

# **Inviting One's Self and Inviting Others: Influence of Gender, Grade Level, and Gender Orientation**

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*The purpose of this study was to provide a developmental perspective on students' invitations of self and of others using data obtained from cohort groups of students ranging from Grades 6 to 8, to determine whether invitations differ as a function of gender, and to discover whether these gender differences can be accounted for by differences in gender orientation beliefs (N=528). Inviting one's own self decreased as students progressed from Grade 6 to 8. Girls were more inviting of others than were boys, but this difference was rendered nonsignificant when gender orientation beliefs were controlled. Instead, girls and boys with a feminine orientation were more inviting of others. Findings support the contentions of researchers who have argued that gender differences in academic self-beliefs may be a function of the stereotypical beliefs that students hold about gender, rather than of gender.*

When invitational theory first emerged from the collective swell of the humanistic movement, its primary focus was giving teachers the tools to cultivate and nurture positive self-concepts in students. As time passed and researchers revised their views of academic functioning, this "teacher-as-agent" approach evolved into a more reciprocal model of functioning which viewed schools as "functioning wholes" and networks of human communication.

In this more recent conceptualization, the entire environment, including teachers, students, administrators, and the community at large, serve as "signal systems" which send messages to students. Inviting messages tell students that they are able, valuable, and responsible, and invite them to participate in their own development. Disinviting messages, on the other hand, subdue students' creativity and inform them that they are incapable, worthless, and that they cannot participate in their own development. This reciprocal view places communication (the role of talking and listening) at the center of invitational theory, and suggests that individuals can be inviting of themselves and others with the messages that they send and receive. "With its emphasis on reciprocal communication, an inviting message is an effort to establishing a cooperative interaction" (Purkey & Novak, 1996, p. 10).

With its roots in perceptual psychology, this interactive view in which individuals interpret sensory information, collectively construct meaning, and regulate themselves partly through self-regulating talk is consistent with prominent views of psychological functioning. For instance, the past few years have seen a gradual shift in the educational community from a Piagetian model of learning in which students independently construct meaning, to a more Vygotskian model in which language and socio-cultural factors mediate thought. This view of individuals "co-constructing" meaning through social interaction is consistent with Purkey and Novak's (1996) observation that "individuals help create one another" (p. 11).

Researchers have previously situated the invitational construct within broader theoretical networks that emphasize the influence of social factors and the interpretation of social messages. For instance, Pajares (1994) made connections between invitational theory and Bandura's (1986) social cognitive theory. He concluded that inviting messages help create and strengthen self-efficacy beliefs whereas disinviting messages weaken self-efficacy. Pajares and Zeldin (1999) further strengthened the relationship with social cognitive theory when they investigated the self-efficacy beliefs of

women in mathematics and science careers. They reported that invitations were not only instrumental in the development of self-efficacy, but that invitations from others re-emerged as self-invitations that women used down the road. The clear pattern to emerge from these various lines of inquiry is that the social messages that students receive in the form of invitations and disinvitations powerfully influence the beliefs that they develop. These beliefs then filter experience, and serve as guides for future behaviors (Bandura, 1997; Pajares, 1992).

To assess the invitations that students report sending to themselves and to others, Wiemer and Purkey (1994) created the Inviting/Disinviting Index (IDI). Valiante and Pajares (1999) conducted exploratory factor analysis and reported that the inviting self and inviting others scales of the IDI possess internal consistency and provide a reliable assessment of invitations.

When Valiante and Pajares (1999) investigated gender and grade level differences in the invitations students reported sending themselves and others, they discovered that girls and boys did not differ in the degree to which they report inviting themselves, but girls were more inviting of others. This was consistent with theoretical contentions regarding the relational and individual postures to which boys and girls are differently socialized, the view that girls perceive themselves as the center of an intricate relational web, and findings that girls function from an ethic that is built on care and on social responsibility (Gilligan, 1982; Noddings, 1988). Findings were not consistent with those of Wiemer and Purkey (1994), who found no gender differences in invitations. However, their respondents were counselor education graduate students, so it is likely that a difference in samples account for discrepant findings. Valiante and Pajares also found that Grade 6 students reported being more inviting of themselves and of others than were Grade 8 students. This finding was consistent with results obtained by various researchers regarding the transition through middle school. In general, researchers report that middle-school students suffer a decrease in self-beliefs as they make their way through the

middle grades (Bandura, 1997; Pajares, 1997; Wigfield, Eccles, MacIver, Reuman, & Midgley, 1991).

But gender differences in self-beliefs can be confounded by other factors, however. For example, numerous researchers have argued that some gender differences in social, personality, and academic variables may actually be a function of gender orientation (the stereotypic beliefs about gender that students hold) rather than of gender (see Eisenberg, Martin, & Fabes, 1996). Gender differences in variables such as moral voice tend to disappear when gender stereotypical beliefs are controlled (Harter, Waters, & Whitesell, 1997). Eccles's (1987) model of educational and occupational choice posits that cultural milieu factors such as students' gender role stereotypes are partly responsible for differences in course and career selection and in confidence beliefs and perceived value of tasks and activities.

To determine the degree to which gender differences in self-beliefs may be a function of gender stereotypic beliefs rather than of gender, researchers have asked middle school students to report how strongly they identified with characteristics stereotypically associated with males or females in American society. They have reported that gender orientation beliefs rendered nonsignificant differences favoring girls in their self-efficacy beliefs about their language arts competence and about the use of self-regulatory practices. Instead, a feminine orientation was primarily associated with self-efficacy beliefs. These results foreshadow the possibility that gender differences found on the invitations that students send others may be accounted for by differences in the beliefs that students hold about their gender rather than by their gender per se.

In this study, we first aim to replicate the findings of Valiante and Pajares (1999) by investigating gender and grade level differences in the invitations that middle school students send to themselves and to others. Second, and the primary focus of our study, if gender differences are detected, we seek to discover whether these differences are a function of the stereotypic beliefs that students hold about gender rather than of gender.

## **Method**

### **Participants and Procedures**

Participants were 529 students in a public middle school in the Northeast (255 girls, 274 boys; 171 Grade 6, 176 Grade 7, 182 Grade 8). The socioeconomic status of the school and of the area that the school served was largely middle class, and students were primarily White. Students' ages ranged from 11 to 16. Instruments were group administered in individual classes during one period. All items were read aloud by the first author. The study took place during the second semester of the academic year.

### **Instruments and Variables in the Study**

To assess Invitations of Self and of Others, we used an adapted version of the Inviting/Disinviting Index (Wiemer & Purkey, 1994) along the lines suggested by Valiante and Pajares (1999) as a result of their factor analysis. Valiante and Pajares contended that the difference between invitations and disinvitations can be explained by the reverse scoring of each of the items. Students who disagree that they are disinviting on a particular item are actually reporting that they are strongly inviting (a response of “never” to “I don’t pay much attention to other people’s needs” indicates the same thing as a response of “always” to an item that could be positively phrased “I pay attention to other people’s needs.”). They concluded that being inviting and disinviting can be viewed as mirror images and recommended that removing the negative wording would help reduce the instability in the disinviting items. Moreover, they found that Cronbach’s alpha coefficients for the inviting scales had modestly higher internal consistency (.72) than did the disinviting scales (.69 for disinviting self; .63 for disinviting others).

Consequently, our adapted version of the IDI consisted of two scales each with six items (see Appendix 1), one scale measuring

being inviting to one's own self and the other measuring being inviting to others. In addition, we altered item wording in line with the recommendations of Valiante and Pajares (1999) and increased the 5-point Likert response scale to 6 points that ranged from 1 (never) to 6 (always) (see Albaum, 1997, for rationale on increasing points on a Likert scale). Test-retest reliability has ranged from .68 to .83 for the scales of the original IDI (Wiemer & Purkey, 1994) and .41 to .59 for those of the adapted version (Schmidt, Shields, & Ciechalski, 1998). We conducted exploratory factor analysis of our adapted IDI and found that two factors underlay items. The first factor included the six inviting others items, with factor loadings ranging from .36 to .70. The second factor included the six inviting self items, with factor loadings ranging .42 to .82. Interfactor correlation was .54. Cronbach's alpha coefficients were .81 for the inviting self scale and .76 for inviting others.

Gender Orientation beliefs were assessed by asking students to report how strongly they identify with characteristics stereotypically associated with males or females in American society (see Harter et al., 1997). Early on, researchers used gender orientation as a unidimensional construct measured using a single score such that low masculinity indicated high femininity (see Constantinople, 1973). Modern researchers agree that gender orientation is not unidimensional. Rather, they contend that masculinity and femininity are orthogonal variables that represent two distinct dimensions of individuals' self-conceptions. An individual can possess both high masculinity and high femininity (termed androgyny) or, conversely, low masculinity and low femininity (termed undifferentiated) (Ballard-Reisch & Elton, 1992; Harter et al., 1997). For the present study, gender orientation was assessed with items used by Pajares and Valiante (2001). These items were first used in various studies by Harter and her colleagues (see Harter et al., 1997) and adapted primarily from the short form of the Children's Sex Role Inventory (CSRI) (Boldizar, 1991) (sample masculinity item: "I like building and fixing things"; sample femininity item: "I am a warm person and express these feelings to those I feel close to"). Pajares and Valiante reported that factor loadings for the 7

femininity items ranged from .55 to .80; loadings for the 7 masculine items ranged from .43 to .66. The interfactor correlation was -.09. Cronbach's alpha reliability was .76 for masculinity and .88 for femininity. In the present study, we obtained .76 for masculinity and .86 for femininity.

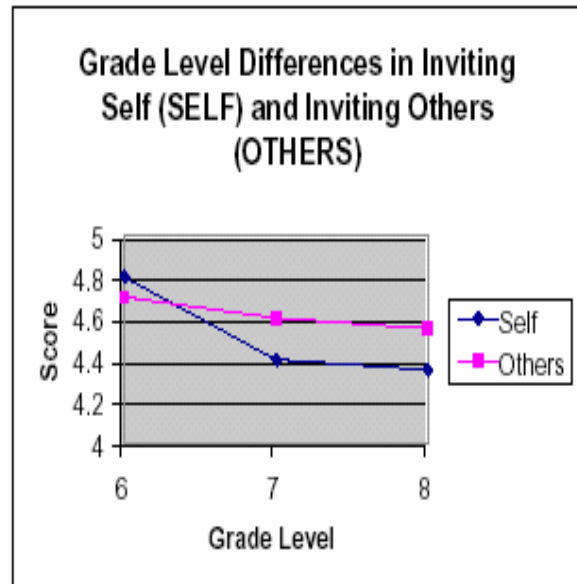
### Analyses

To determine whether inviting self and inviting others differ as a function of grade level and gender, multivariate analysis of variance (MANOVA) was conducted. This was supplemented by a trend analysis. To determine whether gender differences in inviting self and inviting others could be explained by gender orientation beliefs, MANCOVA was conducted with femininity and masculinity as covariates.

## **Results**

Means and correlations for the variables in the study are presented by gender on Table 1. The MANOVA conducted to discover gender and grade level differences in the invitations detected significant multivariate effects both for gender, Wilks'  $\lambda = .94$ ,  $F(2,522) = 17.18$ ,  $p < .0001$ , and for grade level, Wilks'  $\lambda = .96$ ,  $F(4,1044) = 5.99$ ,  $p < .0001$ . Their interaction was nonsignificant. Analyses of variance revealed gender differences favoring girls on inviting others,  $F(1,523) = 22.10$ ,  $p < .0001$ . Girls and boys did not differ as regards their self-invitations. Results are illustrated on Table 2. As can be observed on Figure 1, grade level differences revealed that students' self-invitations decreased steeply from Grade 6 to Grade 8. Trend analyses confirmed the significant linear trend,  $F(1,523) = 19.81$ ,  $p < .0001$ .

### Figure 1



The MANCOVA conducted to discover whether gender differences were a function of gender orientation also included grade level, masculinity and femininity as covariates, and the interactions of gender and grade level, gender and masculinity, and gender and femininity. All interactive effects proved nonsignificant. Consequently, the interactive effects of gender with the covariates were removed from the follow-up ANCOVAs. There were multivariate effects for masculinity, Wilks'  $\lambda = .95$ ,  $F(2,519) = 14.67$ ,  $p = .0001$ , femininity, Wilks'  $\lambda = .64$ ,  $F(2,519) = 147.96$ ,  $p = .0001$ , and grade level, Wilks'  $\lambda = .96$ ,  $F(4,1038) = 5.66$ ,  $p < .0001$ . As we expected, the multivariate effect for gender was nonsignificant, supporting our contention that gender differences in inviting others are nullified when gender orientation beliefs are controlled.

ANCOVA results confirmed that gender differences previously found in inviting others were rendered nonsignificant when controls for femininity and masculinity were included in the model. Instead, a feminine orientation had a pronounced effect on inviting



others ( $\omega^2 = .32$ ),  $F(1,520) = 291.65$ ,  $p < .0001$ . The effect of masculinity, though significant, was negligible ( $\omega^2 = .01$ ),  $F(1,520) = 7.07$ ,  $p = .008$ . As expected, gender orientation beliefs had no influence on grade level differences. Results are provided on Table 3.

## Discussion

We had three aims in this study. First, we wanted to obtain a developmental perspective on students' invitations of self and of others using data obtained from cohort groups of students ranging from Grades 6 to 8. As we noted earlier, the middle school years are critical in the development of students' self-beliefs. Second, we wanted to determine whether invitations differ as a function of gender. And third, we hoped to discover whether these gender differences can be accounted for by differences in gender orientation beliefs, the stereotypical beliefs that students hold regarding masculine and feminine behavior in Western society.

Trend analysis revealed a significant downward trend from Grade 6 to Grade 8 in the invitations that students report sending themselves. This pattern replicates previous findings that generally show a decrease in self-confidence and self-beliefs as students progress through middle school (Bandura, 1997; Pajares, 1997; Wigfield et al., 1991) and replicates the findings of Valiante and Pajares (1999), who also reported that Grade 6 students were more inviting of themselves than were students in Grades 7 or 8.

What is it about the transition from late childhood to early adolescence that should result in a marked decrease in students being self-inviting, self-forgiving, and self-celebratory? In 1902, Charles Horton Cooley introduced the metaphor of the *looking-glass self* to illustrate the idea that our sense of self is primarily formed as we develop self-beliefs that have been created by our perceptions of how others perceive us. That is, the appraisals of others act as mirror reflections that provide the information we use to define our own sense of self. Hence, we are in very great part what we think

other people think we are. For Cooley, the growth of a child's sense of self is deeply influenced by the beliefs and actions of others. This, then, is the great blessing or tragedy of self construction and development—that we become the kind of person we see reflected in the eyes of others.

Cooley's (1902) conception of the looking-glass self brought to the forefront of psychological thought the critical role of social comparisons in the development of self. If Erik Erikson (1968) is right, the start of a adolescence in the West marks the beginning of a powerful quest for self-identity. As they seek this self-definition, young adolescents switch their gaze from their parents' mirrors to those of their peers. It is not surprising that these newly reflected images are less forgiving and more demanding. In school, the start of adolescence also marks the start of social-comparative practices that can shake the foundation of a nascent identity. These practices include standardized, normative assessments, ability grouping and lock-step instruction, and the use of competitive grading practices. In all, the new social comparisons and schooling practices work in tandem to diminish the positive self-views with which young people enter adolescence.

As we noted earlier, motivation researchers have reported that students academic self-beliefs decrease in the transition from elementary school to middle school (Wigfield et al., 1991). Pajares and Valiante (in press) recently found that students experience a loss of confidence in their self-regulatory practices as they progress through middle school. In general, researchers have provided a portrait of early adolescence that is characterized by loss of confidence and self-value. If our findings are correct, it seems that early adolescents also become less inviting of themselves as they begin their search for self-identity.

Effective self-regulation requires students to engage in continual self-observation, self-evaluation, and self-correction. The capability for self-influence through the use of self-regulatory strategies gives individuals the power to shape their own destinies, but

only insofar as they have the appropriate cognitive and motivational tools to bring that influence to bear. It is on this front that invitational theory can make powerful contributions, for being inviting to oneself is in itself a cognitive and motivational technique that has been associated with optimism, self-efficacy, value of school, and a mastery approach to learning (Pajares, 2001). In light of these findings, we urge teachers to help students learn effective self-regulatory skills, and to make being inviting of themselves a key component of the skills being taught. Modeling what might be called "self-regulating invitations" is one way that teachers may help to reverse the negative developmental trend seen in our sample of middle school students.

Of course, educators have long known that, when classroom structures are individualized and instruction is tailored to students' academic capabilities, social comparisons are minimized and students are more likely to gauge their academic progress according to their own standards rather than compare it to the progress of their classmates. To some degree, students will inevitably evaluate themselves in relation to their classmates regardless of what a school or teacher does to minimize or counter these comparisons. In cooperative and individualized learning settings, however, students can more easily select the peers with whom to compare themselves. Individualized structures that lower the competitive orientation of a classroom and school are more likely than traditional, competitive structures to increase confidence and raise students' perceived self-value.

Consistent with the findings of Valiante and Pajares (1999), we detected no differences in the degree to which boys and girls were inviting of themselves. Girls were more inviting of others than were boys, but these differences were rendered nonsignificant when gender orientation beliefs were accounted for. Instead, a feminine orientation had a powerful relationship with being inviting to others.

Researchers have long observed that fields in the areas of mathematics, science, and technology are typically viewed by students as being within a male-domain (see Eisenberg et al., 1996). In these areas, a masculine orientation is associated with confidence and achievement because masculine self-perceptions are themselves imbued with the notion that success in these areas is a masculine imperative. Conversely, the process of writing is associated with a feminine orientation in part because writing is viewed by most students, particularly younger students, as being primarily within a female-domain. As a consequence, a feminine orientation is associated with motivational beliefs that are related to success in writing.

It seems reasonable to suggest that being inviting to others is viewed by students, particularly early adolescents, as a feminine concern. Socialization practices are responsible for girls being more likely than boys to perceive themselves as relational and relationship-oriented, to function from an ethic of care rather than an ethic of justice (Gilligan, 1982; Noddings, 1988). Consequently, being inviting of others is part of how being feminine is stereotypically construed, i.e., as being caring, nurturing, inclusive, and forgiving of others.

Our findings suggest that both girls *and* boys will be more inviting of others to the degree that they espouse what is today considered a traditional feminine orientation. That is, to the degree that they believe themselves capable of caring about others. We believe that a girl who eschews this injunction is as unlikely to care for others as is a boy who espouses a traditional masculine orientation. Conversely, boys who have been socialized toward an ethic of caring and social responsibility are as likely to be inviting of others as are girls who espouse a traditional feminine orientation.

Invitational theorists contend that optimal personal and academic functioning depends on the messages that individuals send and receive, and that everything in schools serves as signal sys-

tems that invite students to succeed or, conversely, open the doors to failure. Invitations and disinvitations contain both explicit and implicit messages about participation, value, and responsibility. No doubt they are also imbued with messages about gender and gender appropriate behaviors. We believe that one important challenge before parents and educators is to alter students' views toward caring and social responsibility so that they are perceived as relevant and valuable both to male and to female domains. A challenge for all educators, and for the broader culture, is to continue to expound and model gender self-beliefs that encompasses both the feminine expressiveness and the masculine instrumentality that are critical to a balanced self-view.

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**Table 1*****Means, Standard Deviations, and Zero-order Correlations for Variables in the Study by Gender***

	<i>Girls</i>							<i>Boys</i>	
	<b>M</b>	<b>SD</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>		<b>SD</b>	<b>M</b>
1. Inviting Self	4.48	0.97	--	.55***	.33***	.41***		1.02	4.52
2. Inviting Others	4.78	0.74	.55***	--	.25***	.62***		0.83	4.46
3. Masculinity	4.32	0.84	.33***	.25***	--	.22**		0.69	5.17
4. Femininity	5.01	0.76	.41***	.62***	.22**	--		1.03	4.34

Note: Means for inviting self, inviting others, masculinity, and femininity reflect the 6 points of the Likert scale. \* $p < .05$ , \*\* $p < .001$ , \*\*\* $p < .0001$



**Table 2**

Analysis of Variance of Invitations of Self and Invitations of Others  
as a Function of Gender and Grade Level.

Dependent Variable: Inviting Self					
Source	df	SS	MS	<i>F</i>	$\omega^2$
Gender	1	.15	.15	.16	.00
Grade Level	2	21.73	10.86	11.37***	.04
Gender*Grade level	2	3.78	1.89	1.98	.00
Error	523	499.85	.96		
Total	528	525.47			
Dependent Variable: Inviting Others					
Source	df	SS	MS	<i>F</i>	$\omega^2$
Gender	1	13.89	13.89	22.10***	.04
Grade Level	2	1.50	.75	1.19	.00
Gender*Grade level	2	.76	0.38	.61	.00
Error	523	328.55	.63		
Total	528	344.84			

Note: Model R-square for Inviting Self = .05; for Inviting Others = .05.

\* $p < .05$ . \*\* $p < .001$ . \*\*\* $p < .00001$

**Table 3**

Analysis of Covariance of Invitations of Self and Invitations of Others as a Function of Gender and Grade Level, with Masculinity and Femininity as Covariates.

Dependent Variable: Inviting Self					
Source	df	SS	MS	<i>F</i>	<sup>2</sup>
Gender	1	.21	0.21	0.28	.00
Grade level	2	15.82	7.91	10.51***	.03
Gender*Grade level	2	2.48	1.24	1.65	.00
Masculinity	1	21.89	21.89	29.07***	.04
Femininity	1	57.90	57.90	76.89***	.11
Error	520	391.55	0.75		
Total	527	517.43			
Dependent Variable: Inviting Others					
Source	df	SS	MS	<i>F</i>	<sup>2</sup>
Gender	1	.46	.46	1.20	.00
Grade level	2	1.21	.61	1.58	.00
Gender*Grade level	2	.67	.33	.87	.00
Masculinity	1	2.71	2.71	7.07*	.01
Femininity	1	111.72	111.72	291.65***	.32
Error	520	199.19	.38		
Total	527	343.94			

Note: Model R-square = .25 for inviting self; .42 for inviting others. \* $p < .05$ . \*\* $p < .001$ . \*\*\* $p < .00001$ .