

Self-Perceived Competencies and Depression Among Middle School Students in Japan and the United States

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Predictors of self-reported depressive symptoms were investigated within groups of 125 middle school students from the United States and 99 middle school students from Japan. Multiple regression analyses indicated that self-perceptions of physical attractiveness, social acceptance, and behavioral conduct independently contributed to self-reported depression among United States students. Self-perceptions of interpersonal connectedness, peer social acceptance, behavioral conduct, and physical attractiveness independently contributed to self-reported depression among Japanese students. Self-perceptions of academic competence were not an independent predictor of depression in either group. In addition to revealing critical relations between specific domains of perceived competence and depression during early adolescence within each group of students, results indicated that common beliefs regarding associations between Japanese students' perceived academic competence and level of emotional distress may reflect an exception rather than a rule. Implications for preventive interventions and further research are discussed.

Depressed mood and other depressive symptoms are experienced by some adolescents in nations with widely varying cultures (Offer, Ostrov, Howard, &

The authors thank Professors Jiro Adachi and Yoshiko Kinoshita for their assistance in data collection. They also thank Principal Takashi Komaki and Vice Principal Kodono at Onari Junior High School and Principal Richard Gaubatz and Assistant Principal Valorie Berryman for kindly facilitating data collection, and David Crystal for his translation of study scales. The help of classroom teachers at participating schools also is acknowledged gratefully. This study was funded partially by a grant from the University of Michigan—Dearborn Morbach Fund for Research with Children and Adolescents.

Journal of Early Adolescence, Vol. 16 No. 2, May 1996 192-210

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Atkinson, 1988). Although the more collective culture of Japan differs in many respects from the more individualistic culture of the United States (Triandis, 1989), the phenomenon of depression occurs in both nations (e.g., Marsella, Sartorius, Jablensky, & Fenton, 1985; Sartorius, Jablensky, Gulbinat, & Ernberg, 1980). Because of the consistently reported increase in depressive symptoms between childhood and adolescence (e.g., Rutter, 1986), adolescence represents a particularly important developmental period for the study of depressive symptoms (Petersen, Compas, Brooks-Gunn, Stemmler, Ey, & Grant, 1993). An improved, more detailed understanding of the documented association between negative self-perceptions and depression during adolescence (Harter, 1990a; Rosenberg, 1986; Ryan et al., 1987) may offer important insight into the problem of depressed mood and other depressive symptoms among some adolescents.

Because depression has been conceptualized in differing ways, clear definitions of the construct of interest are critical to research in this area. In discussing issues related to the taxonomy and assessment of depression during adolescence, Compas, Ey, and Grant (1993) identified three separate constructs. These are depressed mood, depressed syndromes, and depressive disorders. *Depressed mood* generally is assessed with adolescent self-report scales, some of which also include other symptoms of depression (Compas et al., 1993; Reynolds, 1987). These scales assess the adolescents' self-perceived depressive symptoms at a cross-section in time. This information is of critical importance to the understanding of adolescents' current subjective experience of depressive symptoms rather than whether or not they have a *depressive syndrome* (based on information from multiple informants and an assessment of a wide range of related problem behaviors and emotions) or a *depressive disorder* (based on information about the presence, duration, and severity of depressive symptoms, often gathered from multiple informants) (Compas et al., 1993). In the present study, depression was defined as self-reported depressive symptoms.

Developmental Perspective

The relation between negative self-perceptions or self-referent cognitions and self-reported depressive symptoms may be examined from a developmental perspective. Harter (1990a) has documented empirically the increasing differentiation of self-understanding across the life span, assessing perceptions of self in differing social roles or contexts. She found that peer social acceptance and physical appearance contributed most to global self-worth among United States adolescents. These domains were more critical than those reflecting actual skills or competencies in scholastic, athletic, and

behavioral conduct areas. Other recent research also has indicated that not all domains of perceived competency or actual competency are of equal importance to depression during adolescence. Among adolescent psychiatric inpatients, a mood-congruent cluster of perceived competencies was identified that included the domains of social acceptance, close friendship, and romantic appeal (King, Naylor, Segal, Evans, & Shain, 1993). Each of those competencies involves a social or interpersonal component. This is consistent with the model recently examined by Harter, Marold, and Whitesell (1992). They noted that clusters of perceived competencies, in addition to parental and peer support, best predicted depression in early adolescence. The cluster of social acceptance or peer likability, perceived physical attractiveness, and athletic competence (the lack thereof) had the strongest path to depression.

Perceived social acceptance and the quality of peer relations seem to be especially relevant to adolescent depression. Adolescents are notably susceptible to peer influence (Hill & Holmbeck, 1986; Montemayor, 1982) and are concerned about their own level of popularity (Harter, 1990a, 1990b). This is not to minimize the role of parents during adolescence. Parent-child relations change during adolescence, even as parents continue to offer a stable, affective bond or sense of connectedness (Grotevant & Cooper, 1986). Parents remain highly influential in terms of support, guidance, and the development of enduring values and long-term goals. Gradual changes do occur in the relation, however, in that it becomes characterized by less dependency, unilateral parental authority, conversational intimacy, parental idealization, and time spent together (Hunter & Youniss, 1982; Paikoff & Brooks-Gunn, 1991). Depressed mood and other depressive symptoms among some adolescents, therefore, occur within a context of increasing cognitive and behavioral autonomy from parental figures (e.g., Blos, 1979; Sigafos, Feinstein, Damond, & Reiss, 1988; Steinberg & Silverberg, 1986). While becoming more cognitively and behaviorally independent, adolescents also are developing further emotional bonds in peer and other interpersonal relations. Reviews of the social support literature indicate that studies converge in documenting relations between depressive symptoms and a variety of social support measures (e.g., Barnett & Gotlib, 1988; Cohen & Wills, 1985). Thus adolescents attain higher levels of autonomy or separateness while maintaining, and perhaps enhancing, emotional connectedness to others.

National Perspective

Studying self-perceived competencies and their relation to depressive symptoms within two nations may facilitate an improved understanding of

patterns within each nation as well as possible parallels in patterns between nations. Japan and the United States represent two nations for which cultural differences have been carefully characterized. Japan is characterized as a collectivist culture wherein members are more nurturant and intimate than are members of more individualistic cultures such as the United States (e.g., Triandis, 1989). Dependency on others is perceived in a positive way within the Japanese culture (Doi, 1976); interpersonal connectedness or emotional interdependence is believed to be a central component of self-worth (Befu, 1986). Markus and Kitayama (1991) have noted that people in differing nations, with their respective cultures, have widely varying understandings of self, others, and relations between self and others. They noted that a more independent view of self, characteristic of the broad United States culture, places an emphasis on the autonomy of individuals and the discovery and expression of individual uniqueness. The individual may be responsive to the social environment, but this responsiveness has its origin in the need to express and affirm internal attributes. In marked contrast, an interdependent view of self, characteristic of Japanese culture, emphasizes the connectedness of people. The individual is motivated to behave in ways resulting in harmonious relations and a sense of belonging within a social unit (Markus & Kitayama, 1991). In some ways, this parallels the view of self and relationships described by Gilligan (1982) as characteristic of women in the United States, wherein a sense of psychological well-being, in fact, may relate to social connectedness. In support of this view, Horino and Mori (1991) found a slight but significant negative association between depression and social support in Japanese college students.

Present Study

The present study was designed to provide new information about relations between self-perceived competencies, in several specific domains, and adolescents' subjective experience of depression. The design of the study enabled a determination of self-perceptions associated with depression among middle school students in Japan and the United States. Rather than directly comparing findings from the two groups of students, the focus was on understanding patterns of relationships within each national group and then discussing some of the parallels between groups. Direct statistical comparisons of groups on study variables were not made for several reasons. First of all, main effect comparisons are problematic due to a culturally induced inhibition against openly reporting one's positive attributes and capabilities in Japan (Hymes & Akiyama, 1991; Kashiwagi, 1986). This response style contrasts to that found in the United States, wherein the

majority of students have described themselves as being above average in at least one study (Hymes & Akiyama, 1991). It is also the case that cross-national equivalence at the level of sentence does not guarantee equivalence at the level of sentence interpretation or conceptual understanding (Kleinman, 1988). Finally, there would be such a large number of uncontrolled variables in any direct comparison of national samples that it would be difficult to make meaningful inferences about any obtained differences.

Given the well-documented developmental issues of adolescence (Grotevant & Cooper, 1986; Hunter & Youniss, 1982) and previously documented associations between peer social acceptance, global self-worth, and depression (Harter et al., 1992; King et al., 1993), it was hypothesized that lower levels of perceived peer social acceptance or peer popularity would be associated with higher levels of self-reported depression among students in Japan and the United States.

In addition to this hypothesized cross-national relation, some relations between self-perceptions and depression were expected to occur only within groups of students from each nation. Within the United States group of students, self-perceptions of physical attractiveness were expected to be associated with self-reported depression because of the strong, documented association between global self-worth and self-perceptions of physical attractiveness, particularly among girls, in this nation (Harter, 1990a). Physical attractiveness has been associated with the psychosocial functioning of United States sixth grade students within and across time (Lerner et al., 1991). Perceived academic competence was not expected to be associated with depression among United States students because (a) interpersonal concerns seem to have a stronger valence during this developmental phase and (b) previous studies in clinical samples have indicated an absence of such an association with academic competence (e.g., King et al., 1993).

Within the Japanese group of students, perceived social connectedness, behavioral conduct, and academic competence were expected to be associated with self-reported depression. Because social connectedness is believed to be especially critical to the psychological well-being of individuals in nations that emphasize *interdependent construals of self* (Markus & Kitayama, 1991), it was hypothesized that lower levels of perceived connectedness to others, whether it be parents or peers, would be associated with higher levels of self-reported depression among Japanese students. As defined here, connectedness reflects a general interpersonal orientation of empathy, giving, and mutual dependency, rather than popularity and general peer acceptance per se. It also was hypothesized that perceived negative behavioral conduct would be associated with higher levels of self-reported depression among

Japanese students. In a nation where the culture tends to value interdependence, individuals are motivated more highly to behave in ways that minimize conflict and disharmony (Markus & Kitayama, 1991). Finally, because of the intense competition for admission to prestigious universities and the clear links between attendance at those universities and future opportunities in Japan (e.g., Baker & Stevenson, 1990; Kashiwagi, 1986), it was hypothesized that perceived competency in the academic domain would be associated with depression among Japanese middle school students.

METHOD

Subjects

Subjects included 125 middle school students from the United States (60 males, 65 females) and 99 middle school students from Japan (53 males, 46 females). The mean age of both national sample groups was 12.7 years ($SD = 0.7$ years).

Participating middle school students from the United States were recruited from two school districts in the Midwest. Teachers within these districts volunteered to involve their classes in the project, and students and their parents could refuse participation. Eight students or their parents did refuse (6%). In addition, 21 United States middle school students (including 17 "mainstreamed" special education students) were excluded from the study because of incomplete responses on questionnaires (less than 80% complete). The socioeconomic status (SES) of families within these districts ranged primarily from the lower-middle to the upper-middle class. Census tract information from 1990 indicated that only 3.2% of families in these school districts were below the poverty level in 1989. Although specific family incomes for participating students were unavailable, census tract information indicated the following about family incomes for the participating public school districts: Less than \$25,000: 18%; \$25,000-\$49,000: 38%; \$50,000-\$74,999: 27%; \$75,000 or more: 17%. In terms of family educational level, 87% of adults in these school districts were high school graduates or higher, 26% had college degrees or higher, and 9% had graduate or professional degrees.

Participating middle school students from Japan were recruited from one public school in a suburb of Tokyo. Two teachers volunteered to participate with their classes, and with the principal's endorsement, 98% of Japanese students participated. The families of these students represented a full range

in terms of SES, with a possible underrepresentation of students from the most educated families and the upper/upper-middle SES. This is because those students aiming for admission to prestigious universities generally attend private schools. In keeping with the school's preference, specific SES information was not requested from Japanese students. Two Japanese middle school students were excluded from the study because of incomplete responses on questionnaires (less than 80% complete).

Measures

Measures included self-report questionnaires assessing self-perceived competencies, interpersonal connectedness, and depression.

Self-Perception Profile for Children (SPPC). The SPPC (Harter, 1985) assessed students' perceived competency in five specific domains: academic, athletic, social acceptance, physical appearance, behavioral conduct. (As part of a related study, students also were asked to rate the importance of each domain and provide a written response to a hypothetical situation in which they failed to meet parental academic expectations). Although SPPC domains are known to be characteristic of middle childhood, and represent an oversimplification of self-perception domains for adolescents, this instrument was chosen because these basic domains continue during adolescence and are understood by students in both countries. The Global Self-Worth subscale was excluded. In keeping with the Markus and Kitayama (1991) notion of an interdependent construal of self, it was believed that Japanese students could not reasonably be expected to describe global, enduring, internal attributes or characteristics of self across different contexts (Markus & Kitayama, 1991). The assumption that global self-perception is a meaningful construct in both cultures was believed to be invalid.

The Japanese version of the SPPC was based on an earlier translation of the Perceived Competence Scale (Sakurai, 1983), but it was further developed for the present study in keeping with the Harter (1985) revision of the same scale. Internal consistency reliabilities for the English version of the five SPPC subscales, based on the Cronbach alpha, ranged between .75 and .86 across two samples of sixth through eighth grade students (Harter, 1985). Internal consistency reliabilities for the original Japanese version ranged between .72 and .86 for a sample of third through ninth grade students (Sakurai, 1983). A clear factor pattern consistent with the five subscales was found within each country (Harter, 1985; Sakurai, 1983).

Internal consistency coefficients in the present study were computed for each group of students on each SPPC subscale. These coefficients, based on the Cronbach alpha, ranged between .80 and .84 among United States middle school students and between .65 and .80 among Japanese middle school students.

Connectedness and Separateness Scale (Yamamoto, 1989). The original scale, written in Japanese, consisted of 31 true-false items with a 12-item separateness subscale and a 19-item connectedness subscale (Yamamoto, 1989). The connectedness subscale was chosen because it seemed to tap the construct of emotional interdependence believed to be especially important within Japan, whereas the separateness subscale seemed to tap assertiveness and cognitive autonomy believed to be especially important within the United States. In a sample including Japanese high school students, college students, and adults, internal consistency, based on the Cronbach alpha, was .81 for the connectedness subscale and .73 for the separateness subscale (Yamamoto, 1989). This instrument was translated into English and back-translated by a paid translator, with previous translation experience, whose qualifications included a master's degree in Japanese literature and a doctoral degree in developmental psychology. This individual is well-known to the university community for his ability to express psychological traits in English and Japanese.

Internal consistency coefficients were computed for the present study because of questions regarding each item's applicability to the overall constructs in the early adolescent age group and in the two nations studied. Reliability coefficients for the connectedness subscale, based on the Cronbach alpha, were .60 for the United States group and .77 for the Japanese group. Because of the relatively low reliability coefficient for the United States group of middle school students, five subscale items with negative or low item-total correlations ($< .15$) were deleted. This resulted in a 14-item subscale with a reliability coefficient of .73. Neither negative item-total correlations nor item-total correlations less than .15 were evident in item analyses of Japanese group data. Because the focus of this study was on relations between self-perceived competencies and depression within each nation's participant group, the use of differing scales was believed to be justified.

Sample items from the entire true-false scale (used for Japanese sample analyses) and the modified true-false scale (used for United States sample analyses) were as follows:

- I often get emotional when other people show caring and compassion. (True)
- It is hard for me to sense how other people feel. (False)
- I can't help sympathizing with those who are suffering. (True)
- I tend to be sensitive to other people's feelings. (True)
- I feel happy when devoting myself to others. (True)
- Other people's happiness is my happiness. (True)
- I try to develop my own characteristics and abilities. (False)
- I think about other people's feelings whenever I want to do something. (True)
- I can get along well with others. (True)

Reliability coefficients for the 12-item separateness subscale were .20 and .25 for United States and Japanese middle school students, respectively. Due to the high level of inconsistency, this subscale was not included in further analyses.

Reynolds Adolescent Depression Scale (RADS). The RADS is a 30-item self-report scale (Reynolds, 1987). Items are presented in a 4-point response format and reflect the range of diagnostic symptoms for depressive disorders. Sample items are: I feel happy (reverse-scored), I feel lonely, I feel like crying, I feel like having fun with other students (reverse-scored), I feel tired, and I like eating meals (reverse-scored). Response choices are *almost never*, *hardly ever*, *sometimes*, and *most of the time*. These response choices correspond to scores of 1 through 4 (4 through 1 for reverse-scored items), such that higher RADS total scores reflect greater self-reported depression. The psychometric properties of the RADS, including internal consistency coefficients (.91 through .94), are strong and well-documented (Reynolds, 1987). RADS scores have been shown to be highly correlated ($r > .75$) with scores on the Children's Depression Inventory (CDI; Kovacs, 1981) and the Children's Depression Rating Scale-Revised (CDRS-R; Poznanski et al., 1984; Shain, Naylor, & Alessi, 1990). In addition to its strong psychometric properties, the RADS was chosen because of the appropriateness of items for use with adolescents. The RADS was translated into Japanese and back-translated by the translator described previously.

Procedures

Students completed a battery of self-report questionnaires, written in their native language, during regular school hours at a time arranged in conjunction with school administrators and teachers. The battery of questionnaires required approximately 45 minutes to complete. Students were told by either their teachers (Japan) or teachers and research associates (United States) some minor variation of the statement, "We are studying how students in the United States and Japan

TABLE 1: Self-Perception (SPPC), Connectedness, and Depression (RADS) Scores: Means and Standard Deviations

	<i>Japan</i>			<i>United States</i>		
	<i>Male</i>	<i>Female</i>	<i>Overall</i>	<i>Male</i>	<i>Female</i>	<i>Overall</i>
SPPC						
Academic competence	2.2 (.5)	2.1 (.5)	2.1 (.5)	2.9 (.8)	3.0 (.7)	3.0 (.7)
Social acceptance	2.7 (.6)	2.6 (.5)	2.6 (.5)	3.0 (.7)	3.0 (.7)	3.0 (.7)
Athletic competence	2.4 (.7)	2.2 (.7)	2.3 (.7)	2.8 (.7)	2.7 (.7)	2.8 (.7)
Physical attractiveness	2.2 (.6)	1.8 (.6)	2.0 (.6)	2.7 (.8)	2.4 (.8)	2.6 (.8)
Behavioral conduct	2.5 (.4)	2.6 (.5)	2.5 (.5)	2.7 (.7)	3.0 (.6)	2.9 (.7)
Connectedness ^a	2.7 (.5)	2.9 (.4)	2.8 (.5)	2.8 (.4)	3.0 (.5)	2.9 (.4)
Reynolds Adolescent Depression Scale	57.1 (12.2)	58.1 (12.5)	57.8 (12.5)	60.1 (14.7)	60.6 (15.5)	60.5 (15.0)

a. The entire connectedness scale (19 items) was used for analyses of Japanese sample data. The modified connectedness scale (14 items) was used for analyses of United States sample data.

view themselves, their school life, and their relations with others.” They completed questionnaires in classroom groups and were given instructions for each questionnaire before beginning. Teachers and research associates remained available to answer questions. All questionnaires were completed anonymously. Students were asked not to record their names on forms.

RESULTS

Descriptive Statistics

RADS mean scores for groups of students from the United States and Japan were 60.5 ($SD = 15.0$) and 57.8 ($SD = 12.5$), respectively. Higher scores indicate higher levels of depressive symptoms. Twenty students in the United States group (16%) and 11 students in the Japanese group (11%) scored above the clinical cutoff of 77 or above (Reynolds, 1987). This has been established as the level at which further evaluation is warranted due to potentially significant psychopathology. There was no significant gender effect on self-reported depression.

Means and standard deviations for each national group of students on the SPPC and the connectedness subscale are shown in Table 1.

TABLE 2: Correlations Between Self-Reported Depression and Predictor Variables Among Middle School Students in Japan and the United States

Predictors	<i>Japanese Middle School</i>	<i>United States Middle School</i>
	(<i>n</i> = 100)	(<i>n</i> = 125)
Self-perception domain		
Academic competence	-.02	-.26**
Social acceptance	-.52***	-.45***
Athletic competence	-.10	-.24**
Physical attractiveness	-.22*	-.50***
Behavior conduct	-.43***	-.31***
Connectedness ^a	-.38***	-.21*

a. The entire connectedness scale (19 items) was used for analyses of Japanese sample data. The modified connectedness scale (14 items) was used for analyses of United States sample data.

* $p < .05$; ** $p < .01$; *** $p < .001$.

United States. A multivariate analysis of variance (MANOVA) indicated an overall gender effect on SPPC scores within the United States group, $F(5, 119) = 4.60, p < .01$. Univariate analyses revealed that male students reported more positive self-perceptions of their physical attractiveness than did female students, $F(1, 123) = 5.94, p = 0.016$. Female students reported more positive perceptions of their behavioral conduct, $F(1, 123) = 8.79, p = .004$, and higher levels of interpersonal connectedness than did male students, $t(124) = 2.65, p = .009$.

Japan. A MANOVA revealed an overall gender effect on SPPC scores within Japan, $F(5, 91) = 3.68, p < .01$. Univariate analyses indicated that male students reported more positive self-perceptions of their physical attractiveness than did female students, $F(1, 95) = 10.71, p = 0.001$. In addition, female students reported higher levels of interpersonal connectedness than did male students, $t(97) = 2.03, p = 0.045$.

Correlations Between Self-Perceived Competencies, Connectedness, and Depression

Correlations between self-reported depression and predictor variables within each of the two participant groups, defined by nation, are presented in Table 2. Multiple predictor variables were associated significantly with self-reported depression in each group. There was an overall pattern of significant relations between self-reported depression and negative self-perceptions of competency.

TABLE 3: Regression of Self-Reported Depression on Self-Perceived Competency and Connectedness Scores Within Samples of Japanese and United States Students

<i>Predictor Variables</i>	B	SE	t
Japan			
Constant	117.36***	9.42	12.46
Connectedness	-9.79**	3.01	-3.25
Academic competence	2.31	2.05	1.12
Physical attractiveness	-3.76*	1.84	-2.04
Athletic competence	1.88	1.56	1.19
Behavioral conduct	-5.04*	2.39	-2.11
Social acceptance	-8.10***	2.23	-3.64
$F^2 = .43$			
United States			
Constant	115.64***	9.49	12.19
Connectedness	-.86	2.65	-.33
Academic competence	2.17	1.81	0.00
Physical attractiveness	-6.01***	1.84	-3.73
Athletic competence	-1.60	1.78	-.90
Behavioral conduct	-5.30**	1.91	-2.77
Social acceptance	-5.95**	1.94	-3.07
$F^2 = .38$			

* $p < .05$; ** $p < .01$; *** $p < .001$.

Self-perceptions of peer social acceptance, physical attractiveness, behavioral conduct, and interpersonal connectedness were correlated negatively with self-reported depression in both national groups. Contrary to hypotheses, however, there was no significant correlation between the SPPC academic subscale and depression among Japanese middle school students.

Multiple Regression Analyses of Self-Reported Depression

Table 3 presents multiple regression analyses of self-reported depression conducted separately for the two national groups. These were conducted to control for intercorrelations among SPPC subscale scores. In each analysis, the five SPPC subscale scores and the connectedness subscale score were entered first as a block of predictor variables. Gender was then entered, followed by pertinent gender-subscale interaction variables. The latter were selected for entry based upon empirical findings of significant gender effects for predictor variables. Results of regression analyses are presented in Table 3 and will be discussed for each of the two national groups.

United States. SPPC and connectedness subscale scores accounted for 38% of the variance in self-reported depressive symptoms, $F(6, 118) = 11.89$, $p < .0001$. Self-perceived physical attractiveness ($t = -3.73$, $p < .001$), behavioral conduct ($t = -2.77$, $p < .01$), and social acceptance ($t = -3.07$, $p < .01$) were independent predictors, consistent with hypotheses that social acceptance and physical attractiveness would be related to depressive symptoms. The inclusion of gender and interaction variables did not improve the prediction of self-reported depressive symptoms. The interaction variables analyzed were gender by physical attractiveness, gender by interpersonal connectedness, and gender by behavioral conduct.

Japan. SPPC and connectedness subscale scores accounted for 43% of the variance in self-reported depressive symptoms, $F(6, 90) = 11.32$, $p < .0001$. As indicated in Table 3, self-perceived interpersonal connectedness ($t = -3.25$, $p < .01$), physical attractiveness ($t = -2.04$, $p < .05$), behavioral conduct ($t = -2.11$, $p < .05$), and social acceptance ($t = -3.64$, $p < .001$) were independent predictors of self-reported depressive symptoms. Although consistent with hypotheses concerning the importance of connectedness and social acceptance, these findings are contrary to the hypothesis that perceived academic competence would be related to self-reported depressive symptoms in Japanese students. The inclusion of gender and two interaction variables (gender by physical attractiveness, gender by interpersonal connectedness) did not improve the prediction of self-reported depression.

DISCUSSION

Self-perceptions of peer social acceptance were a strong and consistent predictor of self-reported depressive symptoms. This pattern was found among students both in Japan and the United States. Believing that one is well-liked by peers seems to be especially important as adolescents establish an increasing degree of emotional autonomy and behavioral independence from their parents (e.g., Blos, 1979; Gilligan, 1982; Steinberg & Silverberg, 1986) and show high levels of susceptibility to peer pressures (Hill & Holmbeck, 1986). It also is consistent with the well-documented relation between social support and depression (e.g., Barnett & Gotlib, 1988; Cohen & Wills, 1985). Other parallels may be drawn between patterns of findings within samples of Japanese and United States students. Perceived physical attractiveness and behavioral conduct also predicted self-reported depressive symptoms in both samples. Despite the many documented differences between the more collective culture of Japan and the more individualistic

culture of the United States (Triandis, 1989), these three constructs—social acceptance, physical attractiveness, and behavioral conduct—may be critical to a sense of well-being among young adolescent students in both nations, at least as reflected by fewer self-reported depressive symptoms.

Although these striking parallels between patterns of findings within student groups from each nation are notable, measurement and conceptual difficulties involved in making comparisons across nations and cultures, as well as differing hypotheses, require that more specific findings be discussed separately for each group of students. Given this framework, perhaps the most surprising finding is the absence of an association between perceived academic competence and depression among Japanese students. Japanese middle school students presumably are under considerable pressure to compete for admission to prestigious academic institutions and for career opportunities (Baker & Stevenson, 1990; Kashiwagi, 1986). In the news media, academic pressures on Japanese youth often are cited as the reasons behind adolescent depression or suicide. "Examination hell" is a phrase that is used commonly in United States and Japanese society to refer to the presumed extreme pressures on Japanese students before entering universities (Kashiwagi, 1986). Thus the present findings indicate that these beliefs represent stereotypes, at least for this group of public school students. Although it is wise to be careful in generalizing from a nonrejected null hypothesis when the sample is relatively small, power was determined to be sufficient for this analysis. Anticipating a moderate, positive correlation ($r = .25$ to $.30$), the present sample size of 99 enabled detection of such an effect size (0.50 to 0.60) with power of over .90 (two-tailed, $\alpha = .05$; Lipsey, 1990).

It also is noteworthy that physical attractiveness was related to self-reported depressive symptoms among Japanese students. Few previous studies have addressed issues related to physical attractiveness and personal well-being in Japan. One recent study addressed weight preoccupation and eating attitudes and behaviors among female high school students in Japan (Mukai, 1994). Self-perceptions of being overweight, as well as more frequent mother-daughter conversations about food and dieting, were associated with adolescent girls' dieting attitudes and behaviors, suggesting meaningful variability in perceived physical attractiveness, or at least in satisfaction with weight and body image. In another study, body image dissatisfaction was found to accompany depressive experience in a study of Americans of Chinese, Caucasian, and Japanese ancestry (Marsella, Shizuru, Brennan, & Kameoka, 1981). Of particular note, the ancestry groups were found to differ in type of body image dissatisfaction. Among Japanese, body dissatisfaction was primarily with physique. Thus it is possible that the link between perceived physical unattractiveness and depression among this group of

students from Japan reflects, at least partially, a culture-specific interpretation of physical attractiveness.

Perceived physical attractiveness emerged as the strongest predictor of self-reported depressive symptoms among United States middle school students. This converges with the findings of Harter (1990a), who documented a strong association between global self-worth and perceptions of physical attractiveness within a sample of students from the United States. She found that perceptions of competence in the domains of physical appearance and peer social acceptance contributed more to students' global self-worth than did perceptions of other specific competencies.

Gender Differences

The finding that boys in the United States group described themselves as more physically attractive than did girls is consistent with other recent research in the United States (Harter, 1985; King et al., 1993). Lerner et al. (1991) documented the stability of these gender differences in a short-term longitudinal study across the sixth grade period. Offer et al. (1988) also noted that in many countries boys showed a tendency to have a more positive body image than did girls. Offer et al. documented those differences in early as well as late adolescence, such that the difference is unlikely to be totally a reflection of girls' earlier onset of puberty.

Offer et al. (1988) also reported that girls in many countries gave evidence of a "more sociable and empathic stance" than did boys (p. 70). Across the 10 countries studied by Offer and his colleagues, girls were more likely than boys to express a desire to help a friend when possible. Present findings are consistent with those of Offer et al., in that girls in Japan and the United States had higher scores than did boys on the connectedness scale, which measures an interpersonal orientation of empathy, giving, and mutual dependency.

In Japan, female students' self-perceptions have been historically more negative than those of male students. There is ample documentation spanning many years of this gender difference (Kashiwagi, 1986), although one recent study of 502 Japanese students found that girls reported more favorable self-perceptions of academic competence than did boys (Isozaki, 1994). Present findings also showed that female students' self-perceptions were not more negative than male students' self-perceptions in many areas, with the exception of physical attractiveness. In fact, female students in Japan reported higher levels of interpersonal connectedness, which generally is valued highly within the more collective culture of that country.

Study Limitations

One limitation of the present study relates to the representativeness of subjects from Japan and the United States. Subject samples were relatively small, and findings may not be generalizable to the entire population of Japanese or United States students. The Japanese and United States middle schools included in the study, however, were comparable. Both middle schools were located outside of major metropolitan areas and included a reasonably wide representation in terms of respective SES. A second limitation is the reliance on self-report measures reflecting students' willing report of perceived personal characteristics.

A third limitation relates to the difficulties inherent in a cross-national study. National and cultural differences in reporting perceived competencies mitigate against analyzing main effects for nation and overinterpreting differing patterns of predictors of self-reported depressive symptoms (Sugar, 1991). As stated previously, Japanese students tend to evaluate themselves less positively than United States students (Hymes & Akiyama, 1991), and cross-national equivalence at the level of sentence does not necessarily mean that students in each nation will understand sentence meanings in the same manner (Kleinman, 1988). The present group of Japanese students also showed less variance on almost all scale scores than did the group of United States students. Thus, it is possible that range restriction may have influenced the magnitude of correlations within the Japanese sample. Finally, because of the lower reliability and exclusion of some connectedness scale items for United States students, any association between connectedness and self-reported depressive symptoms in this group may have been attenuated. Although an in-depth interview methodology would address some of these concerns related to cross-national comparisons, such an approach is not possible for survey researchers. As an alternative, it may be possible to ask subjects to list example acts or events that come to their mind when they read a questionnaire sentence. To the extent that example acts are similar across cultures or nations, the likelihood that cultural equivalence actually exists beyond the sentence level would be enhanced.

CONCLUSIONS AND POSSIBLE APPLICATIONS

The present study provided new information about predictors of self-reported depressive symptoms within groups of Japanese and United States

students. Certain patterns were evident within groups, and in some cases, parallels could be drawn between them. Perhaps most striking was the relatively strong relation between perceived social acceptance and self-reported depressive symptoms within both student groups. Perceived physical attractiveness and behavioral conduct also were important among United States students, as were interpersonal connectedness, behavioral conduct, and physical attractiveness among Japanese students. A surprising finding emerged in that perceived academic competence was not a predictor of depression among Japanese students.

Because depressed mood and other depressive symptoms become increasingly common across the adolescent years, knowledge about related self-perceptions is critical and has several applications. Preventive and clinical interventions aimed at improving early adolescent students' self-concepts and diminishing depressed mood and other depressive symptoms would be advised to address domains of adjustment and competence that have particular developmental significance for these students. In particular, it would be important to provide opportunities for positive peer interactions and education concerning the skills needed to form healthy peer relationships. Young adolescent students also need to be taught to evaluate their physical attractiveness realistically and to set reasonable goals for physical activity and fitness. They likely would benefit from ongoing support in these areas from parents and others. To the extent that the young adolescent's self-perceptions are distorted or inaccurate, tailored treatment interventions may be required. Such self-perceptions may represent a reasonably stable self-schema that organizes self-referent information, influences the processing of new information, and guides behaviors (e.g., Cantor, 1990).

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