rearing, socialization, or teaching; (c) environmental stress; (d) child personality traits or psychodynamic processes (e.g., internal conflicts); (e) sociological (e.g., living in slums); (f) typical developmental (e.g., "just the way children of that age behave"); (g) diagnosis only (e.g., "the child has a conduct disorder"); or (h) other. Proposed interventions were categorized as (a) medical or biological (e.g., drugs), (b) behavioral (e.g., reinforce good behavior), (c) verbal (e.g., "talk to the child," "reassure him or her"), (d) educational/academic, (e) social support, (f) religious or moral training, (g) punishment, (h) more thorough evaluation, or (i) other. Finally, explanations for why the over- or undercontrolled child should have treatment priority were coded as (a) more upsetting to self (i.e., the child), (b) more upsetting to others (e.g., other children), (c) more problems involved, (d) fewer strengths, (e) greater long-term risk, (f) more severe disturbance, or (g) other. To assess reliability, two coders independently assessed 100 responses. Across all the category systems, kappas ranged from 0.91 to 0.98 ( $M = 0.94$ ).

## Results

### *Vignette-Specific Ratings of Seriousness, Distress, and Prognosis*

The first set of analyses focused on the adults' ratings of the seriousness of the child's problem behavior, on how worried the adults would be if they were the child's parent or teacher, on the unusualness of the behavior, and on the likelihood of improvement. All analyses were  $2 \times 3 \times 2 \times 2 \times 2 \times 2$  (Culture  $\times$  Adult Group  $\times$  Sex of Child  $\times$  Problem Type  $\times$  Context Combination  $\times$  Vignette Order) repeated-measures analyses of variance (ANOVAs), with Problem Type entered as a within-subjects factor. To minimize the risk of chance findings, we applied

<sup>2</sup> The Likert items were conceptually related (e.g., the degree to which respondents report that they would worry about the child should be correlated with the degree to which they regard the child's problem behavior as serious). To assess the extent to which item responses were in fact related, we computed intercorrelations among all the Likert items, with separate calculations for over- and undercontrolled vignettes. In doing so, we converted negative correlations to positive correlations when they reflected a logically inverse relation; for example, we converted the  $-0.37$  correlation between worrying as a teacher and the perceived likelihood of improvement in overcontrolled problems to  $0.37$ . The mean of all correlations for overcontrolled problem vignettes was  $.54$ , with a range of  $0.34$  (Improve  $\times$  Parent Worry) to  $0.82$  (Parent Worry  $\times$  Teacher Worry). The mean of all intercorrelations for undercontrolled problems was  $0.52$ , with a range of  $0.36$  (Serious  $\times$  Improve) to  $0.78$  (Parent Worry  $\times$  Teacher Worry).

<sup>3</sup> Other questions were excluded from the present article because of redundancy (we dropped questions about the seriousness of the problems and about the child's need for help from a specialist) or because they were peripheral to the main purpose of the study (we dropped questions about how confident the respondents were in their judgments and about the kind of specialist to which respondents would refer the vignette child).

14.51, 15.42, 16.37;  $SDs = 3.19, 1.61, 0.79$ ;  $p < .0001$ ) but not in gender or religious affiliation. In the U.S. sample, the three adult groups also differed significantly in age (mean years = 37.31, 41.00, 47.87;  $SDs = 6.13, 9.65, 10.91$ ;  $p < .0001$ ) and education (mean years = 14.48, 17.17, 21.27;  $SDs = 2.67, 0.98, 1.15$ ;  $p < .0001$ ) as well as in gender composition (89%, 93%, and 33% female;  $p < .0001$ ) and religious affiliation (92%, 89%, and 60% Christian or Jewish, respectively), although 35% of the U.S. psychologists reported no religion.

a Bonferroni correction (Neter, Wasserman, & Kutner, 1985); this set the alpha level for these five complex analyses at .001. We broke interactions down conventionally, proceeding stepwise from higher-order interactions to simple effects tests.<sup>4</sup>

**Context combination effects.** There were no significant effects involving vignette order; however, there were several interactions involving vignette context. Context interacted with problem type (over- vs. undercontrolled) on all five questions (all  $p$ s < .0001) and entered into a four-way interaction with problem type, sex, and adult group on the parent worry and teacher worry questions (both  $p$ s < .001). All these interactions can be characterized rather simply: In each instance, the component simple effects and lower-order interactions were stronger when the overcontrolled child was in Context A and the undercontrolled child was in Context B. The effects suggested that the adults read the vignettes carefully and took into account not only the problems reported but also the informational context in which those problems occurred. Although it was useful to establish this fact, the specific context effects were of little theoretical interest and are not described further here.

**Culture main effects.** Strong main effects of culture were found for all five questions (all  $p$ s < .0001): for the unusualness question,  $F(1, 410) = 27.43$ ; for the other four questions, all  $F$ s > 60.00. As Figure 1 shows, Thais, compared with Americans, rated both over- and undercontrolled problem patterns as less serious ( $M$ s = 4.47 and 5.24,  $SD$ s = 1.26 and 1.15), less worrisome to a parent ( $M$ s = 5.15 and 5.88,  $SD$ s = 1.24 and 0.81) or teacher ( $M$ s = 4.85 and 5.76,  $SD$ s = 1.31 and 0.81), less unusual ( $M$ s = 4.44 and 4.97,  $SD$ s = 1.64 and 1.23), and more likely to improve ( $M$ s = 4.70 and 3.37,  $SD$ s = 1.39 and 1.32). The last finding suggests that Thais may have rated seriousness and worrisomeness relatively low in part because they were more confident than were Americans that the problems would improve over time.

We considered artifactual interpretations of the culture main effects. For example, might Thais simply give lower ratings than Americans on Likert scales? Evidently not, because Thais gave higher ratings than Americans on the improvement question. Might Thais consistently give more moderate ratings than Americans? Contrary to this possibility, the standard deviations of the Thai and U.S. samples shown in the preceding paragraph revealed that Thais actually showed slightly more variability than Americans.

**Adult group main effects.** Main effects of adult group emerged on the unusualness question,  $F(2, 409) = 8.51$ ,  $p = .0002$ , and on the likelihood of improvement question,  $F(2, 401) = 11.09$ ,  $p < .0001$ . The problems (across both types) were rated as most unusual by psychologists ( $M = 4.97$ ,  $SD = 1.07$ ), next by parents ( $M = 4.65$ ,  $SD = 1.54$ ), and least by teachers ( $M = 4.43$ ,  $SD = 1.59$ ). Improvement was rated least likely by psychologists ( $M = 3.58$ ,  $SD = 1.39$ ), next by parents ( $M = 4.23$ ,  $SD = 1.52$ ), and most likely by teachers ( $M = 4.43$ ,  $SD = 1.45$ ). For both questions, parents and teachers differed significantly from psychologists (Newman-Keuls  $p < .05$ ) but not from each other.

**Problem type main effects.** On all but the unusualness question, the over vs. undercontrolled main effect was highly significant, all  $F$ s > 28.0, all  $p$ s < .0001. Undercontrolled prob-

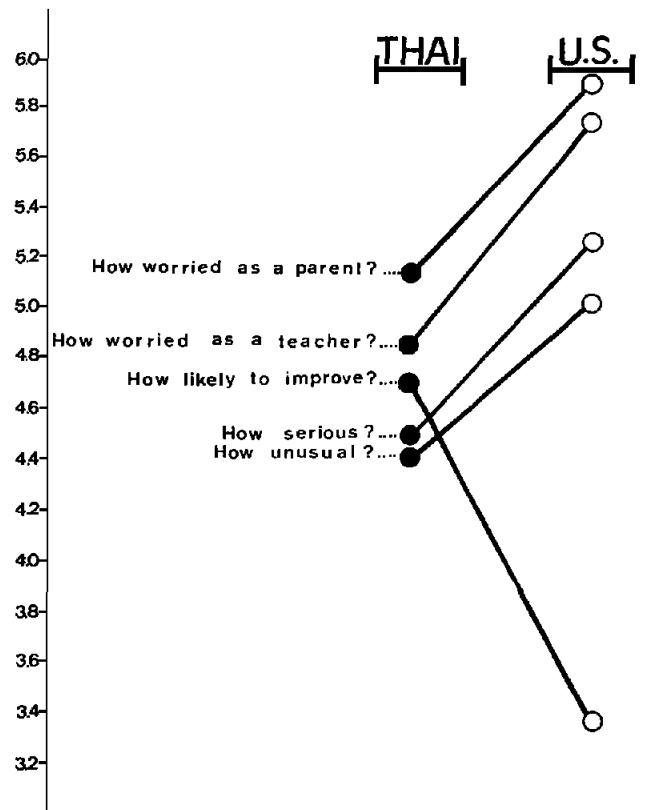


Figure 1. Thai and American adults' answers to five questions about child problems (problem types combined). The numbers reflect mean ratings on Likert scales ranging from 1 to 7.

lems, relative to overcontrolled problems, were rated more serious ( $M$ s = 5.02 and 4.69,  $SD$ s = 1.54 and 1.54), more worrisome to a parent ( $M$ s = 5.69 and 5.34,  $SD$ s = 1.30 and 1.38) and a teacher ( $M$ s = 5.53 and 5.09,  $SD$ s = 1.34 and 1.42), and less likely to improve ( $M$ s = 3.78 and 4.27,  $SD$ s = 1.78 and 1.74).

**Interactions.** Three two-way interactions emerged. On the seriousness ratings, culture and adult group interacted,  $F(2, 410) = 18.42$ ,  $p < .0001$ . In Thailand, the three adult groups

<sup>4</sup> Because the multiple-design factors made interactions likely, we developed a policy regarding the reporting of main effects in the presence of interactions. Some statisticians have maintained that one should never report main effects if the factors involved enter into significant interactions. Others (e.g., Howell, 1982; Neter et al., 1985) have argued that such firm caveats may risk the loss of useful information. Following the guidelines suggested by these latter authors, we decided (a) that significant main effects qualified by crossover interactions (i.e., those with significant component effects running in opposite directions at different levels of a component factor) would not be reported but (b) that main effects qualified by noncrossover interactions would be reported together with complete information on the nature of the interaction and its level of significance. Thus, we avoided reporting main effects that might have been misleading but still provided all the information readers need to make their own judgments regarding other main effects.

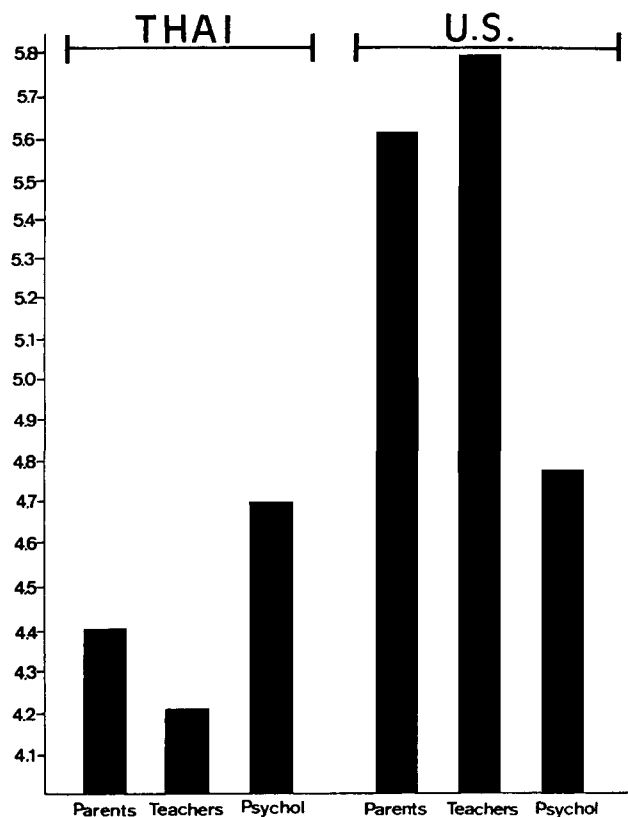


Figure 2. Mean responses to the question, "How serious is this child's problem?" (Ratings ranged from 1 [not serious at all] to 7 [very serious]. Psychol = psychologists.)

did not differ reliably ( $M_s = 4.70$  for psychologists, 4.22 for teachers, and 4.44 for parents;  $SD_s = 1.06, 1.20,$  and 1.42), but (as Figure 2 shows) in the United States the groups did differ,  $F(2, 453) = 17.82, p < .001$ . The U.S. psychologists ( $M = 4.77, SD = 1.34$ ) rated the child problems (across both types) as less serious than did the U.S. parents ( $M = 5.59, SD = 0.96$ ) and teachers ( $M = 5.77, SD = 0.77$ ), both  $p_s < .001$ , but parents and teachers did not differ significantly. In another view of the interaction, we found that Thai and U.S. psychologists did not differ from one another in their ratings but that the child problems were rated as more serious by U.S. than by Thai parents ( $p < .001$ ) and by U.S. than by Thai teachers ( $p < .001$ ).

Adult Group  $\times$  Problem Type interactions were found on ratings for seriousness,  $F(2, 410) = 18.01, p < .0001$ , and for parent worry,  $F(2, 410) = 7.21, p < .001$ . Breaking down the interaction for seriousness, we found that the three adult groups did not differ in their assessments of overcontrolled problems ( $M_s = 4.83$  for psychologists, 4.58 for teachers, and 4.61 for parents;  $SD_s = 1.30, 1.53, 1.74$ ) but that they did differ in their perceptions of the seriousness of undercontrolled problems,  $F(2, 455) = 9.52, p < .0001$ . Psychologists ( $M = 4.66, SD = 1.57$ ) rated undercontrolled problems as less serious than did parents ( $M = 5.25, SD = 1.56$ ) or teachers ( $M = 5.31, SD = 1.39$ ),  $p < .001$ , with the latter two groups having nearly identical ratings. In an alternate view of the interaction, we found that

parents rated undercontrolled problems as more serious than overcontrolled problems ( $M_s = 5.25$  vs. 4.58,  $SD_s = 1.56$  and 1.74,  $p < .001$ ) and that teachers did likewise ( $M_s = 5.31$  vs. 4.61,  $SD_s = 1.39$  and 1.53,  $p < .001$ ); but psychologists did not provide significantly different ratings for the two problem types.

The Adult Group  $\times$  Problem Type interaction for the parent worry question was simpler. The adult groups did not differ significantly in their ratings on the overcontrolled vignettes or in their ratings on the undercontrolled vignettes. However, parents rated undercontrolled problems as more worrisome than overcontrolled problems ( $M_s = 5.80$  and 5.28,  $SD_s = 1.41$  and 1.56,  $p < .001$ ), as did teachers ( $M_s = 5.82$  and 5.29,  $SD_s = 1.27$  and 1.45,  $p < .001$ ); but psychologists did not consider one problem type more serious than the other ( $M_s = 5.46$  vs. 5.54,  $SD_s = 1.21$  and 1.07).

*Controlling for demographic differences between cultures.* The significant main and interaction effects involving culture may have occurred as the result of age or educational differences between the two cultures. To test this demographic interpretation, we reran our analyses twice and included first age then education as the first term in the model to statistically eliminate the two demographic effects. Across all tests, all but one of the culture main effects remained significant beyond the .001 level in both eliminating tests. The exception was the effect of culture on the unusualness question; this effect dropped to  $p = .006$  when educational level was controlled.

We next reanalyzed the significant Culture  $\times$  Adult Group interaction shown in Figure 2. This interaction held up at the .0001 level with age controlled and with education controlled. The simple effects of culture also remained significant at the .0001 level for the teachers and parents and remained nonsignificant for the psychologists when age and education were controlled.

#### *Need for Treatment: Over- Versus Undercontrolled Problems*

Next, we focused on the question asking whether the over- or undercontrolled child had a greater need to be taken to a specialist for counseling or help. We used a log linear approach (see Ray, 1982), which generates main and interaction effects analogous to the ANOVA but uses the chi-square distribution to test effects.

*Effects of context and culture.* For the  $2 \times 3 \times 2 \times 2 \times 2 \times 2$  (Culture  $\times$  Adult Group  $\times$  Sex of Child  $\times$  Context  $\times$  Order  $\times$  Problem Type) analysis, a Bonferroni correction set the alpha level at .001. There was a significant context effect,  $\chi^2(1, N = 361) = 21.62, p < .001$ . With the overcontrolled child in Context A and the undercontrolled child in Context B, 70% of the adults chose the undercontrolled child, but with the contexts reversed, 43% did so. There was also a marginal main effect of culture,  $\chi^2(1, N = 361) = 3.76, p = .05$ . Americans were about equally likely to choose the overcontrolled child (49%) and the undercontrolled child (51%). Thais, by contrast, were more likely to choose the undercontrolled child (60% vs. 40%).<sup>5</sup>

<sup>5</sup> To better understand responses to the question that asked which child (over- or undercontrolled) exhibited a greater need for treatment, we analyzed the reasons provided by adults. To meet cell-size require-

*Controlling for demographics.* We reran the log linear analyses first with age then with education included as direct, continuous effects in separate models. With cross-national differences in age and education thus controlled, the marginal effect of culture on need for treatment was reduced to nonsignificance (both  $ps > .10$ ).

### Judgments About Etiology

Next, we focused on adults' judgments about the causes of the behavior problems. We used  $2 \times 3 \times 3$  (Culture  $\times$  Adult Group  $\times$  Etiology) log linear analyses. For these and all subsequent analyses, a Bonferroni correction set the alpha level at .007. We used only the three high-frequency categories: (a) faulty child rearing, socialization, or teaching; (b) environmental stress; and (c) personality trait/psychodynamics.

*Overcontrolled child.* For the overcontrolled child, only the culture main effect was significant,  $\chi^2(2, N = 389) = 50.76, p < .0001$ . Thais, much more than Americans, attributed the problems to faulty child rearing, socialization, or teaching. Although 53% of the Thais offered that attribution, only 14% of the Americans did so. Environmental stresses were blamed by 28% of the Americans and by 15% of the Thais. Personality/psychodynamic explanations were offered by 58% of the Americans but by only 32% of the Thais (see Figure 3).

*Undercontrolled child.* The same analysis was applied to causal explanations for the undercontrolled child. Again, only the main effect of culture was significant,  $\chi^2(2, N = 376) = 45.54, p < .0001$ . The problems were attributed to faulty child rearing, socialization, or teaching by 58% of the Thais but by only 27% of the Americans. Environmental stresses were blamed by 27% of the Americans and by 26% of the Thais. By contrast, personality trait/psychodynamic explanations were advanced by 46% of the Americans but by only 16% of the Thais. Thus, Thai adults were more likely to attribute child problems to faulty behavior by parents and other socializing agents, whereas American adults were more likely to use psychodynamic explanations involving inner conflict and child personality (see Figure 3).

*Controlling for demographics.* We controlled for age and education by reanalyzing the data and including those two variables

as direct, continuous effects in separate models. The two main effects of culture remained significant at  $p < .0001$ .

### Proposed Interventions

Next, we analyzed the interventions proposed by Americans and Thais to help the behavior problem children. We included only the categories with appreciable frequencies: (a) behavioral, (b) psychodynamic, and (c) social support. We used  $2 \times 3 \times 3$  (Culture  $\times$  Adult Group  $\times$  Intervention Category) log linear analyses.

*Undercontrolled child.* Proposed interventions for the undercontrolled child differed only as a function of culture,  $\chi^2(2, N = 377) = 50.12, p < .0001$ . Thais favored verbal interventions, whereas Americans favored behavioral approaches. Of the Thai responses, 22% proposed a behavioral approach, 77% a verbal approach, and 1% a social support approach. For Americans, the figures were 57%, 39%, and 4%.

*Overcontrolled child.* Proposed interventions for the overcontrolled child differed as a function of adult group,  $\chi^2(4, N = 384) = 17.88, p < .0001$ , and (marginally) of culture,  $\chi^2(2, N = 384) = 10.62, p < .01$ . The marginal culture effect reflected the strong preference Thais showed for verbal interventions. Of the Thai responses, 22% involved behavioral approaches, 73% verbal approaches, and 5% social support approaches; for Americans, the figures were 58%, 30%, and 12%. The adult-group main effect resulted mainly because psychologists and parents were more likely than teachers to propose verbal interventions. Of the psychologists, 73% proposed verbal approaches, 23% behavioral approaches, and 5% social support approaches. The figures for parents were 71%, 21%, and 8%. For teachers, the figures were 52%, 35%, and 13%.

*Controlling for demographics.* We controlled for age and education by reanalyzing with the two variables included as direct, continuous effects in separate models; the main effect of culture for the undercontrolled child remained significant at the .0001 level. The marginal effect of culture for the overcontrolled child remained marginal, falling to  $p < .05$  in both cases.

### Discussion

Thai and American adults made judgments about the same patterns of child behavior, but they evidently viewed the behavior from different perspectives. The most pronounced cross-national differences supported the general form of the threshold model described in the introduction: In multiple judgments about how serious, unusual, and worrisome over- and undercontrolled problems are, Thai adults expressed less concern than Americans.

The findings seem consistent both with Suvannathat's (1979) conclusion that Thai adults tolerate broad variations in child behavior and with some basic tenets of Thai Buddhism (Daksingnanadhikorn, 1973; Jumsai, 1980). For example, the Buddhist belief that change is inevitable is sometimes linked in Thailand with optimism that children's behavior, when it does change, will improve. Thais were much more confident than Americans that problem behavior would improve. The findings may also reflect the premium that Thais place on low levels of

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ments, it was necessary to simplify the design and retain only the four most-frequent responses: upsetting to self, upsetting to others, long-term risk, and severity of current disturbance. The  $2 \times 3 \times 2 \times 4$  (Culture  $\times$  Adult Group  $\times$  Problem Type  $\times$  Reason) log linear analysis (with the alpha level set at .003) revealed only a significant problem type main effect,  $\chi^2(3, N = 276) = 37.06, p < .0001$ . The effect appeared to result from differences between the first two response categories. Of the 119 who selected the overcontrolled child as more in need of treatment, 31 (26%) gave an "upsetting to self" rationale, whereas only 6 (5%) gave an "upsetting to others" rationale. By contrast, of the 157 who chose the undercontrolled child as more in need of treatment, only 4 (3%) used an "upsetting to self rationale," whereas 51 (32%) used an "upsetting to others" rationale. This finding, in the absence of main or interaction effects involving culture or adult group, suggests that for all groups in both cultures, a key question used to determine treatment priorities was "Who suffers?"

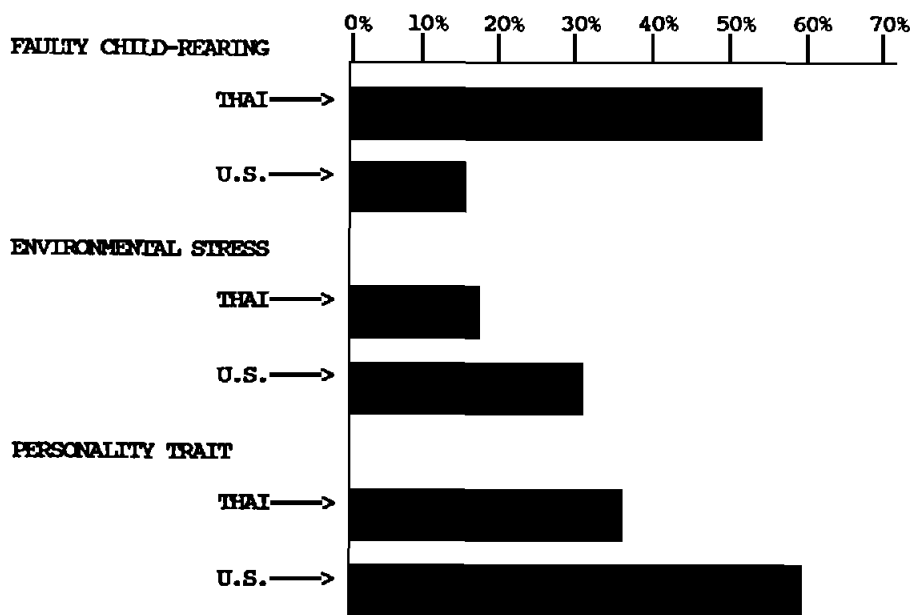
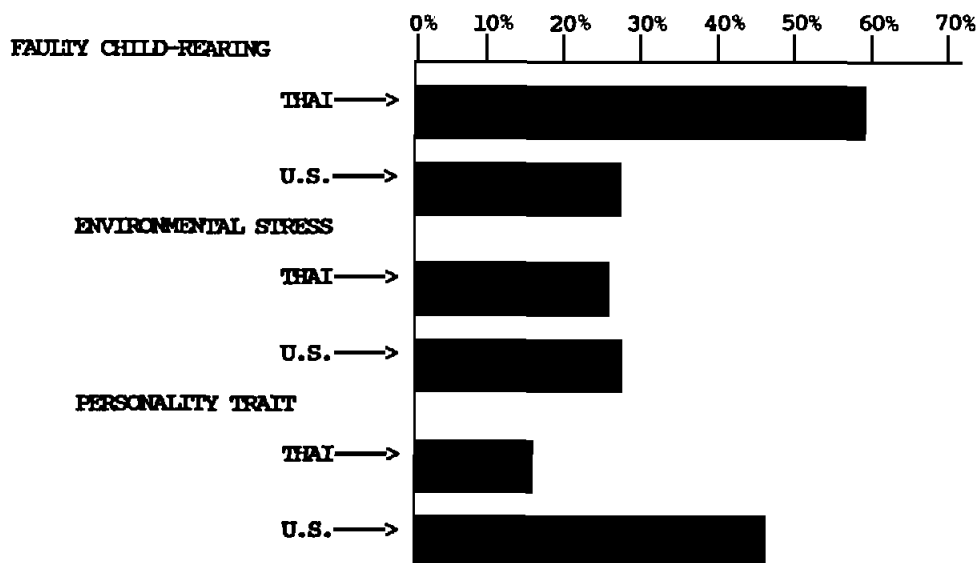
OVERCONTROLLED CHILDUNDERCONTROLLED CHILD

Figure 3. Percentage of Thai and American adults identifying various factors as the primary cause of overcontrolled and undercontrolled child problems.

emotional reactivity (a style known as *choei choei*) or on the capacity to avoid being overly disturbed in the face of potentially upsetting events. In addition, the findings may have resulted partly because the Thais have less exposure than Americans to child psychology and, thus, are less informed about the risks of child problem behavior (see Suwanlert, 1980).

Two other interpretations should be considered. First, per-

haps some of the Thai–United States differences reflect reality. For example, Thai children who show behavior problems may actually be more amenable to change than American children who show similar problems. Finally, the findings may have been influenced by subtle cross-cultural differences in meaning within the vignettes and the questions. We used a three-wave translation procedure designed to minimize this possibility, but

the richness and complexity of language make it impossible to completely rule out such an artifactual explanation.

There was virtually no support for the pattern-specific variant of the threshold hypothesis. The only support was a trend that emerged from the forced-choice treatment-priority judgments. Asked whether the over- or undercontrolled child was more in need of help, Thais were marginally more likely than Americans to choose the undercontrolled youngster. The direction of the finding is consistent with the notion that Thais are more likely than Americans to be distressed by undercontrolled child behavior and more likely than Americans to consider inhibited behavior acceptable in children (see Sangsingkeo, 1969; Suvannathat, 1979; Suwanlert, 1974). However, the weakness of this solitary trend raises doubts about this particular cross-cultural hypothesis.

The present findings may help us interpret recent data on clinic-referral problems among Thai and U.S. youngsters (Weisz, Suwanlert, Chaiyasit, & Walter, 1987): Overcontrolled problems were more often noted among clinic-referred Thai youth than among their American counterparts, and undercontrolled problems were more often noted among American than Thai youth. Such findings might have resulted from Thai-U.S. differences in the actual prevalence of over- and undercontrolled problems and/or from Thai-U.S. differences in adult judgments about which types of child behavior warrant referral. The present findings suggest that the clinic-referral patterns in Weisz et al. (1987) did not result simply from Thai-U.S. differences in adult judgments about what and when to refer; indeed, the present findings suggest that Thai adults may be, if anything, slightly more likely than Americans to refer children for undercontrolled problems. The clinic-referral findings of Weisz et al. (1987) may thus reflect Thai-U.S. differences in true problem prevalence rates.

Recent epidemiologic findings from nonclinic samples lend partial support to this idea: Weisz, Suwanlert, Chaiyasit, Weiss, Achenbach, and Walter (1987) compared standardized parent-report data on child problems for 960 randomly selected Thai and U.S. children aged 6-11 years. They found significantly higher levels ( $p < .005$ ) of overcontrolled problems in the Thai than in the U.S. sample. (There was no significant Thai-U.S. difference in undercontrolled problems.) Moreover, four of the eight problems included in the overcontrolled vignettes in the present study were found to be significantly more prevalent in Thai than in American children (all  $ps < .001$ ), whereas none of the eight was more prevalent in American than Thai children. Thus, previous findings have suggested that overcontrolled problems may be more common in Thai than in American children and that this difference may be reflected in clinic-referral patterns.

In addition to culture effects, we found differences related to adults' roles with respect to children. Psychologists, perhaps because of their professional socialization, made some judgments quite differently than did parents and teachers of both cultures. Parents and teachers rated undercontrolled problems as more serious than overcontrolled problems, but psychologists judged the two patterns to be equally serious. And responses to the question asking adults to assess the likelihood of improvement suggested that, in at least one respect, psycholo-

gists may be the most pessimistic of all three groups; perhaps this reflects psychologists' belief that their work is necessary or their tendency to be exposed to children whose problems do not remit spontaneously.

On seriousness ratings, we found cross-national differences among parents and teachers but not among psychologists. Most Thai psychologists receive instruction via Western texts from teachers who have been trained in the West. The pattern of findings suggests that the professional socialization to which Thai psychologists are exposed may somewhat mitigate the impact of their socialization within their own national culture.

Because cross-cultural similarities may be as important as differences (see Draguns, 1982; Triandis & Brislin, 1984), we should emphasize that our study also revealed a potentially important cross-national likeness. Both Thai and American adults rated undercontrolled problems as more worrisome and less favorable prognostically than overcontrolled problems. American research on long-term outcomes (e.g., Robins, 1979) has supported these judgments.

Overall, the study illustrates a potentially useful cross-cultural approach, supports a general threshold model to guide such research, and points up questions for further study. The results remind us that child psychopathology is, to some extent, in the eye of the beholder and that the beholding that most of us do may be influenced by our cultural context.

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