The Adolescent Masculinity Ideology in Relationships Scale

Development and Validation of a New Measure for Boys

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This article presents a new scale to measure adolescent boys' internalization of masculine norms as evidenced by their attitudes and beliefs about what constitutes appropriate behavior for males within interpersonal relationships. Framing masculinity ideology within a relational paradigm, the theoretical foundations of the Adolescent Masculinity Ideology in Relationships Scale (AMIRS) emphasize that it is through and within relationships that masculine norms become personally meaningful and directly consequential to adolescent boys. Designed specifically for use with adolescents, the AMIRS derives from adolescent boys' narratives about their perceptions and experiences of masculinity, particularly in their peer relationships. Correlation and regression analyses indicate a negative association between the AMIRS and self-esteem, suggesting the double-edged sword of masculinity. That is, despite the advantages of status, alignment with hegemonic masculinity may hinder adolescent boys' psychological health, for instance, by limiting the ways that they are able to express themselves and engage in their interpersonal relationships.

Key words: boys; adolescence; masculinity; gender roles; socialization, relationships; development

Over the past two decades, feminist researchers have highlighted ways in which aspects of conventional norms of femininity can contribute to the social and psychological oppression of girls and women (Bartky 1990; Brownmiller 1984; Gilligan 1982, 1990; Miller 1976; Rogers 1994) and have

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raised questions as to whether aspects of conventional norms of masculinity may similarly have negative consequences for boys and men, despite the social privileges of being male (Bergman 1995; Kimmel 1987; Kimmel and Messner 1989; Pleck 1981; Seidler 1998). While historians and anthropologists assert that no single pattern of masculinity is found everywhere and that multiple forms of masculinity often exist within as well as between groups, Connell (1996) points out that within most groups, certain masculinities are more honored than others such that a hegemonic masculinity, or "the form of masculinity that is culturally dominant in a given setting" (p. 209), becomes evident. As institutionalized within European American, middle-class culture in the United States, hegemonic masculinity tends to emphasize physical toughness, emotional stoicism, projected self-sufficiency, and heterosexual dominance over women (Stearns 1990). It is boys' socialization toward this conception of masculinity that clinicians and researchers in recent discourse suggest can be detrimental to boys' emotional and relational development and overall psychological health (Kindlon and Thompson 1999; Pollack 1995, 1998).

For instance, Kindlon and Thompson (1999) propose that as emotional stoicism is regarded as a defining feature of masculinity, boys are "emotionally miseducated" through their socialization toward masculine norms, or gender socialization, and thereby rendered emotionally illiterate in the sense that they become unable to articulate their own feelings or recognize other people's feelings. Similarly, Pollack (1995, 1998) argues that boys' separations from their mothers during early childhood in the name of masculine self-sufficiency, although considered normative in boys' gender socialization, is experienced as a "traumatic abrogation of their early holding environment" (Pollack 1995, 35) that exacerbates their struggles as men to develop close, intimate relationships. Likewise, Levant (1995) and Bergman (1995) suggest that as a result of their gender socialization, males become "alexithymic," or unable to put emotions into words, and separated from ways of being in a relationship that are conducive to establishing closeness and intimacy, respectively.

However, this literature is somewhat limited in that it is largely based on clinical work with boys and men. Adopting a diagnostic approach, this recent discourse often starts from the premise that there is something wrong psychologically with boys and then focuses on explaining how boys' socialization toward masculine norms (and/or boys' biological makeup) contributes to the problem. Few empirical research studies adopt a developmental approach when examining normative processes and experiences, particularly from boys' own perspectives, that are associated with boys' gender socialization (Chu 1997). While clinical work with boys provides an important perspective on how boys may become emotionally and relationally constrained as a result of their gender socialization, more work is needed to explore individ-

ual differences in the ways that masculine norms manifest in boys' lives and influence their decisions.

Assessing Masculinity and Masculinity Ideology

We have developed a new scale to measure the extent to which adolescent boys align themselves with hegemonic masculinity within the contexts of their interpersonal relationships. According to Thompson and Pleck (1995), empirical research on masculinity has typically adopted one of two perspectives on masculinity. First, a trait perspective starts from the premise that masculinity is located in individuals to varying degrees and that male identity is evidenced by masculine traits or self-attributions of personal qualities and social behaviors that are considered masculine. Second, a normative perspective conceptualizes masculinity in terms of culturally constructed social roles and focuses on a person's attitudes toward, or level of endorsement of (i.e., agreement or disagreement with), male roles. Our scale adopts the latter perspective and focuses in particular on masculinity ideology.

As introduced by Pleck, Sonenstein, and Ku (1993a), masculinity ideology refers to "beliefs about the importance of men adhering to culturally defined standards for male behavior" (p. 85). Expanding on the more neutral construct of attitudes toward male roles, masculinity ideology conveys the internalization as well as endorsement of cultural beliefs systems about masculinity and male gender (Pleck 1995, 19). That is, masculinity ideology reflects not only an individual's general conceptions of what men are like (e.g., cultural norms) and how men should act (e.g., cultural expectations) (Pleck, Sonenstein, and Ku 1994a) but also the extent to which an individual internalizes the need for males to accommodate such norms and expectations. Thus, masculinity ideology serves as the "individual-level construct that links individual males to their culture's construction of masculinity" (Pleck, Sonenstein, and Ku 1993a, 89). Furthermore, masculinity ideology (and attitudes toward male roles) has been shown to be empirically distinct from ideologies and attitudes about gender differences and gender relations as well as femininity ideologies (and attitudes toward female roles) (Gradman 1990; Thompson and Pleck 1995, 1986). Thompson and Pleck (1995) explain that while these various gender ideologies are certainly connected, it is possible, for instance, for an individual to "hold a progressive attitude toward women (e.g., believing that working mothers' employment is quite acceptable) while simultaneously holding a conservative attitude toward men (e.g., believing that men should remain the primary family breadwinner)" (p. 132).

The most prominent measure of masculinity ideology is the Male Role Attitudes Scale (MRAS; Pleck, Sonenstein, and Ku 1994a), an 8-item scale that conceptualizes masculinity in terms of attitudes toward male roles and

measures “the perceived importance of men fulfilling traditional masculinity standards” (Thompson and Pleck 1995, 146). As assessed by the MRAS, masculinity ideology has been shown to be associated with risk-related social behaviors, including school problems, substance use, and delinquency among adolescent boys (Pleck, Sonenstein, and Ku 1994b; Pleck et al. 1996), as well as sexual conduct, including having a less intimate relationship at last intercourse, having unprotected sex, and “tricking” or forcing someone into having sex (Pleck, Sonenstein, and Ku 1993b).

According to Pleck’s (1995) theory of gender role strain, masculinity ideology may also be linked to psychological health and adjustment. Building on the work of Goffman (1963) and Mead (1949), Pleck (1981) emphasizes that social constructions of ideal masculinity are seldom, if ever, fully attained, such that males are destined to strive toward standards in relation to which they will always fall short. Pleck (1995) suggests that as a result of this inevitable gender role discrepancy, individual males may experience negative social feedback and/or internalized negative self-judgments that can result, for example, in low self-esteem. The positive relationship between masculine traits, as assessed by such scales as the Bem Sex Roles Inventory (BSRI; Bem 1974), and self-esteem has been well documented (Cate and Sugawara 1986; Long 1989; Marsh, Antill, and Cunningham 1987; Spence and Helmreich 1978). Although a few studies have found a significant relationship between attitudes toward gender roles—particularly, attitudes toward female roles—and self-esteem (Logan and Kaschak 1980; Valentine 1998; Pryor 1994), the relationship between attitudes toward male roles, including masculinity ideology, and self-esteem remains virtually unexplored.

In introducing the construct of masculinity ideology and exploring its correlates, Pleck, Sonenstein, and Ku (1993a) begin to highlight ways in which masculine norms can influence boys’ social behaviors and psychological health. However, whereas Pleck, Sonenstein, and Ku tend to focus on how individual boys develop a sense of being adequately masculine (e.g., “man enough”) through self-comparisons to culturally constructed male norms, we wanted to explore how individual boys respond (e.g., resist and conform) to male norms that manifest specifically within the more immediate contexts of interpersonal relationships. To this end, we created a new scale that expands upon Pleck, Sonenstein, and Ku’s construct of masculinity ideology by framing it within a relational paradigm.

Empirical and Theoretical Roots of the AMIRS

A relational framework highlights the centrality of relationships in people’s lives and experiences and emphasizes that human development and psychology do not occur in isolation with the option of having relationships

but are inextricably embedded in relationships with other people (Gilligan 1982; Jordan 1992; Miller 1976, 1994). By considering girls' development and gender socialization through a relational framework, researchers discovered evidence of girls' conflict, resistance, and compromise during early adolescence when heightened pressures to accommodate cultural prescriptions of gender-appropriate behavior jeopardize their ability to engage authentically in their interpersonal relationships (Brown and Gilligan 1992; Gilligan, Rogers, and Tolman 1991; Taylor, Gilligan, and Sullivan 1995).

Although initially based on work with girls and women, a relational paradigm has since been successfully applied to the study of boys (Chu 1999; Way 1997) and men (Bergman 1995). Infant research has shown that both boys and girls demonstrate a fundamental capacity and primary desire to establish close, meaningful relationships with other people (Stern 1985; Trevarthan 1979; Tronick and Gianino 1986; Weinberg and Tronick 1996). In contrast to deficit models that suggest boys' emotional and relational shortcomings as compared to girls' (Gurian 1998), a relational framing of boys' development reveals that boys are not inherently less capable than girls of being emotionally attuned and relationally responsive (Chu 1998; Way 1998). There is evidence of boys' resistance during early childhood (Chu 2000) and adolescence (Way 1998) when boys' perceptions of their relational, social, and cultural realities, which include constructions of gender, constrain their possibilities to know, express, and engage themselves fully in their relationships. As with girls (Miller and Stiver 1997), it is often for the sake of preserving relationships and participating socially that boys yield to pressures to comply with masculine norms, sometimes at the cost of disconnecting from themselves and others (Chu 2000).

Thus, we designed the Adolescent Masculinity Ideology in Relationships Scale (AMIRS) to incorporate the fact that it is often through and within the contexts of interpersonal relationships that masculine norms are introduced, reinforced, incorporated, and perpetuated in ways that become personally meaningful and directly consequential to adolescent boys (Chu 1999). Developed to correspond to the Adolescent Femininity Ideology Scale for girls (Tolman and Porche 2000), the AMIRS is intended to measure the extent to which adolescent boys internalize, in terms of resisting as well as conforming to, hegemonic masculinity, as evidenced by their attitudes and beliefs about what constitutes appropriate behaviors for males within the contexts of their interpersonal relationships. Most items constituting the Male Role Attitudes Scale (MRAS; Pleck, Sonenstein, and Ku 1994a) also refer directly or implicitly to relational contexts ("A man always deserves the respect of his wife and children"). However, what distinguishes the AMIRS from the MRAS is that its items focus less on the absolute need for power and privilege in relationships; rather, it suggests how the need to maintain the appearance of having power and privilege—for instance, through displays of dominance and stoicism—may hinder closeness and intimacy in relation-

Table 1:
Items Constituting the MRAS and the AMIRS

Male Role Attitudes Scale (MRAS)
1. It is essential for a guy to get respect from others.
2. A man always deserves the respect of his wife and children.
3. I admire a guy who is totally sure of himself.
4. A guy will lose respect if he talks about his problems.
5. A young man should be physically tough, even if he's not big.
6. It bothers me when a guy acts like a girl.
7. I don't think a husband should have to do housework.
8. Men are always ready for sex.

Adolescent Masculinity Ideology in Relationships Scale (AMIRS)
1. It's important for a guy to act like nothing is wrong, even when something is bothering him.
2. In a good dating relationship, the guy gets his way most of the time.
3. I can respect a guy who backs down from a fight.[a]
4. It's ok for a guy to say no to sex.[a]
5. Guys should not let it show when their feelings are hurt.
6. A guy never needs to hit another guy to get respect.[a]
7. If a guy tells people his worries, he will look weak.
8. I think it's important for a guy to go after what he wants, even if it means hurting other people's feelings.
9. I think it is important for a guy to act like he is sexually active even if he is not.
10. I would be friends with a guy who is gay.[a]
11. It's embarrassing for a guy when he needs to ask for help.
12. I think it's important for a guy to talk about his feelings, even if people might laugh at him.[a]

NOTE: Range for each item is 1 (*disagree a lot*) to 4 (*agree a lot*)
a. Item is reversed for scoring.

ships ("In a good dating relationship, the guy gets his way most of the time." "Guys should not let it show when their feelings are hurt.") (see Table 1).

HYPOTHESES

We intended for the AMIRS to reflect a theoretically cohesive, unidimensional construct rather than represent any particular themes or topics. To assess the validity of our measure, we also tested the following hypotheses:

1. Expanding on Pleck, Sonenstein, and Ku's (1994a) construct of masculinity ideology, masculinity ideology in relationships similarly represents a normative perspective on masculinity, but it is distinct in that it emphasizes ways in which masculine norms manifest in adolescent boys' interpersonal relationships. Thus, we expected our measure to be positively but moderately correlated with other measures that consider masculinity in terms of socially constructed norms and roles.

2. Conversely, masculinity ideology in relationships is intended to be conceptually different from a trait perspective on masculinity. Thompson, Pleck, and Ferrera (1993) found that measures of gender ideologies, which tend to incorporate a normative perspective, and measures of gender orientation, which tend to incorporate a trait perspective, were independent and had different correlates. We therefore expected masculinity ideology in relationships and measures that conceptualize masculinity as a personality trait to have different correlates.
3. Although Thompson and Pleck (1995) point out that it is possible for individuals to hold progressive attitudes toward women yet conservative attitudes toward men, we nevertheless predicted that most adolescent boys who place greater importance on the need for males to adhere to conventional norms of masculinity would also have more traditional beliefs about women's roles.
4. Pleck (1995) suggests that masculinity ideology can mediate the effects of gender role discrepancy on psychological health such that boys who place less importance on the need to comply with masculine norms may be less likely to feel bad about themselves when they are unable to accommodate these norms. We therefore hypothesized a negative relationship between masculinity ideology in relationships and self-esteem.
5. Finally, as conventional norms of masculinity often include macho posturing that can lead to delinquency-type behaviors, we predicted that adolescent boys with conventional masculinity ideologies would be more likely to engage in aggressive or deviant social behaviors such as fighting, accepting dares, and smoking cigarettes.

SCALE DEVELOPMENT

Study 1: Item Generation

A unique aspect of the AMIRS is that its items were created specifically for use with adolescents, whereas most measures of masculinity and masculinity ideology are intended for adult populations and, at best, modified for use with children (e.g., Bem's Sex Role Inventory; Bem 1974) and adolescents (e.g., Male Role Attitudes Scale; Pleck, Sonenstein, and Ku 1994a). With the aim to construct a measure that is grounded in and relevant to adolescent boys' experiences, potential items for inclusion in the AMIRS were largely generated by identifying expressions of hegemonic masculinity ideology among qualitative observational and interview data collected with adolescent boys. That is, items constituting the AMIRS were derived primarily from adolescent boys' narratives about their own experiences of pressures to accommodate masculine norms within the contexts of their peer relationships and interactions.

PARTICIPANTS

The qualitative data on which our scale items are based were collected as part of a previous study investigating how boys negotiate their senses of self, social behaviors, and styles of relating to others in light of cultural construc-

tions of masculinity (Chu 1998, 1999). Participants were 65 adolescent boys (ages twelve to eighteen) from three different school settings—a suburban public high school in California, an urban public middle school in New England, and a private single-sex secondary school (grades seven through twelve) in New England. In this sample of adolescents from middle-class families, the majority (77 percent) identified as White, 14 percent identified as African American, and 9 percent identified as Asian American.

PROCEDURE

Ethnographic observations examined boys' social interactions, mostly with peers, within various school settings (e.g., in classes, during free periods, at extra-curricular activities). Observations were conducted on a twice-a-week basis and lasted two hours on average. Semistructured, one-on-one interviews focused on boys' perspectives on their relationships and peer culture and lasted an hour on average. Permission from school administrators was obtained prior to conducting the observations. Written consent was obtained from the students' parents or guardians prior to conducting the interviews. Participants were selected on a volunteer basis.

Observational and interview data were analyzed using conceptually clustered matrices (Miles and Huberman 1994) that were organized by grade level, ethnicity, and school (e.g., public vs. private). Specifically, field notes from observations and transcripts of interviews were coded for content (e.g., issues and topics that were addressed). Next, individual codes representing issues and topics related to the boys' perceptions and experiences of masculinity/masculine norms were transferred onto index cards. Finally, these index cards were sorted to identify dominant and/or common themes (i.e., distinct, recurring, and organizing principles or ideas).

RESULTS

Content and thematic analyses led to the identification of recurrent themes that appeared across groups, although the ways in which these adolescent boys negotiated or evaluated masculine norms sometimes varied. For instance, conventions of masculinity, as played out in these boys' relationships, were often described in terms of the need to portray and maintain a specific social persona. These conventions included toughness (e.g., "act tough"), emotional invulnerability (e.g., "act like you don't care"), and heterosexual dominance (e.g., "act like you are in control"). The consistency of these boys' perceptions of "rules" meant to regulate their projected social personas and self-expression in relationships—whether or not they comply with these rules—offers empirical evidence that there is a hegemonic masculinity ideology composed, at least partially, of these domains of experience that boys from diverse backgrounds encounter in their interpersonal relationships.

Centered on these emergent themes, an original pool of more than fifty potential scale items was generated that consisted of belief statements about boys' expected behaviors within the contexts of their interpersonal relationships. We were particularly interested in creating items that reflect how boys talk as well as what boys say about the ways in which they experience, make meaning of, and respond to pressures in their lives to comply with masculine norms. Thus, our scale items are primarily rooted in boys' own words and written in the third person strategically to enhance boys' comfort when responding and to honor the mode of self-expression that adolescent boys chose in speaking about this topic. In consultation with focus groups of adolescent boys, some new items were added, and items from the original pool were revised or omitted to yield a preliminary, seventeen-item version of the scale.

Study 2: Pilot Studies

For the purpose of scale refinement, pilot studies were conducted with boys from one class at an urban school district in the northeastern United States during May of their eighth-grade year and October of their ninth-grade year. The demographics of both pilot groups were consistent with those for the school as a whole. This population was particularly appealing because it provided an ethnically and socioeconomically diverse sample with which to test our scale. In this district, 39 percent of the students were eligible for free or reduced lunch.

PARTICIPANTS

The eighth-grade participants were thirty-four boys who were unable to attend a class field trip and were given the option to complete pilot surveys; their participation was rewarded with an ice cream party. Ages ranged from thirteen to fifteen, with an average of fourteen. Of these boys, 35 percent identified as Caucasian, 21 percent Latino, 3 percent Asian, 18 percent biracial, 12 percent other, and 11 percent did not identify. Twenty-four percent reported that their mothers had some schooling beyond high school.

The ninth-grade participants comprised twenty-seven boys recruited from the freshman football team (n = 16) and a freshman English class (n = 11). Ages ranged from 14 to 17 with an average of 14.5. Of these boys, 48 percent identified as Caucasian, 22 percent Latino, 7 percent Asian, 4 percent African American, and 19 percent biracial. Forty-four percent reported that their mothers had some schooling beyond high school.

PROCEDURE

The same procedure was used in both pilot studies. Written permission was obtained from each student's parent or guardian. Participants were asked

to complete a survey instrument that included the preliminary, seventeen-item version of the AMIRS along with several demographic questions. Participants were reminded that they did not have to answer any questions that made them feel uncomfortable and were encouraged to provide written comments identifying items that required clarification or were difficult to understand. A follow-up discussion was conducted afterwards to solicit the participants' feedback, particularly critiques of individual items that were confusing.

RESULTS

Based on the eighth-grade participants' responses, exploratory tests of internal consistency (Spector 1992) revealed a standardized Cronbach's alpha of .54 for the seventeen-item measure. In light of this preliminary analysis and the eighth-grade participants' feedback, one item was omitted, and items that appeared to convey more than one idea or that compared boys and girls rather than focusing on beliefs about masculinity were reworded to enhance clarity. A revised sixteen-item measure was then administered to the ninth-grade participants (Cronbach's alpha = .70). In light of the ninth-grade participants' feedback, items were further refined or omitted, yielding a final twelve-item version of the AMIRS scale for testing and validation.

SCALE VALIDATION

Study 3: Scale Reliability and Validity Testing

PARTICIPANTS

Validity studies were conducted the following spring and during subsequent school years at the same school district where we conducted our pilot studies.

The seventh-grade sample included 114 boys who were recruited for a study of gender equity in schools and psychological and academic outcomes. Ages ranged from 10 to 14, with an average of 12.2. Of these boys, 61 percent identified as Caucasian, 19 percent as Latino, 4 percent African American, 9 percent biracial, and 7 percent other (including Asian and Native American). Thirty-six percent reported that their mothers' education included taking some college courses or beyond.

The eighth-grade sample included 133 boys who were recruited to participate in a study of gender ideology and its relationship to risk of unintended pregnancy and sexual health. Of these boys, 99 completed a second instrument three months later that included measures to assess the validity of the AMIRS. Ages ranged from 12 to 15 (with the addition of an 18-year-old who had been retained several times), with an average of 13.5. Sixty-two percent

of the boys identified as Caucasian, 20 percent Latino, 2 percent African American, 9 percent biracial, 7 percent other (including Asian and Native American). Thirty-six percent of the boys reported that their mother's education included taking some college courses or beyond.

The high school participants included thirty-one boys (all of the boys) from five science classes ($n = 31$) who were recruited for the purpose of testing our scale with older students. Ages ranged from 15 to 18, with an average of 16.8. The majority (79 percent) of the boys identified as Caucasian, 4 percent identified as Latino, and 17 percent identified as biracial. Forty-one percent of the boys reported their mothers' education level as having a college degree or higher.

PROCEDURE

Each sample responded to a survey instrument that included the final twelve-item version of the AMIRS, a selection of measures intended to assess its validity, and demographic questions. Surveys were administered during hour-long class periods on three separate occasions. For each administration, written permission was obtained from each student's parent or guardian. Spanish-speaking students were offered the option of completing a Spanish version of the survey. Participants were reminded that they did not have to answer any questions that made them feel uncomfortable and were encouraged to provide written comments identifying items that required clarification or were difficult to understand. Each administration was followed by a short debriefing session in which students were invited to provide feedback about survey items.

MEASURES

Adolescent masculinity ideology in relationships. AMIRS is comprised of 12 belief statements and respondents indicate their agreement using a four-point anchor, ranging from *disagree* a lot (1) to *agree a lot* (4). Negatively worded items receive a reversed score. Composite scores are calculated by taking the mean across items. Higher scores reflect greater alignment with norms of hegemonic masculinity within the context of interpersonal relationships.

Normative perspectives on masculinity. The MRAS (Pleck, Sonenstein, and Ku 1994a; Cronbach's alpha = .56) consists of eight belief statements and respondents indicate their agreement using a four-point Likert-type scale, ranging from *disagree a lot* (1) to *agree a lot* (4). Seven of the eight items were adapted from Thompson and Pleck's (1986) Male Role Norms Scale (MRNS) and were chosen to represent the three factorial dimensions of

the MRNS (status, toughness, and antifemininity). Higher scores indicate traditional or conservative attitudes toward male roles.

The Masculine Behavior Scale (MBS; Snell 1989) consists of belief statements regarding stereotypically masculine behaviors. For this study, the item format was changed from first person to third person, and the success dedication subscale was omitted to make the scale more appropriate for use with adolescent boys. The remaining three subscales measure restrictive emotionality (Cronbach's alpha = .89), inhibited affection (Cronbach's alpha = .89), and exaggerated self-reliance (Cronbach's alpha = .69). Respondents indicate their agreement using a five-point scale, ranging from +2 to –2 with a neutral midpoint (0). Higher scores indicate conventional views on men's expected behaviors.

Trait perspectives on masculinity. The short form of the Bem Sex Role Inventory (BSRI; Bem 1974; Cronbach's alpha = .84) consists of thirty adjectives: ten masculine items, ten feminine items, and ten neutral items. Respondents indicate the extent to which each adjective describes them on a seven-point Likert-type scale, ranging from *never* (1) to *always* (7). Sum scores are used to categorize respondents as masculine, feminine, androgynous, or undifferentiated. For validation purposes, only items that determined masculine personality traits were considered.

Attitudes toward women. The twelve-item Attitudes towards Women Scale for Adolescents (AWSA; Galambos et al. 1985; Cronbach's alpha = .72) measures beliefs about feminine gender roles. This scale is a modification of the Attitudes towards Women Scale (Spence, Helmreich, and Stapp 1973) and is intended for use with adolescents. Participants indicate their endorsement of more conventional and less conventional beliefs about how females should behave using a four-point Likert-type scale, ranging from *disagree a lot* (1) to *agree a lot* (4). Higher scores reflect less conventional attitudes toward women's roles and rights.

Self-esteem. The Rosenberg Self-Esteem Scale (Rosenberg 1965; Cronbach's alpha = .72) is composed of ten belief statements and assesses global self-esteem. Respondents indicate the extent to which each item describes them on a four-point Likert-type scale, ranging from *disagree a lot* (1) to *agree a lot* (4). Higher scores indicate greater self-regard and personal feelings of worth.

Depression. The ten-item short form of the Children's Depression Inventory (CDI; Kovacs 1980/1981; Cronbach's alpha = .87 for nonclinical populations) was used to assess indicators of depression among the eighth-grade

participants. Developed for a nonclinical population, this scale asks respondents to report on their mood during the past two weeks. For our analysis, we used the sum scores rather than creating a dichotomous variable to indicate the presence or absence of depression.

Aggressive or deviant social behaviors. An acting-out index was created that consisted of thirteen questions derived from the National Longitudinal Study of Adolescent Health (ADD Health; Resnick et al. 1997). Respondents indicate the frequency with which they exhibit behaviors ranging from mild (e.g., lying to parents) to serious (e.g., using weapons) forms of acting out. In this study, the reliability was .80 for the seventh-grade sample.

Background questions. A number of demographic items were included to assess, for example, participant's age, ethnicity, country of origin, and mother's level of education.

To maintain a reasonable survey length for each administration, none of the samples received all of the validity measures. In addition to the AMIRS, measures included in each survey varied according to the separate studies for which each sample was recruited; the seventh graders responded to the MRAS, AWSA, and the Acting Out Index; the eighth graders responded to the MRAS, MBS, AWSA, BSRI, Rosenberg Self-Esteem Scale, and CDI; the high school students responded to the MBS, AWSA, and BSRI. Each of these scales has been used with ethnically diverse samples and has demonstrated adequate to good validity and reliability in past studies.

RESULTS

To increase power for our reliability and validity tests, we combined the seventh-grade, eighth-grade, and high school samples ($n = 246$) for our analyses. As the data were collected from boys in the same school district within a brief time frame, it seemed reasonable to consider the combined sample as a single, cohesive group of boys. However, we also tested for differences by demographic groups.

Group Differences

A series of ANOVA tests, conducted to test for differences by ethnicity and SES (as measured by mother's education), revealed no significant difference in AMIRS scores as a function of either ethnicity or SES. An examination of the effect of age/grade indicated that the seventh-grade boys had slightly higher AMIRS scores (more conventional) than the eighth-grade boys (2.28 compared to 2.05; $F(245) = 7.33$, $p < .001$). However, there was no significant difference in AMIRS scores between eighth-grade boys and

Table 2:
Bivariate Correlations between the Adolescent Masculinity Ideology in Relationships Scale (AMIRS) and Validity Measures

	Simple Correlation	Partialling Out Latino	Partialling Out Age/Grade
Male Role Attitudes Scale (n = 244)	.54***	.53***	.52***
Masculine Behavior Scale			
Restrictive Emotionality (n = 94)	.41***	.39***	.41***
Inhibited Affection (n = 94)	.26*	.23*	.26*
Exaggerated Self-Reliance (n = 94)	.31**	.29**	.31**
Bem Sex Role Inventory			
Masculine Personality Traits (n = 95)	.07	.08	.07
Attitudes Towards Women Scale (n = 244)	–.42***	–.40***	–.43***
Rosenberg Self-Esteem Scale (n = 132)	–.32***	–.32***	–.32***
Acting Out Index (n = 99)	.27**	.29**	.27**

*p < .05. **p < .01. ***p < .001.

the high school boys (2.09). As an additional check, we examined partial correlations, controlling for ethnicity (Latino vs. non-Latino) and age/grade, to establish that correlations between the AMIRS and validity measures were not simply functions of demographics. Table 2 displays simple correlations for the combined sample along with partial correlations, which were stable as compared to the simple correlations.

Reliability

An item analysis was conducted to evaluate the internal consistency of the final twelve-item AMIRS. Reliability estimates were calculated for each sample separately (seventh grade: Cronbach's alpha = .71; eighth grade: Cronbach's alpha = .67; high school: Cronbach's alpha = .70) and also for the three samples combined (Cronbach's alpha = .70).

Validity

Correlation analyses were conducted to examine the relationships between the AMIRS and validity measures. In cases where individuals skipped one (n = 22) or two (n = 4) items from the AMIRS scale, responses were imputed to obtain scores for the largest number of participants. As a check, correlations before and after data imputation were compared. For all measures, results were stable, if not more conservative, with the imputed values. Thus, we report results with data imputation.

Construct validity. To evaluate construct validity, we examined relationships between the AMIRS and two other measures that represent a normative perspective on masculinity. The AMIRS was moderately correlated with the

Table 3:
*Summary of Hierarchical Regression Analysis for Psychological and Gender Variables Predicting Self-Esteem (*n = *120)*

	Final B	SE_b	Final β	R^2 Change
Step 1: psychological measure				
Children's Depression Inventory	–.11***	.01	–.59***	.31
Step 2: other gender measures				
Male Role Attitudes Scale	.26**	.09	.23**	
Attitudes Towards Women Scale for Adolescents	.27**	.09	.27**	.11
Step 3: our measure				
Adolescent Masculinity Ideology in Relationships Scale	–.24*	.09	–.23**	.03
Adjusted R^2 = .45				
F(4, 116) = 23.40***				

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

MRAS ($r = .54$; $p < .001$) and with the three subscales of the MBS: Restrictive Emotionality ($r = .41$, $p < .001$), Inhibited Affection ($r = .26$, $p < .05$); Exaggerated Self-Reliance ($r =.31$, $p < .05$).

In addition, to verify that the AMIRS measures a single construct, we submitted the scale items to a factor analysis. Evaluations based on the scree test (Cattell 1966) and the Kaiser criterion (Kaiser 1960) indicated a single factor solution. Factor loadings for the AMIRS as a single factor solution similarly suggested unidimensionality. However, while several of the items showed relatively high loadings, this single factor solution explained only 18.3 percent of the overall variance. This may be due to the relatively small size of our sample. A two-factor solution was also considered, but the results were neither statistically compelling nor conceptually meaningful. Thus, to reflect these findings and also the theoretical basis of our measure, we posit that the AMIRS be used as a unidimensional scale.

Discriminant validity. To evaluate discriminant validity, we compared how the AMIRS and the Bem Sex Roles Inventory, which represents a trait perspective on masculinity, correlated with a number of validity measures. For the eighth-grade sample (n = 133), the AMIRS was significantly correlated with the MRAS ($r = .48$; $p < .001$), the Attitudes Towards Women Scale for Adolescents ($r = –.55$, $p < .001$), and the Rosenberg Self-Esteem Scale ($r = –.32$, $p < .001$). However, the Bem Sex Roles Inventory was not significantly correlated with any of these measures.

Concurrent validity. To evaluate concurrent validity, we examined the relationships between the AMIRS and measures of attitudes toward women, self-esteem, and aggressive or deviant social behaviors. The AMIRS was negatively correlated with the AWSA ($r = –.42$, $p < .001$) and the Rosenberg

Self-Esteem Scale ($r = -.32$, $p < .001$) and positively correlated with the Acting Out Index ($r = .27$, $p < .01$).

Predictive Value

To explore the predictive qualities of the AMIRS, we also fit a series of multiple regressions (see Table 3). Specifically, we sought to parse out the unique contribution of the AMIRS in predicting self-esteem, controlling for a measure of depression and two other gender measures. Because not all measures were administered across samples, these analyses are limited to the eighth-grade participants who completed both the self-esteem measure and the measure of depression.

Our final model shows all four of these predictors to be significantly related to self-esteem. Specifically, the CDI and the AMIRS appeared to be negatively related to self-esteem, while the MRAS and the AWSA appeared to be positively related to self-esteem.

Based on this final model, which is illustrated in Figure 1, we would predict that on average, a boy with a more conventional masculinity ideology in relationships would tend to *disagree a little* with statements that suggest having good feelings about himself, while a boy with a less conventional masculinity ideology in relationships would tend to *agree a lot* with statements that suggest having good feelings about himself.

Our final model also shows that within this model, the CDI explained the greatest amount of variance (31 percent) in self-esteem. This is not surprising given that depression and self-esteem are both established indices of psychological health and have been repeatedly found to correlate with each other. Of the gender measures, the AMIRS and the AWSA also appeared to explain unique, although smaller, portions of the variance in self-esteem. The MRAS, however, did not explain any of the variance in self-esteem by itself in a simple regression model. Thus, controlling for depression, the effects of the MRAS were only significant when one or both of the other gender measures (i.e., AWSA, AMIRS) were also included in the model.

DISCUSSION

Our goal was to develop a scale to measure adolescent boys' internalization of norms of hegemonic masculinity as evidenced by their attitudes and beliefs about what constitutes appropriate behaviors for males, particularly within the contexts of their interpersonal relationships. As we were especially interested in developing a scale with and for adolescent boys, we started by drawing on adolescent boys' narratives about their constructions and experiences of masculinity. We then refined our scale items according to

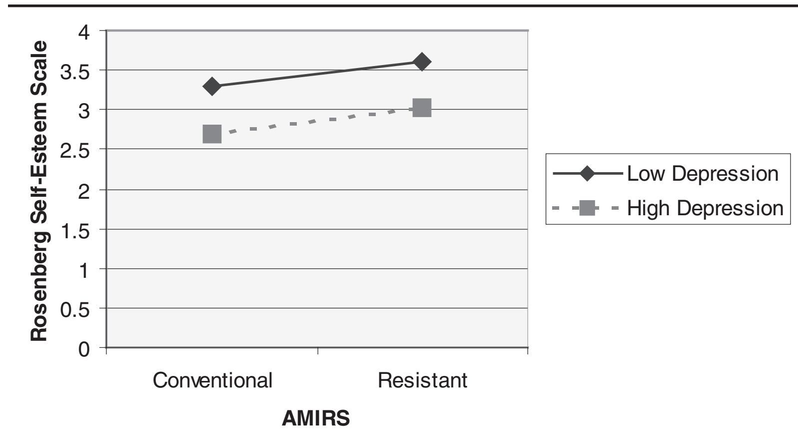

Figure 1. Plot of Final Regression Model
NOTE: This model predicts self-esteem as a function of AMIRS at conventional (top 90th percentile) and resistant (bottom 10th percentile) levels, by high (90th percentile) and low (10th percentile) levels of depression, controlling for male role attitudes (MRAS) and attitudes towards women (AWSA), which were set at sample means.

tests of reliability and adolescent boys' feedback about the items, yielding a final twelve-item version of the AMIRS.

Our analyses indicate that the AMIRS has good psychometric properties. With respect to reliability, the AMIRS met or came close to acceptable levels of internal consistency (Nunnally 1978). An item analysis showed that all of the items contribute to the index and that omitting any one item would not improve the reliability of our scale. Moreover, a factor analysis of the scale items, along with our Cronbach's alpha values, suggested that the AMIRS demonstrates theoretical cohesiveness as a unidimensional scale. The AMIRS also performed as hypothesized in our validity studies, thereby providing evidence of good construct, discriminant, and concurrent validity. As expected, adolescent boys who aligned themselves with hegemonic masculinity in their relationships tended to have more traditional attitudes toward male roles and toward men's expected behaviors (hypothesis 1), more traditional beliefs about women's roles (hypothesis 3), lower self-esteem (hypothesis 4), and more reported incidents of aggressive or deviant social behaviors (hypothesis 5). Moreover, masculine traits did not appear to be significantly related to attitudes toward male roles, beliefs about women's roles, or self-esteem, thus confirming a distinction between one's alignment with hegemonic masculinity and one's possession of masculine personality traits (hypothesis 2).

Of particular interest among these correlations is the negative association between the AMIRS and self-esteem. Consistent with Pleck's (1995) theory of gender role strain, our findings indicate that adolescent boys who place greater importance on the need to accommodate conventional norms of mas-

culinity, which are often larger than life and unattainable, tend to report lower levels of self-esteem. In combination with previous studies that link masculine traits with high self-esteem (Cate and Sugawara 1986; Loper 1984; Orlofsky and O'Heron 1987; Whitley 1988), this finding suggests the double-edged sword of masculinity. On one hand, it appears that the possession of traits deemed masculine may lead to higher self-esteem, for instance via rewards of social status and acceptance. However, Pleck (1995) notes that positive correlates with masculine traits are not surprising, given that masculinity scales are often explicitly designed "to assess the *socially desirable* component of traits associated with masculinity" (p. 17). Lundy and Rosenberg (1987) similarly suggest that the frequently reported relationship between masculinity and higher self-esteem is "an artifact of the inclusion of a strong self-image component in the masculine stereotype, despite the fact that this component does not distinguish males from females" (p. 91).

On the other hand, it appears that the internalization of male roles may have a more complex relationship to self-esteem. Our regression analysis indicated that the MRAS, which reflects the status components of hegemonic masculinity, was positively related to self-esteem whereas the AMIRS, which reflects the relational components of hegemonic masculinity, was negatively related to self-esteem. This discrepancy suggests that while the power and privilege associated with hegemonic masculinity may lead to enhanced feelings of self-esteem, the constraints of hegemonic masculinity on mutuality, humility, and authenticity in relationships may likewise lead to diminished feelings of self-esteem. That is, despite the advantages of status, alignment with hegemonic masculinity may hinder adolescent boys' psychological health, for instance, by limiting the ways that they are able to express themselves and engage in their interpersonal relationships. This discrepancy also suggests that while the MRAS and the AMIRS both measure masculinity ideology, these two scales may capture two different aspects of masculinity ideology that contribute differently to levels of self-esteem.

Limitations and Suggestions for Future Research

A central feature of our approach to developing the AMIRS was starting with adolescent boys' own words about how masculine norms manifest in their interpersonal relationships. As our scale items were generated and developed with a relatively limited range of participants, it will be important to evaluate the usefulness of our scale with other diverse populations of adolescent boys. Our findings revealed no significant differences in AMIRS scores as a function of ethnicity or socioeconomic status and only slightly by age, suggesting that the AMIRS may tap into boys' conceptions and experiences of masculinity that are common across groups (Willis 1977). However, we realize that masculine norms (and boys' conceptions and experiences of

these norms) can nevertheless vary across groups. For instance, boys who are marginalized among their peers may have a different perspective than boys who are more centrally located in the dominant culture (Lorde 1984). Developmental changes can also be expected, as pressures to conform to masculine norms may be greater at certain ages. Thus, it will be important for future studies to examine potential group differences and changes over time in boys' masculinity ideologies and perhaps extend the AMIRS to include items that address such variations.

On a related note, it will also be important for researchers to conduct additional psychometric and statistical tests of the AMIRS, particularly with other diverse groups of adolescent boys. While our study showed the AMIRS to have acceptable internal consistency reliabilities for each of our three samples and for the samples combined, the internal consistency reliability of the AMIRS could be improved, for instance, by expanding the scale to include more items. Evaluating the test-retest reliability of the AMIRS, which was not possible in this study due to limited access to participants, would also help to demonstrate the usefulness of this scale.

Finally, while the items comprising the AMIRS are intended to refer to boys' peer relationships in general, we realize that the extent to which boys align themselves with hegemonic masculinity is likely to vary across specific relationships (e.g., with close friends, romantic partners, same sex peers, and opposite sex peers). There may also be substantial differences in boys' attitudes and behaviors regarding masculine norms in peer versus nonpeer relationships (e.g., relationships with family, teachers, mentors). Studies have suggested that the ways in which boys (and girls) conduct themselves depends in part on where and with whom they are interacting (Furman and Buhrmester 1985; Harter et al. 1998). It is therefore difficult and inappropriate to make generalizations about boys' attitudes and behaviors in all of their relationships based solely on their peer relationships. To study similarities and differences in boys' masculinity ideologies across relationships, future research may find it useful to expand the AMIRS to include subscales that ask similar questions for a range of relational contexts.

We are at a critical juncture in developing instruments to measure the psychological complexity of masculinity. While ideas about femininity shifted liberally during the last half of the twentieth century (Tolman and Porche 2000), ideas about masculinity barely changed. Consider Kimmel's (2000) observation that John Wayne has remained the archetypal male for fifty years. Yet, the importance placed on traditional male roles is being reconsidered as boys' failure to fulfill these roles, the traumatizing process by which boys learn to fulfill these roles, and even boys' successful fulfillment of these roles are increasingly recognized as detrimental to boys' senses of self and relational well-being (Pleck 1995). The internalization of conventions regulating how boys are supposed to conduct themselves has been identified through qualitative analyses (Chu 1999, 2000), and this instrument offers a

way to investigate further the role that boys' masculinity ideologies, and particularly, their alignment with hegemonic masculinity, play in their psychological health as well as their social behaviors. Our data show that there is sufficient and compelling evidence that the AMIRS presents a unique measure of masculinity that will contribute to our body of knowledge about male gender development.

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