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An Investigation Into the Gender and Age Differences in the Social Coping of Academically Advanced Students

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Background of the Study

During adolescence, individuals undergo a series of critical changes that allow them to understand their world, and themselves, in more complex and sophisticated ways (Keating, 2004). The cognitive advancements that typically occur during this time, such as the development of deductive reasoning and the improved ability to think abstractly and metacognitively, are related to both a heightened sense of self-awareness, a better understanding of what makes one unique, and the development

Summary

In certain contexts, some academically advanced students employ coping strategies that manipulate the visibility of their ability. These strategies may include denying giftedness, hiding giftedness, gaining favor by helping others, denying the negative impact on peer acceptance, conforming to mask giftedness, and minimizing focus on popularity. The goal of the current study was to replicate previous research that revealed gender and age differences in coping strategy choice. The analysis of responses from approximately 550 students at a summer camp for academically advanced students revealed more similarities than differences among the subgroups of participants. As in previous research, girls were somewhat more likely than boys to engage in the stereotypically female role of helping others. In addition, older adolescents were significantly more likely than younger students to report hiding and denying their giftedness. Developmental differences between older and younger students may explain this finding, as well as the possibility of older adolescents identifying with a broader peer-base through participation in school and extracurricular activities and establishing greater independence from their parents. Finally, younger students were more likely to report that they minimize their focus on popularity. Although this last finding differs from previous research, it underscores the need for further research into the topic of social coping strategies among subpopulations of academically advanced students.

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of coping strategies (Chalmers & Lawrence, 1993; Klaczynski & Narasimham, 1998; Morris & Sloutsky, 2001; Sternberg & Nigro, 1980).

Giftedness in the Social Context

One of the ways that some adolescents differ from their peers is by possessing and displaying high intellectual ability. Research suggests that some gifted students believe *others* perceive them as different because of their giftedness, and therefore, treat them differently (Coleman & Cross, 1988; Cross, Coleman, & Stewart, 1993; Janos, Fung, & Robinson, 1985; Manaster, Chan, Watt, & Wiehe, 1994; Manor-Bullock, Look, & Dixon, 1995; Robinson, 1990). As a result, giftedness may become a stressor in certain social contexts, thus hindering normal social interaction (Coleman & Cross; Cross et al.; Manaster et al.; Manor-Bullock et al.). After reviewing research on this concern, Swiatek (2001) concluded:

> Many gifted adolescents believe that their high ability level complicates their social relationships. This situation can be described as a stressor—more specifically, as a normative interpersonal difficulty that is exacerbated by the context of giftedness and that prompts the use of any of a number of coping strategies. (p. 24)

Social Coping of Gifted Students

Research suggests that gifted adolescents respond to the "perceived negative social effects of recognized high ability" (Swiatek, 2002, p. 66) by employing a variety of strategies that manipulate the visibility of their giftedness in these social contexts. These strategies range from conforming and using humor to conceal giftedness to outright denial of giftedness. See Table 1 for a more detailed representation of these findings across the various studies of the strategies used.

Table 1

Social Coping Strategies and Associated Cronbach's Alphas Reported in Previous Studies

Strategy	Swiatek, 1995	Swiatek & Dorr, 1998	Swiatek, 2001[1]	Swiatek, 2002	Chan, 2003	Chan, 2004	Chan, 2005[2]	Rudasill et al., 2006
Denial of Giftedness	0.79	0.75	0.72, 0.79	0.66, 0.68	0.83	0.82	0.79, 0.74	0.73
Emphasis on Popularity/Conformity	0.79	0.73						
Peer Acceptance	0.71	0.62						
Denying Negative Impact on Peer Acceptance			0.63, 0.71	0.55, 0.62				0.62
High (extracurricular, social) Activity Level	0.54	0.71	0.65, 0.66	0.61, 0.66	0.54	0.57	0.62, 0.61	0.57
Hiding Giftedness		0.62						
Using Humor			0.78, 0.77	0.53, 0.67				
Conformity to Mask Giftedness			0.56, 0.61	0.57, 0.53	0.73	0.74	0.69, 0.63	0.74
Helping Others			0.71, 0.62				0.72, 0.76	0.66
Minimizing One's Focus on Popularity			0.66, 0.73	0.66, 0.68	0.85	0.84	0.85, 0.79	0.72
Valuing Peer Acceptance					0.76	0.78	0.62, 0.60	
Attempting Avoidance					0.79	0.78	0.81, 0.81	

[1] Indicates Cronbach's alphas for administration at Time 1 and Time 2, respectively.

[2] Indicates Cronbach's alphas for administration with the older sample and the younger sample, respectively.

This broad spectrum of social coping strategies was identified using samples of gifted and high-achieving students who were tested in a variety of educational and social contexts using forms of the Social Coping Questionnaire (SCQ; Swiatek, 2001, 2002). For example, the samples ranged from American students who scored in the top 1% of students taking the ACT or SATs (Swiatek, 1995), honors and advanced placement students (Swiatek, 2001), and summer gifted program participants (Swiatek, 2002), to Chinese students who were nominated by their schools to participate in the Chinese University of Hong Kong gifted program because of their intellectual precocity, academic ability, or talent in a specific area (Chan, 2003, 2004, 2005). In each case, authors identified their samples as gifted although they include both high-achieving and intellectually precocious students. Furthermore, the forms of the SCQ administered differed in the number of items included (Swiatek, 1995, 2001, 2002; Swiatek & Dorr, 1998) and their language (Chan, 2003, 2004, 2005). Despite the diversity of the samples and version of the SCQ, the results of these studies and those of other investigations of adolescent coping suggest gender and age differences in strategy choice (Buescher, Olszewski, & Higham, 1987; Callahan, Cunningham, & Plucker, 1994; Chan, 2003, 2004, 2005; Swiatek, 1995; 2001, 2002; Swiatek & Dorr).

Gender Differences. Prior quantitative research points to a difference between the social coping strategies boys and girls employ. Relative to gifted females, gifted adolescent males are more likely to employ humor (Swiatek, 2001) and to discount the importance of popularity (Chan, 2003, 2004). Alternatively, gifted males have been identified as less likely to deny their giftedness (Swiatek, 2001; Swiatek & Dorr, 1998), place less value on peer acceptance (Chan, 2004), and are less likely to maintain high levels of interpersonal activity (Swiatek, 2001, 2002; Swiatek & Dorr). Data from the study by Buescher et al. (1987) showed that gifted adolescent boys employed more strategies and relied on adult support, whereas girls used fewer strategies and relied on more peer support. Callahan et al.'s (1994) qualita-

tive study of gifted middle school females supported the findings of Chan (2003, 2004, 2005), Swiatek (2001, 2002), and Swiatek and Dorr; the females in their sample also conformed and hid their talents in social situations.

Age Differences. Younger gifted students appear to use different coping strategies than their older counterparts. Specifically, gifted students in higher grades have been found less likely to use conforming strategies (Chan, 2005) and more likely to endorse the items on the scales of Helping Others (Chan, 2005; Swiatek, 2001) and Minimize One's Focus on Popularity (Chan, 2004, 2005; Swiatek, 2002).

The Current Study

It is clear that gifted adolescents employ a variety of strategies to cope with their own giftedness in social situations, and there is some evidence that strategy choices are related to gender and age differences (Buescher et al., 1987; Chan, 2004; Swiatek, 1995, 2001, 2002; Swiatek & Dorr, 1998). Further investigation of patterns in social coping strategy choice of males and females and students of different ages may provide insight into the social cognition and behavior of gifted and academically advanced students. This may allow educators to better predict and monitor students' behavior to prevent them from engaging in deleterious social coping. However, the literature on social coping is limited, and several of the studies of how strategies differ for various groups of gifted students (i.e., boys and girls, older and younger students) are based on Chinese samples, raising questions about cross-cultural generalizability. Therefore, the goal of the current study was to replicate the assessment of social coping with a sample of American academically advanced preadolescent and adolescent students and to answer the following questions: (1) What coping strategies do academically advanced adolescents employ? and (2) To what extent do students differ by gender and grade in the application of those social coping strategies?

Method

Participants

The sample comprised students participating in a 2-week residential summer enrichment program for gifted students (grades 5–11). Candidates were admitted to the program based on applications that included standardized achievement and/or IQ test scores, teacher recommendations, and responses to essay questions. Each application was scored by two independent raters using a rubric developed by the program administrators. Therefore, while the sample consisted of both high-achieving students and students identified as gifted in their home schools, the students will be referred to as academically advanced students throughout the paper. In 2004, applications were received from 1,519 students for 936 slots (acceptance rate: 61%).[1]

All student participants (N = 935) were recruited for participation in the study via mail. Specifically, letters and consent forms were sent to parents along with other information about the program. Additional attempts were made to solicit participation in the study through the use of follow-up mailings and in-person contact at registration. These efforts yielded consent forms for study participation from parents of 669 students. Each student was assigned a code number to ensure confidentiality while allowing for identification of each student's grade and gender. Five hundred and seventy-two adolescents (entering grades 5–11, 327 girls) completed the measure used in this study.

Design and Procedure

On the second or third evening of each camp session, students with consent to participate in the study convened with counselors to complete the Social Coping Questionnaire (Swiatek, 2001, 2002) as part of a battery of measures. To ensure confidentiality, the researchers enacted several procedures. First, students were placed at least 4 feet apart while responding to items. Second, students only placed their names on consent forms, and these

were promptly separated from the remaining documents upon receipt by researchers. Finally, once finished, each participant placed the completed measures inside an envelope, sealed it, and then returned it to the counselor.

Instrument

The Social Coping Questionnaire (Swiatek, 2001, 2002), a 34-item survey, probes the ways in which gifted adolescents deal with their own giftedness in social situations. Likert-type 7-point scales accompany each statement so that respondents can rate their level of *agreement* (1) or *disagreement* (7). For the purposes of this study, we used scales resulting from factor analyses of the SCQ scores from the current sample. Students' scores were randomly assigned to exploratory (EFA) or confirmatory (CFA) factor analysis. EFA was conducted first; items with low or double factor loadings were removed. Next, CFA was conducted using results from EFA. The final model revealed six social coping strategies (see Rudasill, Foust, & Callahan, in press, for a full report). Internal reliability values for these scales were (a) Denial of Giftedness ($\alpha = 0.73$), (b) Helping Others ($\alpha = 0.66$), (c) Minimizing One's Focus on Popularity ($\alpha = 0.72$), (d) Denying Negative Impact on Peer Acceptance ($\alpha = 0.62$), (e) Conformity to Mask Giftedness ($\alpha = 0.74$), and (f) Hiding Giftedness ($\alpha = 0.57$). The Denial of Giftedness, Helping Others, and Minimizing One's Focus on Popularity strategy scales each comprised four items; the Denying Negative Impact on Peer Acceptance strategy scale comprised three items; and the remaining strategy scales, Conformity to Mask Giftedness and Hiding Giftedness, each comprised two items. Although somewhat low (ranging from 0.57–0.74), the internal consistency values for scores on the social coping strategy scales are commensurate with previous replications using this instrument.

For ease of interpretation, all scores were reverse-coded so that a numerically low scale mean denoted less endorsement of the associated strategy and a high scale mean denoted more endorsement of the associated strategy. Students scoring high on

the Denial of Giftedness scale endorsed items such as, "People think that I am gifted, but they are mistaken," "I am not gifted; I am just lucky in school," and "I don't think that I am gifted." The second strategy was Helping Others, which comprised the items "I explain course material to other students when they don't understand it," "People come to me for help with their homework," and "I try to use what I know to help other students." Students endorsing items such as "Being popular is not important in the long run," "It doesn't matter what other people think about me," and "Because of all my activities, I don't have time to worry about my popularity" scored high on the third strategy scale, Minimizing One's Focus on Popularity. The fourth strategy, Denying Negative Impact on Peer Acceptance, contained the items "Other students do not like me any less because I am gifted," and "Being gifted does not hurt my popularity." The fifth strategy was Conformity to Mask Giftedness, which is composed of the following items: "I try to act very much like other students act" and "I try to look very similar to other students." The final strategy identified was Hiding Giftedness. It contained the items "I try to hide my giftedness from other students" and "I don't tell people that I am gifted."

Data Analysis

Correlational analyses were conducted to examine relationships among students' scores for the social coping strategies. Correlation coefficients (shown in Table 2) indicated generally low intercorrelations (less than $r = 0.25$) with the exception of the Hiding Giftedness and Denial of Giftedness scales, which were moderately correlated ($r = 0.35$). A 2 x 7 multivariate analysis of variance (MANOVA) was conducted to assess differences in social coping strategy scores across gender and grade. First, all students' social coping scores were compared across gender and grade. Mean scores for each factor were entered as dependent variables, with gender and grade entered as fixed factors. MANOVA was followed by post-hoc univariate F tests of group (grade) differences with Bonferroni adjustments to control for

Table 2

Correlation Coefficients for Relationships Among Social Coping Strategies

	Helping	Denial	Minimizing	Denying	Conformity	Hiding
Helping	1.0					
Denial	-0.25**	1.0				
Minimizing	0.16**	-0.05	1.0			
Denying	0.14**	-0.03	0.11**	1.0		
Conformity	-0.04	0.13**	-0.22**	-0.02	1.0	
Hiding	-0.12**	0.35**	-0.01	-0.10*	0.16**	1.0

Note. **Helping = Helping Others, Denial = Denial of Giftedness, Minimizing = Minimizing One's Focus on Popularity, Denying = Denying Negative Impact of Giftedness on Peer Acceptance, Conformity = Conformity to Mask Giftedness, and Hiding = Hiding Giftedness.**

$^{**}p < .01$.

Type I error. Finally, we calculated effect size measures (i.e., Cohen's *d* values) to examine the practical significance of our findings. Cohen (1988) hesitantly defined effect sizes as "small, *d* = .2," "medium, *d* = .5," and "large, *d* = .8" (p. 25).

Results

Descriptive analyses revealed that students reported that they were most likely to employ the Helping Others (*M* = 5.25) and Denying Negative Impact of Giftedness on Peer Acceptance (*M* = 5.46) strategies, and least likely to use the Denial of Giftedness (*M* = 2.06) strategy. Mean scores for the social coping strategies, as a function of both gender and grade, are shown in Table 3. Tables 4–9 present the effect sizes for each social coping scale as a function of grade.

The MANOVA analysis indicated significant grade (F[36, 558] = 2.87, $p < .001$) and gender (F[6, 558] = 2.67, $p = .015$) differences in strategy choice.[2] There were main effects for grade (F[6,558] = 4.86, $p < .001$) and gender (F[1,558] = 6.40, $p = .012$) on scores for the Helping Others scale and a main effect for grade on scores for the Denial of Giftedness (F[6,558] = 3.65, $p = .001$), the Hiding Giftedness (F[6, 558] = 3.00, $p =$

Table 3

Mean Scores and Standard Deviations for Social Coping Strategy Scores as a Function of Grade and Gender

	SCQ Strategy					
	Helping Others	Denial of Giftedness	Minimizing One's Focus on Popularity	Denying Negative Impact of Giftedness on Peer Acceptance	Conformity to Mask Giftedness	Hiding Giftedness
Group	*M (SD)*	*M (SD)*	*M (SD)*	*M (SD)*	*M (SD)*	*M (SD)*
Males	5.11 (1.16)	2.01 (1.04)	4.37 (1.46)	5.40 (1.38)	3.64 (1.69)	3.82 (1.51)
Females	5.35 (1.08)	2.10 (1.00)	4.26 (1.34)	5.51 (1.45)	3.74 (1.54)	3.56 (1.61)
Total	5.25 (1.12)	2.06 (1.02)	4.31 (1.39)	5.46 (1.42)	3.70 (1.60)	3.67 (1.57)
5th grade	5.12 (1.17)	1.92 (1.02)	4.80 (1.54)	5.31 (1.54)	3.42 (1.86)	3.72 (1.67)
Males	5.10 (1.02)	1.81 (1.05)	5.21 (1.39)	5.31 (1.47)	3.43 (1.99)	3.70 (1.32)
Females	5.15 (1.31)	2.01 (1.01)	4.48 (1.59)	5.31 (1.63)	3.41 (1.77)	3.73 (1.93)
6th grade	5.29 (0.99)	1.84 (0.91)	4.48 (1.43)	5.30 (1.50)	3.50 (1.61)	3.64 (1.69)
Males	5.16 (0.97)	1.96 (1.04)	4.75 (1.50)	5.40 (1.48)	3.41 (1.62)	3.84 (1.62)
Females	5.42 (1.00)	1.71 (0.76)	4.22 (1.32)	5.19 (1.52)	3.59 (1.60)	3.43 (1.75)
7th grade	4.96 (1.24)	2.03 (0.90)	4.23 (1.31)	5.49 (1.42)	3.87 (1.48)	3.52 (1.51)
Males	4.86 (1.40)	1.86 (0.75)	4.22 (1.43)	5.63 (1.36)	3.87 (1.55)	3.77 (1.66)
Females	5.01 (1.16)	2.12 (0.97)	4.24 (1.25)	5.42 (1.44)	3.86 (1.45)	3.38 (1.42)
8th grade	5.25 (1.18)	2.01 (1.11)	4.20 (1.39)	5.71 (1.25)	3.81 (1.62)	3.32 (1.47)
Males	4.90 (1.30)	2.12 (1.23)	4.01 (1.47)	5.49 (1.29)	3.57 (1.69)	3.63 (1.34)
Females	5.46 (1.06)	1.95 (1.04)	4.30 (1.34)	5.84 (1.21)	3.94 (1.58)	3.14 (1.51)
9th grade	5.14 (1.07)	2.38 (1.07)	3.93 (1.25)	5.54 (1.41)	3.76 (1.55)	3.82 (1.55)
Males	4.96 (1.20)	2.13 (1.08)	3.67 (1.11)	5.30 (1.40)	3.79 (1.70)	3.64 (1.52)
Females	5.33 (0.89)	2.64 (1.02)	4.19 (1.36)	5.78 (1.39)	3.74 (1.40)	4.00 (1.59)
10th grade	5.73 (0.83)	2.35 (0.98)	4.09 (1.21)	5.42 (1.44)	3.65 (1.58)	4.08 (1.33)
Males	5.77 (0.78)	2.06 (0.87)	4.24 (1.17)	5.22 (1.33)	3.60 (1.57)	3.93 (1.37)
Females	5.69 (0.87)	2.54 (1.01)	3.99 (1.24)	5.56 (1.52)	3.69 (1.61)	4.18 (1.31)
11th grade	5.78 (0.89)	2.33 (1.14)	4.45 (1.54)	5.32 (1.39)	3.91 (1.58)	4.49 (1.49)
Males	5.51 (1.01)	2.35 (1.30)	4.39 (1.62)	5.11 (1.17)	4.14 (1.89)	4.69 (1.44)
Females	6.04 (0.71)	2.32 (0.99)	4.50 (1.50)	5.53 (1.58)	3.68 (1.23)	4.29 (1.56)

Table 4

Cohen's *d* Values for Grade Differences on Helping Others Strategy Scores

	5th Grade	6th Grade	7th Grade	8th Grade	9th Grade	10th Grade	11th Grade
5th Grade							
6th Grade	.19						
7th Grade	.08	.29					
8th Grade	.13	.04	.23				
9th Grade	.04	.19	.16	.10			
10th Grade	.61	.46	.73**	.46	.61		
11th Grade	.13	.51	.76**	.50	.65	.07	

Note. **Post hoc value *****p* **< .01.**

Table 5

Cohen's *d* Values for Grade Differences on Denial of Giftedness Strategy Scores

	5th Grade	6th Grade	7th Grade	8th Grade	9th Grade	10th Grade	11th Grade
5th Grade							
6th Grade	.10						
7th Grade	.10	.22					
8th Grade	.08	.18	.02				
9th Grade	.43	.55**	.35	.34			
10th Grade	.44	.54*	.36	.35	.01		
11th Grade	.37	.48	.29	.28	.01	.04	

Note. **Post hoc values ****p* **< .05. *****p* **< .01.**

Table 6

Cohen's *d* Values for Grade Differences on Minimizing Focus on Popularity Strategy Scores

	5th Grade	6th Grade	7th Grade	8th Grade	9th Grade	10th Grade	11th Grade
5th Grade							
6th Grade	.08						
7th Grade	.21	.14					
8th Grade	.13	.05	.09				
9th Grade	.28	.22	.10	.09			
10th Grade	.24	.17	.04	.10	.05		
11th Grade	.14	.07	.06	.04	.15	.10	

Table 7

Cohen's *d* Values for Grade Differences on Denying Negative Impact on Popularity Strategy Scores

	5th Grade	6th Grade	7th Grade	8th Grade	9th Grade	10th Grade	11th Grade
5th Grade							
6th Grade	.01						
7th Grade	.12	.11					
8th Grade	.28	.28	.12				
9th Grade	.16	.15	.04	.12			
10th Grade	.07	.07	.04	.21	.08		
11th Grade	.01	.00	.11	.29	.16	.07	

Table 8

Cohen's *d* Values for Grade Differences on Conforming Strategy Scores

	5th Grade	6th Grade	7th Grade	8th Grade	9th Grade	10th Grade	11th Grade
5th Grade							
6th Grade	.03						
7th Grade	.26	.06					
8th Grade	.22	.20	.24				
9th Grade	.19	.17	.20	.03			
10th Grade	.11	.09	.17	.12	.08		
11th Grade	.27	.26	.26	.06	.10	.18	

Table 9

Cohen's *d* Values for Grade Differences on Hiding Giftedness Strategy Scores

	5th Grade	6th Grade	7th Grade	8th Grade	9th Grade	10th Grade	11th Grade
5th Grade							
6th Grade	.05						
7th Grade	.11	.06					
8th Grade	.23	.04	.55				
9th Grade	.09	.14	.20	.33			
10th Grade	.27	.31	.40	.54	.18		
11th Grade	.52	.56	.65*	.79**	.44	.29	

Note. ***$p < .05$. **$p < .01$.**

Table 10

Univariate *F* Ratios for Gender x Grade for Social Coping Strategies

Fixed Variables	Helping Others $F(1,563)$	Denial of Giftedness $F(1,563)$	Minimizing Focus on Popularity $F(1,563)$	Denying Negative Impact on Acceptance $F(1,563)$	Conforming $F(1,563)$	Hiding Giftedness $F(1,563)$
Gender	7.04**	0.96	0.53	0.55	0.80	3.84
Grade	5.00***	3.82**	0.77	0.91	1.01	3.42**
Gender x Grade	0.80	1.93	1.49	1.15	0.90	0.90

Note. $^{**}p < .01$. $^{***}p < .001$.

.007), and the Minimizing Focus on Popularity ($F[6,558] = 3.24$, $p = .004$) scales. Table 10 displays the univariate *F* ratios for each social coping strategy resulting from the MANOVA.

Gender Differences

There was only one social coping strategy for which a gender difference emerged with this sample. Specifically, girls ($M = 5.35$) were more likely to endorse the Helping Others strategy than boys ($M = 5.11$), but the effect size of this difference was small according to Cohen's (1988) standards ($d = .21$).

Grade Differences

To understand grade differences in students' use of social coping strategies, we conducted Bonferroni post-hoc tests of differences for the strategies that showed statistically significant grade differences on the MANOVA (i.e., Helping Others, Denial of Giftedness, Hiding Giftedness, and Minimizing One's Focus on Popularity). Specifically, 7th graders were significantly less likely to endorse Helping Others than 10th graders ($p = .001$, $d = .73$) and 11th graders ($p = .002$, $d = .76$). Sixth graders were significantly less likely to endorse the Denial of Giftedness strategy

than 9th graders (p = .005, d = .55) and 10th graders (p = .023, d = .54). Seventh and 8th graders were significantly less likely to endorse Hiding Giftedness than 11th graders (p = .018, d = .65 and p = .002, d = .79, respectively). Finally, fifth graders were significantly more likely to endorse Minimizing One's Focus on Popularity than ninth graders (p = .006, d = .62). No grade differences emerged in the remaining factors: Denying Negative Impact of Giftedness on Peer Acceptance and Conformity to Mask Giftedness.

Discussion

In general, the results revealed that the academically advanced adolescents in this and previous samples (Chan, 2003, 2004, 2005; Swiatek, 2001, 2002; Swiatek & Dorr, 1998), employed strategies that allowed them to manage the visibility of their giftedness in social contexts. Consistent with stereotype expectations, we found that females were somewhat more likely to report that they help others as a way of dealing with their giftedness, and, consistent with the findings of Chan (2005) and Swiatek (2001), we found that older students were also more likely to say that they engage in helping behaviors. Among the unique findings that emerged were: Older adolescents were significantly more likely to say they deny and hide their giftedness and less likely to say they minimize their focus on popularity as a way of dealing with their advanced abilities.

The first set of unique findings, that older students were more likely to deny and hide their giftedness than were younger students, could result from differences between the school, family, and peer contexts that older versus younger adolescents inhabit, as well as their differing developmental stages. As part of the developmental process, older adolescents typically identify with peers, have more independence from parents, and spend more time with peers than parents in school and extracurricular activities. By making themselves more similar to their wider range of peers by denying and hiding their giftedness in social situations,

these older students may feel they will have more success interacting with and identifying with that peer-base. Future studies should investigate adolescents who have varying levels of experience within homogeneous gifted settings in the way they deny and hide their giftedness to see if these grade differences, as well as gender differences, still emerge.

The next unique finding that emerged was that older adolescents were significantly less likely to report minimizing their focus on popularity as a way of dealing with their advanced abilities. Chan (2004, 2005) and Swiatek (2002), however, found the opposite. This discrepancy could be accounted for by the differences between instruments and factors used in each study (Chan, 2004, 2005; Swiatek, 2002). The assessment administered in all cases was the Social Coping Questionnaire; however, it varied in form from the 34- and 35-item iterations (Swiatek, 1995, 2001, 2002; Swiatek & Dorr, 1998) to the 17-item Chinese version (Chan, 2003, 2004, 2005). In addition, regarding the factor structure of the instrument used in each study, Swiatek's (2002) Minimizing One's Focus on Popularity subscale contained five items, whereas the subscale in the current study contained four (see Rudasill et al., in press). Taken together, it is possible, therefore, that the structure of the factors affected the composition of the final scales, which can account for the different results. Or, it may be that the findings regarding this aspect of social coping are not yet clear.

Finally, although Chan (2003, 2004) found that gifted adolescent males were more likely to minimize their focus on popularity and that gifted students in higher grades were less likely to use conforming strategies (Chan, 2005), neither of these findings were replicated in this study. This lack of replication could suggest age and gender differences between American and Chinese gifted students in their coping strategies, but again, we must generalize these results with caution because of the small to moderate size of the effects, as well as the differences in sample selection, assessment forms, and social contexts among these and previous studies.

All of the significant differences were associated with small to moderate effect sizes and an examination of the patterns across grade levels shows an erratic "up and down" pattern across grades and little differences between the genders (see Table 3). The best interpretation of the data from this sample is that grade and gender differences in social coping strategies may exist, but are minimal.

Limitations and Implications

These findings deviated somewhat from previous findings with this instrument, and thus, constitute unique contributions to the literature. However, readers must be cautious when interpreting the results. Although there were several findings of statistical significance across gender and grade differences, effect sizes were small to moderate. In addition, it is important to note that the internal consistency values for social coping strategy scores with this study and previous studies were not high (ranging from .57–.74 for the current study). Lower reliability indicates error in the measurement of social coping strategies, thus limiting the ability to detect real differences between gender and grade groups. Future studies of gifted students' social coping strategies should aim to increase reliability in the measurement of these constructs. Finally, the sample of gifted adolescents was not random; it comprised both high-ability and high-achieving students attending a summer enrichment program and did not represent a wide range of ethnic and socioeconomic diversity, which further limits the generalizability of the results.

The patterns were not informative in confirming prior findings of results from prior studies of American and Chinese samples. Consequently, the patterns of using coping skills are not yet clearly differentiated in the literature by grade or by gender, and caution should be exercised by parents, teachers, and administrators in making generalizations about differences by grade or gender in the use of coping strategies. Researchers should extend these studies to explore the ways that individual gifted and academically achieving males and females employ social coping

strategies not only as they age, but also as they navigate different educational and social contexts. Understanding these patterns in social coping strategy choice would not only provide support for or evidence against gender stereotypes pervasive in our society and differences between gifted students in different cultural contexts, it would also provide critical insight for both researchers and educators into the social cognition and behavior of gifted students in general.

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End Notes

1 It is not possible to calculate meaningful means of standard deviations on scores due to the wide variability of the sources of test scores. That is, schools submit available test scores, which are not consistent across students. In some cases, IQ tests are no longer administered at the student's school. However, students generally score above the 90th percentile on reading and mathematics achievement scores and on assessments of intellectual ability.

2 Multivariate *F* ratios were generated from Pillai's Trace statistic. Pillai's Trace statistics were .028, .154, and .068 for gender, grade, and gender x grade, respectively.