

Development of the Conformity to Masculine Norms Inventory

James R. Mahalik, Benjamin D. Locke,
Larry H. Ludlow, and Matthew A. Diemer
Boston College

Ryan P. J. Scott
University of Georgia

Michael Gottfried
Valparaiso University

Gary Freitas
University of Maryland

This article describes the construction of the Conformity to Masculine Norms Inventory (CMNI), and 5 studies that examined its psychometric properties. Factor analysis indicated 11 distinct factors: Winning, Emotional Control, Risk-Taking, Violence, Dominance, Playboy, Self-Reliance, Primacy of Work, Power Over Women, Disdain for Homosexuals, and Pursuit of Status. Results from Studies 2–5 indicated that the CMNI had strong internal consistency estimates and good differential validity comparing men with women and groups of men on health-related questions; all of the CMNI subscales were significantly and positively related to other masculinity-related measures, with several subscales being related significantly and positively to psychological distress, social dominance, aggression, and the desire to be more muscular, and significantly and negatively to attitudes toward psychological help seeking and social desirability; and CMNI scores had high test–retest estimates for a 2–3 week period.

Social norms are rules and standards that guide and constrain one's behavior (Cialdini & Trost, 1999). As a result of social norms, people learn what is expected of them in their social interactions, or put another way, they learn the "customs, traditions, standards, rules, values, fashions" that constitute social norms (Sherif, 1936, p. 3)

Gender role norms, or those rules and standards that guide and constrain masculine and feminine behavior, are believed to have the same properties as social norms (Mahalik, 2000b). In a way that is simi-

lar to how social norms influence people to engage in specific social behavior, gender role norms also operate when people observe what most men or women do in social situations, are told what is acceptable or unacceptable behavior for men or women, and observe how popular men or women act. As a result, males and females come to learn what is expected of them when living their gendered lives.

For example, masculine norms are communicated to males when they observe that other males tend not to wear pink, when they are told that "big boys don't cry," and when they observe that male movie stars and sports heroes are tough and respond with violence when challenged. As a result, males come to learn what standards or expectations are associated with being masculine in U.S. society. However, after an individual male understands what society expects of him regarding masculinity, he may or may not conform to those normative messages as a function of a host of contextual and individual variables (Mahalik, 2000b). Thus, conformity to masculine norms is defined as meeting societal expectations for what constitutes masculinity in one's public or private life. Conversely, nonconformity to masculine norms is defined as not meeting societal expectations for what constitutes masculinity in one's public or private life.

Addressing these issues in his gender role norms model, Mahalik (2000b) described sources of gender role expectations, how these expectations are communicated, factors that affect conformity and non-

James R. Mahalik, Benjamin D. Locke, Larry H. Ludlow, and Matthew A. Diemer, Department of Counseling, Developmental, and Educational Psychology, Boston College; Ryan P. J. Scott, Department of Psychology, University of Georgia; Michael Gottfried, Department of Psychology, Valparaiso University; Gary Freitas, Department of Psychology, University of Maryland.

We thank Liz Warter, Sam Wan, Brian Alampere, Vanessa Prosper, Kristen Burlingame, Julie Noonan, and Meghan Moore for their participation in the focus groups and Rose Alvarez-Salvat, Suzanne Slattery, and Sam Wan for help inputting data. An earlier version of this article was presented in August 2000 at the 108th Annual Convention of the American Psychological Association, Washington, DC.

Correspondence concerning this article should be addressed to James R. Mahalik, Campion Hall 312, Boston College, Chestnut Hill, Massachusetts 02467. E-mail: mahalik@bc.edu

conformity, the range of outcomes in response to these expectations, and the resultant effects on individuals and others of both conformity and nonconformity to gender role norms. First, Mahalik posited that sociocultural influences, particularly the influence of the most dominant or powerful groups in a society, shape the gender role expectations and standards that constitute gender role norms. Second, the gender role norms of the powerful in a society are communicated to individuals through descriptive, injunctive, and cohesive norms. Third, group and individual factors (e.g., socioeconomic status [SES], characteristics of same-sex others, and racial identity) filter an individual's experience of gender role norms that are communicated by the powerful group in society. Fourth, these group and individual factors affect the extent to which the individual conforms, or does not conform, to specific gender role norms. In turn, there are benefits and costs for the individual and others for both conforming to, and not conforming to, a variety of gender role norms.

The purpose of this study, then, was to develop a psychometrically sound measure that allowed clinicians and researchers to assess the fourth component of the model (i.e., individual conformity and nonconformity to a variety of gender role norms). Mahalik (2000b) described three features of gender role conformity that were incorporated into the structure of the measure's subscales. First, he wrote that conformity to masculinity norms range along a continuum reflective of four statuses: (a) extreme conformity, (b) moderate conformity, (c) moderate nonconformity, and (d) extreme nonconformity. Second, conformity to masculine norms comprises affective, behavioral, and cognitive components. Last, he presented a nonexhaustive list of masculine norms found in the dominant culture in the United States positing that salient masculinity norms for individual men vary. That is, he proposed that the important masculinity norms for one man (e.g., being a winner and a risk taker) are likely different from the important norms for another man (e.g., being emotionally controlled and self-reliant), and this variability is important to take into account.

As such, we believe that a psychometrically sound measure that incorporated dimensions of Mahalik's (2000b) model would make a meaningful contribution to the literature for several reasons. To begin with, the measure would provide a tool to test components of the larger model of conformity to gender role norms. Such a test would examine issues important to psychologists, such as exploring factors that promote conformity or nonconformity to masculinity

norms, as well as better understanding the benefits and costs of conformity outcomes for males.

Additionally, we believe such a measure would address several limitations to the current masculinity measures in the literature. One notable limitation is the large number of measures that examine masculinity as a global index. For example, the Bem Sex Role Inventory (Bem, 1974), the Psychological Attributes Questionnaire (Spence & Helmreich, 1980), and the Macho Scale (Villemez & Touhey, 1977) are examples of measures that assess masculinity unidimensionally and ignore the multiple dimensions of masculinity in U.S. society (see Thompson & Pleck, 1995).

Although the two most frequently used measures currently in the new psychology of men—O'Neil's Gender Role Conflict Scale and Eisler's Gender Role Stress Scale—have multiple dimensions validated by factor analysis, they assess conflict and stress, respectively. In doing so, the measures focus on the pathology that may be associated with masculinity rather than conformity or nonconformity to masculine gender role norms, *per se*. This distinction is important because conformity to masculine gender role norms may often be adaptive and healthy and nonconformity may be associated with social stressors. As such, we believe it would be useful to develop a measure that would allow the examination of both the benefits and costs associated with conformity as well as nonconformity to masculine gender role norms.

As such, we are proposing to develop a normative measure of masculinity similar to Brannon and Juni's (1984) Brannon Masculinity Scale, Thompson and Pleck's (1986) Male Role Norms Scale, and Levant et al.'s (1992) Male Role Norms Inventory. However, our intention is to assess the normative aspects of masculinity more broadly than previous measures by incorporating elements of Mahalik's model of gender role conformity as described earlier. First, we propose to develop a factor-validated scale that assesses a larger number of masculine norms than previous normative measures. Currently, normative measures have either not been factor validated (e.g., the Brannon Masculinity Scale) or have only found support for three masculine norms (e.g., the Male Role Norms Scale [Thompson & Pleck, 1986] and the Male Role Norms Inventory [Levant et al., 1992]). That is, although they assess masculinity more complexly than global indices, these normative measures only assess a small number of potentially salient masculine norms. We believe at this point that it is critical for research to identify a larger number of masculine norms to be able to examine the great

variability in how men enact masculinity, as well as understand the causes of that variability and the resultant benefits and costs to the individual and others.

Second, we intend to assess normative masculinity more broadly by assessing the affective, behavioral, and cognitive dimensions of masculine gender role norms. That is, in addition to assessing behavioral conformity to masculine norms (i.e., acting in ways to meet societal expectations for men), we also wish to assess affective conformity (e.g., feeling proud or happy when conforming to gender role norms and feeling ashamed if not) and cognitive conformity (i.e., believing those things that men and women are expected to believe) as part of assessing overall conformity to a specific masculine gender role norm. We believe this broader assessment is important as one man may behaviorally comply with a certain masculinity norm but not conform affectively or cognitively to it, whereas another man may internalize that same norm and conform behaviorally, affectively, and cognitively to it.

Third, we intend to assess normative masculinity more broadly by assessing nonconformity to masculine gender role norms in addition to conformity. Most measures of normative masculinity do not assess nonconformity to masculine norms in a systematic way. This leaves the construct of conformity to masculine norms only half measured, as disagreeing with conformity items does not necessarily mean agreeing with nonconformity items. For example, a given male may disagree with conformity items such as, "It is best to keep your emotions hidden." However, he may not agree with nonconformity items such as, "I love to explore my feelings with others."

Supportive of this rationale that both conformity and nonconformity responses must be included when assessing masculinity, Pleck (1981, 1995) noted that expectations communicated to men are often contradictory. For example, men are told that to be good citizens and good human beings, they should be non-violent and respectful of women; but they are also told that to be masculine means to "kick butt" and "wear the pants in the family." Because of these contradictory messages, men may end up agreeing with items that assess nonconformity (e.g., "Violence is almost never justified") as well as those that assess conformity (e.g., "If you walk away from a fight, you are a coward"). Thus, to assess the full range of possible conformity responses and attend to Pleck's (1981, 1995) thesis that expectations communicated to men are often contradictory and inconsistent, it is essential to incorporate a systematic assessment of nonconformity items into measures that assess masculinity.

We believe, therefore, that developing a measure that assessed a larger number of masculinity dimensions with the structure described earlier would add to the literature examining masculinity. Specifically, such a measure would provide a tool to examine research questions and clinical issues connected to conformity outcomes, it would present a more complex assessment of masculinity than current measures if factor validated, and it would assess both conformity and nonconformity to masculine norms by examining the full range of the continuum of conformity from extreme conformity to extreme nonconformity for each masculinity norm.

In this article, a factor analysis and four other studies examining the reliability and validity of the Conformity to Masculine Norms Inventory (CMNI) are presented. In Study 1, the factor structure of the proposed inventory is examined. In Study 2, we report the internal consistency estimates of the CMNI and data from distinct groups to examine its discriminant validity. In Studies 3 and 4, we were interested in examining the convergent, concurrent, and additional discriminant validity information of the CMNI. To examine its convergent validity, we tested the relatedness of conformity to masculinity norms to attitudes about masculinity, masculine gender role conflict, and masculine gender role stress. To examine its concurrent validity, we tested its relatedness to psychological distress, attitudes toward psychological help-seeking, social dominance, aggression, and drive for muscularity. After examining discriminant validity in Study 2 by comparing distinct groups, we additionally tested the CMNI in relation to social desirability. In Study 5, we examined additional evidence for the CMNI's reliability by analyzing the stability of CMNI scores over a 2–3 week time period.

Construction of the CMNI

The inventory was constructed to assess the extent that an individual male conforms or does not conform to the actions, thoughts, and feelings that reflect masculinity norms in the dominant culture in U.S. society. This construct was chosen because Mahalik (2000b) posited that gender role norms from the most dominant or powerful group in a society affect the experiences of persons in that group, as well as persons in all other groups. Thus, the expectations of masculinity as constructed by Caucasian, middle- and upper-class heterosexuals should affect members of that group and every other male in U.S. society who is held up to those standards and experiences acceptance or rejection from the majority, in part,

based on adherence to the powerful group's masculinity norms.

The first step in constructing the measure was to identify masculinity norms in the dominant culture. To do so, we reviewed the literature on traditional masculine norms in the United States (i.e., David & Brannon, 1976; Eisler, 1995; Eisler & Skidmore, 1987; Harris, 1995; Lazur & Majors, 1995; Levant et al., 1992; Mahalik, 1999a; O'Neil, 1981a, 1981b, 1982; O'Neil, Helms, Gable, David, & Wrightsman, 1986; Pleck, 1981, 1995; Thompson & Pleck, 1995).

Next, two focus groups consisting of both men and women who were master's and doctoral students in counseling psychology (Group 1: 1 Asian American man, 1 European American man, and 2 European American women; Group 2: 2 European American men, 2 European American women, and 1 Haitian Canadian woman) met with James R. Mahalik (a European American man). These groups met every week for 90 min over an 8-month period to (a) discuss the applicability of the norms identified in the literature, (b) refine the categories of the norms, and (c) construct items to assess the continuum of conformity to the norm. For example, early in the process of measure construction, Mahalik asked the group to discuss their observations of whether males in the United States actually receive normative messages from the dominant culture that have been identified in the masculinity literature (e.g., to "be successful").

If there was agreement among group members that a norm was distinctly applicable to men, it was set aside for the next phase. However, if there was disagreement about whether a norm was distinctly applicable to men, it was revised. For example, in discussing the norm of "be successful," women in the focus groups reported that they also received messages to be successful, felt pressure to be successful, and reported that this was true for most of their female friends.

It was important that masculine norms identified through this process be distinct from feminine norms because Bem (1981) noted that there are separate societal gender schemas associated with masculinity versus femininity. Specifically, she observed that "adults in the child's world rarely notice or remark upon how strong a little girl is becoming or how nurturant a little boy is becoming, despite their readiness to note precisely these attributes in the 'appropriate' sex" (Bem, 1981, p. 355). Thus, if a norm was seen as equally applicable to men and women or was seen as very similar to another norm (e.g., success and performance accomplishment), the group members were given homework assignments to discuss

these issues with friends and family. At the next meeting, the issues would be discussed and the idea around the norm refined until there was consensus that it reflected a masculine norm that was part of the cultural mainstream in U.S. society (i.e., from the dominant culture). Continuing with the example above, after extensive discussion about the issues of success and accomplishment, women group members described that although they felt pressure to be successful, they did not experience expectations that they had to win at everything in which they were involved. However, male members of the focus groups reported that winning was a very salient message for them and for their male friends and family, with people reporting it as a defining message for men found in the cultural mainstream. Thus, winning was identified as a masculine norm of interest for the measure.

Using this process, we identified 12 masculine norms for the CMNI. These were labeled Winning, Emotional Control, Risk-Taking, Violence, Dominance, Playboy, Self-Reliance, Primacy of Work, Power Over Women, Disdain for Homosexuals, Physical Toughness, and Pursuit of Status.

After identifying the masculine norms, the focus groups further discussed them to develop items for each norm that would fit Mahalik's model. Specifically, items should fall along a continuum of conformity for each norm made up of four statuses (i.e., extreme conformity, moderate conformity, moderate nonconformity, and extreme nonconformity) and be made up of affective, behavioral, and cognitive components. Therefore, the focus groups worked to construct 12 items for each of the identified norms (i.e., 1 affective, 1 behavioral, and 1 cognitive item for each of the four statuses for each of the 12 masculinity norms). In this way, 144 items were constructed such that all items assessed an affective, a behavioral, or a cognitive dimension for each of the four conformity statuses for all 12 masculinity norms. For example, the item "In general, I will do anything to win" was constructed to assess extreme conformity behaviors reflecting the masculine norm of Winning.

The measure was then piloted at three different times with small groups of male and female undergraduate participants (sample sizes ranged from 20 to 30) both to solicit their reactions to the items and to assess the subscales' internal consistency estimates. Using this pilot data, the focus groups discussed both the reactions from participants and the results from the internal consistency analyses. On the basis of these discussions, items were revised to improve their readability and the internal consistency estimates of the 12 subscales.

Following the construction and revision of the items for the third time, three raters (two Asian American male graduate students in counseling psychology and one European American female undergraduate student in human development) were asked to judge independently the 144 items as to (a) which of the 12 masculinity norms each item measured, (b) whether the items assessed conformity or nonconformity to a masculine gender role norm, and (c) whether the items assessed an affective, behavioral, or cognitive dimension. Kappas for the three sets of judgments ranged from .96 to .98 categorizing items into the 12 norms ($ps < .001$), .97 to 1.00 categorizing items as either conformity or nonconformity ($ps < .001$), and .83 to .99 categorizing items as affective, behavioral, or cognitive items ($ps < .001$). Thus, these kappa results provided evidence for the face and content validity of the CMNI as raters could reliably differentiate items as a function of the characteristics used in the construction of the inventory.

Through this process, the CMNI was developed. Respondents to the CMNI indicate how much they agreed with the initial 144 items using a 4-point scale (0 = *strongly disagree* and 3 = *strongly agree*) where SD = *strongly disagree*, D = *disagree*, A = *agree*, and SA = *strongly agree*. This 4-point scaling was adopted to be consistent with the structure of the continuum of conformity that ranged across the four statuses (i.e., extreme conformity, moderate conformity, moderate nonconformity, and extreme nonconformity). For example, sample items reflecting the four statuses for the Winning scale included: "In general, I will do anything to win" as an extreme conformity item; "It is important for me to win" as a moderate conformity item; "Winning is not my first priority" as a moderate nonconformity item; and "I do not spend any energy trying to beat other people" as an extreme nonconformity item.

Study 1: Factor Analysis of the CMNI

To identify the factor structure of the CMNI and inform us as to how the CMNI might be revised, we performed a series of factor analyses on the full 144 × 144 item correlation matrix. Analyses were performed with the SPSS FACTOR procedure (SPSS, 1999).

Method

Seven hundred fifty-two men participated in the study. They averaged 20 years of age ($SD = 3.42$) and were mostly Caucasian (639 Caucasian, 24 Af-

rican American, 41 Asian or Asian American, 19 Hispanic/Latino, 11 biracial, and 18 who described themselves as "other"). Most men reported that they were single (728 single, 14 married, 2 divorced, and 8 in committed same-sex relationship) and heterosexual (730 heterosexual, 18 homosexual, and 4 bisexual). All were in college or graduate school (380 freshmen, 219 sophomores, 67 juniors, 52 seniors, and 34 graduate students). These men were recruited from college campuses in the Northeast, Mid-Atlantic, Southeast, and Midwest United States through both classroom recruitment and psychology human subjects pools to complete the CMNI and other instruments described in Studies 2 to 4. The average length of time for participants to complete the 144-item measure was approximately 13 min.

Results

Prior to conducting the factor analyses, we performed three tests to ensure that the correlation matrix had variation suitable for factoring. First, the determinant was nonzero, indicating that no perfect linear dependencies existed among the items (Green, 1976). Second, the Kaiser-Meyer-Olkin measure of sampling adequacy was .89, a magnitude described by Kaiser (1974) as "meritorious." Third, Bartlett's test of sphericity (Bartlett, 1950) was statistically significant ($p < .0005$), indicating that the population correlation matrix is not an identity matrix.

A principal-axis extraction technique was used because after each factor was extracted this technique accounts for the greatest variance remaining in the residual correlation matrix. Oblique rotations (oblimin) were performed because of the presumed correlated nature of the factors. Item factor loadings below .3 were ignored. The criteria for deciding on the final factor solution included the magnitude of the eigenvalues, the percentage of variance accounted for by each factor, the overall percentage of variance accounted for, the number of items that loaded highly on each factor, and the interpretability of the factors after examining the items that loaded most highly on that factor.

Because the inventory was developed to assess 12 distinct masculinity norms, the first principal-axis factor analysis extracted 12 factors. The cumulative percentage of variance was 44.10. Oblique rotations were performed, and inspection of the items that loaded on the 12th factor indicated that it was problematic because it could not be interpreted in terms of a coherent group of items. The other 11 factors, however, were quite well defined. Thus, the

next analytic step was to reduce the number of factors extracted to 11.

The 11-factor solution accounted for 42.6% of the common variance. The oblique rotated factors were remarkably distinct and interpretable. That is, there were very few items that significantly loaded on more than one factor, and items that loaded together on factors were almost all from the same group of items developed to measure separate masculinity norms. An inspection of the factor pattern revealed that the Physical Toughness items did not load together on any of the 11 factors. At this point, we decided to revise the structure of the CMNI by removing the Physical Toughness items. The analysis was then rerun with the 132 items that theoretically defined the 11 scales.

The results of this final 11-factor, principal-axis, oblique-rotated solution are reported in Table 1. Additionally, the table contains the factor loadings, communality loadings, eigenvalues, and percentage of variance statistics. Note that the percentage of variance accounted for by the 11-factor solution (44%) is greater than the percentage accounted for under the 12-factor solution with all 144 items (42.6%). This means that eliminating the Physical Toughness items removed more error variance than common variance from the correlation matrix.

Next, the magnitude of the factor correlations was examined. Results indicated that only 1 of the 55 pairs of correlations among the 11 factors were larger than $|.3|$ (i.e., a correlation of $.31$ between Factor 1 [Power Over Women] and Factor 6 [Playboy]). However, apart from that relationship, the low factor correlations suggest that the factors identified from this sample were relatively distinct from each other.

Finally, we examined each of the 132 items to determine on which of the 11 factors each item significantly and most strongly loaded, which items had the highest loadings on each factor, and whether those high loading items on each factor were identifiable as representing a single construct (see Table 1). Items were retained for the subscales only if they loaded at $|.4|$ or higher on one factor and did not cross-load any higher than $|.30|$ on any other factor. Using these retention criteria resulted in 94 items being retained with each of the 11 factors being composed of items exclusively from only one of the original rationally derived subscales. Thus, factors were labeled according to the rationally constructed subscales from which they derived all of their retained items (e.g., Factor 1 is labeled Power Over Women as all the retained items were from the original Power Over Women items).

Discussion

Results from the factor analysis suggest that the CMNI is a 94-item inventory with an 11-factor structure whose factors are best labeled according to the original CMNI subscales that contributed items retained from the factor analysis. That 11 factors were identified also lends support for the idea that there are a large number of masculine norms to which men respond and that these norms are distinguishable from each other.

The fact that a larger number of masculine norms were identified than previous studies is likely the result of the scale development process based on our conceptual model, which posited a relatively large number of distinct masculine norms. The results of the study, however, should in no way suggest that there are 11 masculine norms—no more and no less—in the dominant culture in the United States. There are obviously other masculine norms from the dominant culture in the United States, other masculine norms from other cultural groups in the United States, and other masculine norms from other cultural groups around the world that we did not identify. However, having a measurement tool that allows examination of a larger number of masculine norms has benefits over previous measures. Specifically, such a tool allows us to (a) better examine the great variability between men, and within individual men (see Addis & Mahalik, in press), in how men enact masculinity; (b) better understand the causes of that variability; and (c) better understand the resultant benefits and costs to the individual and others.

We also observed that our factors are of a different variety from those identified by Walker, Tokar, and Fischer (2000). They factor analyzed eight popular masculinity measures and identified mostly global masculinity constructs. Specifically, they identified four factors labeled Masculinity Ideology, Liberal Gender Role Attitudes, Masculine Gender Role Stress, and Comfort With Emotionality and Affectionate Behavior Between Men. In this case, only their last factor identified a specific masculine norm. The first three factors identified broad constructs of masculinity (e.g., masculinity ideology) without identifying specific norms (e.g., Self-Reliance), which was the central purpose of developing the CMNI.

Study 2

The purposes of Study 2 were to (a) examine the internal consistency estimates for the CMNI total score and 11 Masculinity Norms subscales, (b) ex-

amine the intercorrelations among the 11 Masculinity Norms subscales, (c) determine whether the CMNI differentiates between men and women, and (d) determine if the CMNI differentiates between men who responded differently to a series of questions reflecting aspects of health. The rationale for the third purpose was based on the assumption that men would be more likely to conform to masculine norms than would women. Also, the rationale for the last purpose was derived from literature suggesting that traditional masculinity is associated with behaviors that negatively affect men's health (Blazina & Watkins, 1996; Brooks & Silverstein, 1995; Courtenay, 2000; Eisler, Skidmore, & Ward, 1988; Watkins, Eisler, Carpenter, Schechtman, & Fisher, 1991). Thus, we hypothesized that men would score higher on all masculine norms compared with women and that men who engaged in behaviors that negatively affect health would score higher on all masculinity norms.

Method

Seven hundred fifty-two men described in Study 1 and 245 women participated in this study. Additionally, 450 of the 752 men completed health-related questions that asked them to indicate whether they had (a) visited a physician for a checkup in the last 12 months, (b) been involved in a violent situation in the past 12 months, (c) been in trouble with the law, (d) used tobacco products, (e) witnessed violence in their family, or (f) at least one time in their life drank so much that they could not remember things they had done while drinking.

These 450 participants then completed the CMNI and other measures that are described in Studies 3 and 4. They averaged 20.27 years of age ($SD = 4.23$) and were mostly Caucasian (368 Caucasian, 17 African American, 33 Asian or Asian American, 13 Hispanic/Latino, 6 biracial, and 13 "other"). Most men reported that they were single (430 single, 13 married, 2 divorced, and 5 in committed same-sex relationship) and heterosexual (433 heterosexual, 16 homosexual, and 1 bisexual). All were in college or graduate school (209 freshmen, 129 sophomores, 44 juniors, 34 seniors, and 34 graduate students).

Women in the study averaged 19.68 years of age ($SD = 3.21$) and were mostly Caucasian (202 Caucasian, 9 African American, 13 Asian or Asian American, 12 Hispanic/Latino, 5 biracial, and 4 "other"). Most women reported that they were single (242 single, 3 married) and heterosexual (240 heterosexual, 1 homosexual, and 4 bisexual). All were in

college (132 freshmen, 58 sophomores, 35 juniors, and 20 seniors).

Results

Internal consistency. Examining internal consistency estimates on the CMNI for men in the study indicated that coefficient alpha was .94 for the total CMNI score. For the Masculinity Norms subscales, alphas ranged from .72 for Pursuit of Status to .91 for Emotional Control (see Table 2).

Intercorrelations of the CMNI masculinity norms. Pearson correlations examining the relationship of the 11 Masculinity Norms subscales to each other and the total score on the CMNI are presented in Table 2. Results indicate that all of the subscale scores correlated significantly and positively to the total score and that the subscales correlated in expected directions. The strength of relationship among the subscales with each other ranged from very low and nonsignificant to a correlation of .49 between Power Over Women and Playboy.

Comparisons of men versus women on CMNI scores. To determine whether men and women differed on conformity to masculinity norms, we compared their CMNI total scores and the 11 Masculinity Norms scores using one-tailed t tests (see Table 3 for means and standard deviations of men and women participants on the total score and 11 Masculinity Norms subscale scores). Results indicated that men scored significantly higher than women on the CMNI total score, as well as on 9 of the 11 Masculine Norms scores (i.e., Winning, Emotional Control, Risk-Taking, Violence, Power Over Women, Dominance, Playboy, Self-Reliance, and Disdain for Homosexuals) but were not significantly higher than women on Primacy of Work or Pursuit of Status.

Comparison of men on answers to health-related questions. To determine whether CMNI scores would differ for men who answered "yes" or "no" to the health-related questions, we conducted one-tailed t tests. To attend to the effects of cumulative error due to the large number of t tests (6 questions \times 12 scales = 72), we set the significance level for this analysis at $p < .001$ (i.e., $.05_{1\text{-tailed}}/72 = .0012$). Degrees of freedom for all t tests in these analyses were 410. Results indicated that the 133 men who answered "yes" to the question "I have been involved in a violent situation in the past 12 months" scored significantly higher on Winning ($M = 18.68$ vs. $M = 16.35$, $t = 4.32$), Risk-Taking ($M = 18.09$ vs. $M = 16.10$, $t = 5.61$), Violence ($M = 14.94$ vs. $M = 11.26$, $t = 9.25$), Power Over Women ($M = 10.36$ vs. $M = 8.87$, $t = 3.58$), Dominance ($M = 6.41$ vs. $M = 5.72$, $t = 3.53$), Playboy ($M = 13.33$ vs. $M =$

Table 1 (continued)

Item	Factor											h^2	
	1	2	3	4	5	6	7	8	9	10	11		
Disdain9					-.67								.65
Disdain10					-.66								.55
Disdain5					-.63								.54
Disdain7					-.60								.66
Disdain2					-.60								.61
Disdain12	.31				-.50								.60
Disdain11					-.49								.42
Disdain8	.36				-.48								.68
Playboy2						.77							.66
Playboy1						.67							.60
Playboy4						.65							.58
Playboy11						.64							.60
Playboy5						.60							.55
Playboy10						.57							.57
Playboy9						.57							.57
Playboy12						.55							.55
Playboy8						.50							.43
Playboy3						.45							.49
Playboy7						.45							.57
Playboy6						.45							.41
Risktake4							.77						.62
Risktake7							.65						.56
Risktake5							.64						.52
Risktake2							.60						.50
Risktake10							.55						.50
Risktake11							.52						.46
Risktake1							.47						.48
Risktake12							.44						.46
Risktake8							.42						.49
Risktake3							.41						.43
Risktake6							.37						.32
Risktake9							.32						.39
Work7								.66					.49
Work3								.64					.54
Work6								.57					.51
Work1								.56					.52
Work8								.50					.40
Work10								.48					.42
Work5								.46					.44
Work9								.41					.35
Work4								.38					.40
Work2								.31					.35
Status3													.49
Work12													.29
Violence12									.67				.62
Violence6									.65				.58
Violence9									.64				.61
Violence11									.64				.53
Violence5									.57				.54
Violence1									.55				.55
Violence8									.53				.52
Violence10									.49				.56
Dominant11									.39				.43
Violence4									.32				.46
Violence3									.31				.51
Violence2									.31				.44
Violence7													.48
Dominance9													.30

(table continued)

Table 1 (continued)

Item	Factor											h^2
	1	2	3	4	5	6	7	8	9	10	11	
Dominance6											-.43	.54
Dominance2											-.43	.48
Dominance3											-.41	.54
Dominance4											-.40	.47
Dominance1	.31										-.37	.49
Selfrel5												.39
Dominance5												.38
Dominance10												.34
Selfrel2											.67	.58
Selfrel4											.62	.59
Selfrel3											.62	.60
Selfrel1											.62	.64
Selfrel8											.53	.57
Selfrel7											.51	.50
Status1												.32
Status2												.31
Selfrel9												.38
Eigenvalue	17.19	7.88	5.92	5.08	4.88	3.55	3.17	2.98	2.71	2.44	2.33	
% variance	13.02	5.97	4.48	3.85	3.70	2.69	2.40	2.26	2.05	1.85	1.77	

Note. $N = 752$. h^2 = communality of each item. Women = Power Over Women; Emotion = Emotional Control; Selfrel = Self-Reliance; Status = Pursuit of Status; Work = Primacy of Work; Disdain = Disdain for Homosexuals; Risktake = Risk-Taking. Boldface item values indicate that these items were retained to comprise the subscale for that factor in all subsequent analyses.

10.83, $t = 3.93$), Disdain for Homosexuals ($M = 20.15$ vs. $M = 17.64$, $t = 4.31$), and the total score of the CMNI ($M = 145.03$ vs. $M = 127.81$, $t = 7.02$) compared with 279 men who answered "no."

In response to the question "I have been in trouble with the law," the 94 men who answered "yes" scored significantly higher on Risk-Taking ($M = 18.56$ vs. $M = 16.21$, $t = 5.97$), Violence ($M = 14.11$ vs. $M = 11.95$, $t = 4.52$), and the total score of the CMNI ($M = 142.51$ vs. $M = 130.67$, $t = 4.18$) compared with the 318 men who answered

"no." In response to the question "I use tobacco products," the 116 men who answered "yes" scored significantly higher on Risk-Taking ($M = 17.80$ vs. $M = 16.33$, $t = 3.90$) and Playboy ($M = 13.27$ vs. $M = 11.00$, $t = 3.43$) than the 296 men who answered "no." In response to the question "At least one time in my life I drank so much that I couldn't remember things I had done while drinking," the 244 men who answered "yes" scored significantly higher on Risk-Taking ($M = 17.27$ vs. $M = 15.98$, $t = 3.72$), Violence ($M = 13.06$ vs. $M = 11.55$, $t = 3.66$), Playboy

Table 2

Internal Consistencies and Intercorrelations for Men's Scores on the Total Score and 11 Masculinity Norms Subscales of Conformity to Masculinity Norms Inventory

Factor	1	2	3	4	5	6	7	8	9	10	11	α
1. Winning	—											.88
2. Emotional Control	.19**	—										.91
3. Risk-Taking	.32**	.07*	—									.82
4. Violence	.33**	.20**	.36**	—								.84
5. Power Over Women	.33**	.27**	.16**	.35**	—							.87
6. Dominance	.45**	.10**	.24**	.23**	.34**	—						.73
7. Playboy	.25**	.30**	.15**	.31**	.49**	.22**	—					.88
8. Self-Reliance	.24**	.49**	.06	.17**	.25**	.23**	.20**	—				.85
9. Primacy of Work	.15**	.13**	.03	.01	.15**	.21**	.14**	.13**	—			.76
10. Disdain for Homosexuals	.33**	.19**	.09*	.27**	.42**	.21**	.21**	.12**	.03	—		.90
11. Pursuit of Status	.31**	-.06	.19**	.13**	.09*	.33**	.09*	.05	.10**	.20**	—	.72
Total conformity	.51**	.36**	.29**	.46**	.58**	.46**	.46**	.38**	.18**	.39**	.23**	.94

Note. $N = 752$. Subscale/total conformity correlations are corrected.
* $p < .05$. ** $p < .01$.

Table 3
Means, Standard Deviations, and *t* Values Comparing Men and Women on CMNI Scores

CMNI score	Men		Women		<i>t</i> (995)
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
Winning	16.91	5.10	14.14	4.18	7.69***
Emotional Control	14.89	5.66	11.76	5.56	7.56***
Risk-Taking	16.58	3.61	14.51	3.52	7.84***
Violence	12.38	3.96	9.12	4.15	11.02***
Power Over Women	10.59	4.46	7.25	3.87	10.53***
Dominance	5.84	1.88	5.52	1.79	2.34**
Playboy	12.06	6.05	7.20	5.05	11.34***
Self-Reliance	6.63	2.81	5.78	2.69	4.11***
Primacy of Work	8.97	3.28	9.08	2.59	-0.46
Disdain for Homosexuals	17.74	6.65	16.05	5.46	4.07***
Pursuit of Status	11.85	2.43	12.00	2.03	-0.85
Total conformity	134.45	24.64	112.43	20.09	12.68***

Note. *N* for the total sample = 997 (*n* = 752 for men, *n* = 245 for women). CMNI = Conformity to Masculine Norms Inventory.
p* < .01, one-tailed. *p* < .001, one-tailed.

(*M* = 12.61 vs. *M* = 10.19, *t* = 4.00), and the total score of the CMNI (*M* = 137.36 vs. *M* = 127.43, *t* = 4.09) compared with the 167 men who answered “no.” There were no significant differences on the total CMNI score or the 11 Masculinity Norms on questions “Have you visited a physician in the last 12 months” and “I have witnessed violence in my family.”

Discussion

These results suggest that the CMNI total and 11 Masculinity Norms subscales are internally consistent, have low to moderate relationships among the subscales, with many of CMNI subscales differentiating between important groups. In terms of group differences, support for the contention that the masculinity norms assess distinctly masculine norms was found for 9 of the 11 subscales with the exception of Primacy of Work and Pursuit of Status. As there are separate societal schemas for masculinity versus femininity (Bem, 1981), the fact that these two subscales did not differentiate men from women in this study suggests that “putting work first” and “pursuing status” may not be distinctly masculine in the United States. However, it may be that college men are less conforming to these two norms than men of other ages and experiences (e.g., men in the competitive workplace) or that women who attend prestigious and competitive institutions of higher education receive the same messages about work and status that men do. Future research should examine nonstudent adult men and women to determine if they differ on these scales.

That the CMNI could differentiate men who said “yes” to high-risk behavior such as being involved in violence, being in trouble with the law, smoking, and drinking to the point of unconsciousness fits well with the literature relating masculinity to behaviors that put one’s health at risk (Courtenay, 2000), as well as antisocial behaviors (Brooks & Silverstein, 1995). It seems in particular that conformity to risk-taking norms is a useful predictor for a range of health-related behaviors involving violence, law-breaking, tobacco use, and alcohol abuse, whereas conformity to emotional control, self-reliance, primacy of work, and status norms were not associated with health-related behaviors. Although masculinity, in general, has been identified as contributing to men’s health issues (see Courtenay, 2000), identifying specific masculine norms associated with health, such as risk-taking in this study, is likely to be more helpful for outreach efforts aimed at improving men’s health. For example, in trying to explain why U.S. men die an average of 7 years younger than U.S. women (U.S. Department of Health and Human Services, 1996), identifying conformity to risk-taking norms that place men in harms way would be a more cogent explanation than positing the effects of a global masculinity.

CMNI scores did not differentiate men who had visited a physician in the last year or those who had witnessed violence in their family. In hindsight, these two questions may have been poor ones given that university students often must receive vaccinations to be allowed to register for classes, and the type of violence witnessed in the house was not specified

(e.g., male-on-female abuse, female-on-male abuse, parents spanking children, or fighting between the children). However, as literature on men's help-seeking has consistently demonstrated that men underutilize medical services compared with women (e.g., Rafuse, 1993), examining the relationship of masculinity norms to medical help-seeking should be examined in future research. Also, given the strength of research findings that observing violence and aggression influences individuals to act violently (Bandura, Ross, & Ross, 1963), future research should examine the effect of observing male violence—particularly in the family—on masculinity norms such as Violence, Dominance, and Power Over Women.

Study 3

The purpose of Study 3 was to compare scores on the CMNI with another normative measure of masculinity, measures that assessed conflict and stress associated with masculine norms, and measures of attitudes toward psychological help-seeking, psychological distress, and social desirability. We hypothesized that the CMNI total would relate positively to the other masculinity-related measures' total scores and that CMNI subscales would relate to specific subscales of the other masculinity-related measures assessing related constructs. Specifically, we hypothesized that conformity to Winning should relate to wanting to be admired and respected, successful/powerful/competitive, performing competently, and being physically adequate. Conformity to Emotional Control should relate to other measures of emotional restriction. Risk-Taking should relate to measures of toughness and adventure. Violence should relate to measures of toughness and violence. Power Over Women should relate to antifemininity and subordinating women. Dominance should relate to wanting to be admired and respected, tough, successful/powerful/competitive, and subordinating women. Playboy should relate to adventure, antifemininity, concealing emotions, and subordinating women. Self-Reliance should relate to disconnection from others, and in terms of disconnection as measured by the other masculinity scales, this should relate to emotional disconnection. Primacy of Work should be related to being a breadwinner, enduring work like a machine, pursuing success, and experiencing conflict between work and family/school obligations. Disdain for Homosexuals should relate to antifemininity and restricting one's affectionate behavior with other men. Finally, Pursuit of Status should be related to being a breadwinner, admired and respected, successful/powerful/competitive, and performing well.

As there is a consistent set of findings describing how traditional masculinity is related to less receptive attitudes toward psychological help-seeking (Good, Dell, & Mintz, 1989; Robertson & Fitzgerald, 1992; Wisch, Mahalik, Hayes, & Nutt, 1995), we hypothesized that scores on Emotional Control and Self-Reliance would relate to more negative attitudes toward psychological help-seeking.

There are also consistent findings in the gender role strain literature describing how traditional masculine roles relate to greater psychological distress. For example, research indicates that factors of masculine gender role conflict relate to higher anxiety and depression (Cournoyer & Mahalik, 1995; Good & Mintz, 1990; Sharpe & Heppner, 1991) as well as higher levels of general psychological symptomatology (Good et al., 1995), and that factors of masculine gender role stress relate to anger and hostility (Eisler et al., 1988; Watkins et al., 1991) and social fears (Arrindell, Kolk, Pickersgill, & Hageman, 1993). Thus, we hypothesize that, consistent with these research findings, conformity to masculine norms should relate to greater psychological distress. Finally, we were interested in determining if the CMNI scores were related to social desirability and hypothesized that CMNI scores would be unrelated to social desirability.

Method

Participants and procedures. Two hundred sixty-nine men participated in this study. These men were also participants in Study 1, but in addition to the data they provided related to the purposes of Study 2, participants also completed additional measures for Study 3. These men averaged 19.70 years ($SD = 2.01$) and were mostly Caucasian (224 Caucasian, 11 African American, 15 Asian or Asian American, 7 Hispanic/Latino, 3 biracial, and 9 "other"). All men reported that they were single, and most reported that they were heterosexual (261 heterosexual, 7 homosexual, and 1 bisexual). Of this group, 137 were freshmen, 66 sophomores, 40 juniors, 25 seniors, and 1 was a graduate student.

These participants completed the demographics form and CMNI described in Study 1 (alphas in this study for the 11 Masculinity Norms subscales ranged from .75 to .92, with $\alpha = .94$ for the total score of the CMNI). Additionally, participants completed three of the six measures described below, which were stratified such that there were 20 permutations of the measures that a participant might complete. This was done because we were interested in assessing the CMNI's relationship to a variety of constructs but

were concerned about the length of time that it would take participants to complete the measures in addition to the lengthy demographics form and the original 144-item CMNI.

Measures. Three measures were used to assess masculinity. These were the Brannon Masculinity Scale—Short Form (BMS; Brannon & Juni, 1984), the Gender Role Conflict Scale (GRCS; O'Neil et al., 1986), and the Masculine Gender Role Stress Scale (MGRS; Eisler & Skidmore, 1987). The BMS is a self-report instrument of 58 items that uses a 7-point scale (1 = *strongly disagree* to 7 = *strongly agree*). It was designed to measure endorsement of traditional North American masculine gender roles, specifically assessing seven subscales (i.e., Avoiding Femininity, Concealing Emotions, Breadwinner, Admired—Respected, Tough, Male Machine, and Violence and Adventure). Scores on the Short Form are reported to relate to homophobia, Type A behavior, endorsing unilateral power in intimate relationships (Thompson, Grisanti, & Pleck, 1985), and violence in minor league hockey players (Weinstein, Smith, & Wisenthal, 1995). Reliability for the Short-Form of the BMS was reported as $\alpha = .92$ for the total score, with subscale alphas ranging from .67 to .81 in the Thompson et al. (1985) study. For this study, alphas for BMS total was .93, with alphas ranging from .69 to .81 for subscale scores.

The GRCS is a self-report instrument of 37 items that measures four factors: (a) Success, Power, and Competition; (b) Restrictive Emotionally; (c) Restrictive Affectionate Behavior Between Men; and (d) Conflict Between Work and Family Relations. Participants respond on a 6-point scale from *strongly disagree* (1) to *strongly agree* (6), with higher scores indicating greater gender role conflict. The four factors identified from factor analysis are internally consistent, with alphas reported to range from .75 to .85 and have adequate test–retest reliability over a 4-week period ranging from .72 to .86 (O'Neil et al., 1986). Construct validity has been determined by item-reduction procedures and factor analysis (O'Neil et al., 1986). Concurrent validity has been demonstrated by finding significant relationships between GRCS scores and attitudes about masculinity, fear of intimacy, psychological distress (Good et al., 1995), as well as rigid dominant and hostile interpersonal behavior (Mahalik, 2000b). For this study, alpha for GRCS total was .91, with alphas ranging from .84 to .88 for subscale scores.

The MGRS consists of 40 items rated on a 6-point scale (0 = *not stressful* to 5 = *extremely stressful*) that reflect specific situations in which gender role stress for men may arise. In addition to the total

score, Eisler and Skidmore (1987) reported five factors: (a) Physical Inadequacy, (b) Emotional Inexpressiveness, (c) Subordination to Women, (d) Intellectual Inferiority, and (e) Performance Failure. Support for the construct validity of the MGRS has emerged from studies that report men to score significantly higher on the MGRS and the five MGRS factors than do women (Eisler & Skidmore, 1987; McCreary et al., 1996; Watkins et al., 1991) and that high levels of MGRS in college-age men are predictive of anger, anxiety, unhealthy lifestyle behaviors (Eisler et al., 1988), verbal and nonverbal emotional inexpressiveness, dissatisfaction with social supports (Saurer & Eisler, 1990), and greater externalization, guilt-proneness, and shame-proneness (Efthim, Kenny, & Mahalik, 2001). The MGRS has been linked to Type A (coronary-prone) behavior and hostility (Watkins et al., 1991) and with measures of alcohol abuse in an inpatient group of abusers (Isenhardt, 1993). Two-week test–retest reliability of the MGRS was reported at .93 for the overall scale (Skidmore, 1988). For this study, alpha for MGRS total was .93, with alphas ranging from .73 to .85 for subscale scores.

Psychological distress was measured using the Brief Symptom Inventory (BSI; Derogatis, 1993). The BSI contains 53 items rated on a 5-point scale (0 = *not at all* to 4 = *extremely*) to reflect respondents' distress during the previous week. Higher scores indicate greater distress. Forty-nine of the items were designed by Derogatis to measure nine specific dimensions of psychological symptoms: somatization, obsessive–compulsiveness, interpersonal sensitivity, depression, anxiety, hostility, phobic anxiety, paranoid ideation, and psychoticism. The remaining 4 items were intended to not load on any individual subscale but contribute to an overall index of distress, the Global Severity Index, which reflects the average intensity rating for all 53 items. Hayes (1997) investigated the factor structure of the BSI in a national sample of counseling center clients. Exploratory and confirmatory factor analyses revealed support for six factors: Depression, Somatization, Hostility, Social Comfort, Obsessive–Compulsive, and Phobic Anxiety. The item composition of Somatization, Hostility, and Obsessive–Compulsive replicated exactly the original factors proposed by Derogatis. Hayes obtained evidence of convergent validity for the subscales through moderate to high correlations between the subscales and theoretically related items from a problem checklist, and the subscales showed modest evidence of discriminant validity. Construct validity was supported in that, consistent with established findings, women scored higher than men on nearly all

of the subscales. Regarding reliability, internal consistency values in Hayes's study ranged from .70 to .89, with an average value of .81. For this study, alpha for BSI Global Severity Index was .96, with alphas ranging from .71 to .85 for subscale scores.

The Attitudes Toward Seeking Professional Psychological Help Scale (ATSPPH; Fischer & Turner, 1970) was developed to assess the propensity of an individual to seek psychotherapeutic assistance. The ATSPPH scale consists of 29 statements, which the participant rates on a 4-point Likert-type scale ranging from 1 = *agree* to 4 = *disagree*. Evidence for construct validity includes findings that the scale differentiated between persons who had and had not obtained psychological help (Fischer & Turner, 1970). They reported internal consistency as .83 and that test-retest reliability was .89 for 2 weeks and .84 for 8 weeks. In this study, $\alpha = .82$.

The Marlowe-Crowne Social Desirability Scale (MCSDS; Crowne & Marlowe, 1960) consists of 33 true-false items (0 = *false* and 1 = *true*). The scale was designed to assess the tendency to provide socially desirable responses. Internal consistency was reported to be .88 with test-retest reliability over 1 month as .88. Validity has been supported by the scale's lack of relationship to depression and anxiety. In this study, $\alpha = .78$.

Results

In conducting our analyses for Studies 3 and 4, we wanted to balance Type I and Type II error issues. That is, we wanted to attend to cumulative error that may occur as a result of the large number of analyses conducted in Studies 3 and 4. However, a Bonferroni correction was not calculated as some of the sample sizes for individual analyses raised issues of power. Thus, the significance level for all analyses in these two studies was set to .01 to attend to both issues.

To examine the CMNI total and 11 Masculinity Norms subscales in relation to the other measures of masculinity, we conducted Pearson correlations (see Table 4).

As the masculinity variables should relate positively to each other, these analyses were conducted at the one-tailed level. Results from the analyses indicated that the CMNI total scores related significantly and positively to the total scores for the BMS, the GRCS, and the MGRSS. Examining the CMNI subscales in relation to the other masculinity subscales indicated that Winning scores related to scores on Admired and Respected, Success/Power/Competition, and Physical Inadequacy but were not related to Performance Failure. Emotional Control scores re-

lated to Concealing Emotions, Restrictive Emotionality, Restrictive Affectionate Behavior Between Men, and Emotional Inexpressiveness. Risk-Taking scores related to Tough as well as Violence and Adventure; and Violence scores related to Tough as well as Violence and Adventure. Power Over Women scores related to Antifemininity and Subordination to Women. Dominance scores related to Admired and Respected, Tough, Success/Power/Competition, and Subordination of Women. Playboy scores were related to Antifemininity, Violence and Adventure, and Concealing Emotions but not to Subordination of Women. Self-Reliance scores were related to emotional disconnection through significant relationships with Concealing Emotions, Restrictive Emotionality, and Emotional Inexpressiveness. Primacy of Work scores related to Breadwinner, Male Machine, Success/Power/Competition, and Conflict Between Work and Family. Disdain for Homosexuals scores related to Antifemininity and Restrictive Affectionate Behavior Between Men. Finally, Pursuit of Status scores related significantly to Breadwinner, Admired and Respected, and Success/Power/Competition but did not significantly relate to Performance Failure.

Pearson correlations were conducted to examine the CMNI total and 11 Masculinity Norms subscales in relation to attitudes toward psychological help-seeking. As the literature consistently shows traditional masculinity to relate negatively to attitudes toward psychological help-seeking (e.g., Good et al., 1989; Wisch et al., 1995), these analyses were conducted at the one-tailed level. As hypothesized, the CMNI total score ($r = -.49$) as well as the Emotional Control ($r = -.45$) and Self-Reliance ($r = -.33$) subscales correlated significantly and negatively with scores on the ATSPPH. Additionally, higher scores on the Winning ($r = -.28$), Violence ($r = -.25$), Power Over Women ($r = -.37$), and Disdain for Homosexuals ($r = -.38$) subscales were also associated with negative attitudes toward seeking psychological help.

Pearson correlations were conducted to examine the CMNI total score and the 11 Masculinity Norms subscales in relation to psychological distress (see Table 5). Again, given that research indicates greater distress associated with masculine gender role conflict and stress, these analyses were conducted at the one-tailed level. Results indicated the Violence, Dominance, Self-Reliance, and the CMNI total subscale correlated positively and significantly to the Global Severity Index of the BSI (see Table 5). Results from Pearson correlations between the CMNI scores and the BSI subscales indicated a number of

Table 4
Correlations of CMNI Scores to Total and Subscale Scores for the Brannon Masculinity Scale, Gender Role Conflict Scale, and Masculine Gender Role Stress Scale

CMNI score	Brannon Masculinity Scale														Gender role conflict							Masculine gender role stress				
	BMS	AF	CE	BR	AR	TO	MM	VA	GRCS	SPC	RE	RAM	CBWF	MGRS	PI	EI	SW	II	PF							
Winning Emotional Control	.51***	.46***	.32***	.35***	.42***	.46***	.28***	.41***	.38***	.52***	.18**	.23***	.02	.28**	.39***	.19	.26**	.12	.12							
Risk-Taking	.50***	.34***	.67***	.25***	.20**	.40***	.47***	.30***	.42***	.10	.66***	.39***	.01	.29**	.23**	.41***	.16	.29***	.13							
Violence	.27***	.08	.12	.10	.21**	.36***	.19	.42***	.14	.23***	.02	.06	.05	.09	.01	.07	.16	.03	.08							
Power Over Women	.46***	.29***	.37***	.28***	.23**	.39***	.28***	.65***	.17**	.14	.21**	.11	-.02	.13	.10	.16	.18	.08	-.03							
Dominance	.57***	.56***	.41***	.40***	.43***	.47***	.30***	.46***	.37***	.32***	.30***	.30***	.07	.42***	.37***	.32***	.51***	.31***	.13							
Playboy	.49***	.25***	.32***	.27***	.48***	.54***	.34***	.48***	.44***	.59***	.21**	.19**	.16**	.16	.23**	.04	.16	.09	.11							
Self-Reliance	.46***	.42***	.38***	.36***	.23**	.31***	.27***	.46***	.25***	.18**	.28***	.19**	.03	.13	.15	.19	.15	.02	-.02							
Primacy of Work	.27***	.16	.36***	.12	.12	.23**	.29***	.19	.38***	.22***	.42***	.29***	.10	.21	.20	.37***	.15	.18	-.02							
Disdain for Homosexuals	.34***	.24**	.24**	.38***	.22**	.18	.40***	.18	.30***	.30***	.19	.12	.21**	.17	.13	.18	.25**	.13	-.02							
Pursuit of Status	.57***	.65***	.45***	.38***	.49***	.40***	.30***	.35***	.36***	.32***	.21**	.40***	.04	.31***	.37***	.23**	.30***	.15	.15							
Total conformity	.14	.06	.06	.21**	.21**	.05	.08	.09	.16**	.42***	-.06	-.04	.05	.09	.11	.05	-.03	.08	.17							
	.79***	.65***	.66***	.52***	.53***	.64***	.54***	.67***	.56***	.51***	.48***	.41***	.09	.40***	.40***	.40***	.39***	.26**	.14							

Note. $n = 137$ for BMS; $n = 216$ for GRCS; $n = 114$ for MGRS. CMNI = Conformity to Masculine Norms Inventory. For Brannon Masculinity Scale: BMS = total score; AF = Avoiding Femininity; CE = Conceal Emotions; BR = Breadwinner; AR = Admired and Respected; TO = Tough; MM = Male Machine; VA = Violence and Adventure. For Gender Role Conflict Scale: GRCS = total score; SPC = Success/Power/Competition; RE = Restrictive Emotionality; RAM = Restrictive Affectionate Behavior Between Men; CBWF = Conflict Between Work and Family. For Masculine Gender Role Stress Scale: MGRS = total score; PI = Physical Inadequacy; EI = Emotional Inexpressiveness; SW = Subordination to Women; II = Intellectual Inferiority; PF = Performance Failure.

*** $p < .01$ one-tailed. ** $p < .001$ (one-tailed).

Table 5
Correlations Between CMNI Scores and Subscales of the Brief Symptom Inventory

Factor	Depression	Somatization	Hostility	Social comfort	Obsessive–compulsive	Phobic anxiety	BSI GSI
Winning	.08	.09	.21**	.22**	.11	.01	.13
Emotional Control	–.01	–.03	.16	.06	.06	.06	.05
Risk-Taking	.13	.24**	.18	.16	.07	.12	.16
Violence	.14	.24**	.34***	.21**	.17	.04	.22**
Power Over Women	.02	.10	.26***	.16	.10	.03	.10
Dominance	.18	.26**	.30**	.23**	.17	.20**	.24**
Playboy	.06	.17	.24**	.07	.16	.16	.12
Self-Reliance	.21**	.11	.23**	.26***	.22**	.26***	.26***
Primacy Work	–.02	.07	.03	.08	.09	.30***	.07
Disdain for Homosexuals	–.11	–.05	.07	.07	–.05	–.09	–.05
Pursuit of Status	.13	.09	.06	.15	.07	.07	.11
Total score	.10	.19	.34***	.25**	.18	.15	.20**

Note. $N = 137$. CMNI = Conformity to Masculine Norms Inventory; BSI GSI = Global Severity Index of the Brief Symptom Inventory.

** $p < .01$ (one-tailed). *** $p < .001$ (one-tailed).

significant positive relationships. Specifically, Depression and Obsessive–Compulsive scores related to Self-Reliance scores. Somatization related to Risk-Taking, Violence, and Dominance. Hostility related to Winning, Violence, Power Over Women, Dominance, Playboy, Self-Reliance, and total conformity scores. Social Comfort related to Winning, Violence, Dominance, Self-Reliance, and total conformity scores; and Phobic Anxiety related to Dominance, Self-Reliance, and Primacy of Work.

Pearson correlations were also conducted to examine the CMNI total score and the 11 Masculinity Norms subscales in relation to social desirability. Because social desirability may relate to both conformity to some norms (e.g., Winning) and nonconformity to others (e.g., Violence), analyses of social desirability was conducted at the two-tailed level. Results indicated that MCSDS scores correlated significantly with the CMNI total score ($r = -.34$) and Violence ($r = -.35$), Playboy ($r = -.33$), and Power Over Women ($r = -.32$) subscales.

Discussion

Results from this study supported the convergent validity of scores on the CMNI total and 11 Masculinity Norms subscales. Specifically, the CMNI total related significantly to the total scores of all three masculinity-related measures. Furthermore, almost all of the hypothesized relationships between the subscales of the three masculinity-related measures and the CMNI subscales designed to assess similar constructs were supported. These results suggest that the CMNI subscales were measuring the masculinity constructs they were intended to measure.

It is also notable that the CMNI total score correlated strongly with the other normative masculinity scale (i.e., the BMS total score) but only moderately with the measures of conflict and stress associated with masculine gender roles. Thus, it appears that the CMNI measures more of the normative aspects of masculinity than the conflict and stress associated with masculine gender roles.

Results also indicated support for the concurrent validity of the CMNI in that it was related to negative attitudes toward seeking psychological help but had mixed support when psychological distress was examined. That is, only about a quarter of the relationships between CMNI variables and BSI scores were significant, and these accounted for only a small proportion of variance.

Nevertheless, these two sets of findings highlight an important issue that deserves the attention of psychologists. Namely, there seems to be a consistent pattern in which conformity to masculine norms is associated with greater psychological distress (e.g., Blazina & Watkins, 1996; Cournoyer & Mahalik, 1995; Good et al., 1995; Sharpe & Heppner, 1991; Theodore & Lloyd, 2000) but also less with less willingness to seek psychological help (Good et al., 1989; Robertson & Fitzgerald, 1992; Wisch et al., 1995). However, unlike most other studies reporting emotional restriction to be most strongly associated with psychological distress, this study found men's conformity to self-reliance, dominance, violence, and overall conformity to masculine norms to be the significant predictors of global psychological distress.

Although it is not possible to determine the causal direction of the relationships between conformity to masculine norms and psychological distress sub-

scales, examining the CMNI subscales can develop some pictures that may be clinically useful for understanding conformity to masculine norms and men's psychological distress. Specifically, men who conformed to violence, dominance, and risk-taking masculine norms tended to report psychological distress through somatization. Men who experienced psychological stress through being socially uncomfortable tended to conform to winning, violence, dominance, and self-reliance. For this relationship, trying to defeat others, fight and dominate them, and not count on them may help these men deal with their discomfort; or it may be that their tendency to try to beat others, fight and dominate them, and not count on others led to more feelings of discomfort in their interactions with others. Other results indicated that men who were more anxious tended to put work first and be self-reliant. We speculate that putting energy into work may help men to manage their anxiety, or it may be that putting work first leads to anxiety in other areas of life.

It also appears that conformity to masculine norms as measured by the CMNI is most strongly connected to distress on the Hostility subscale. In this case, the more men conform, in general, to the dominant culture's masculinity norms, the more they report being irritable, angry, and resentful.

Although these results indicate that one cost associated with conformity to masculine norms is mild levels of psychological distress, conformity is also posited to have benefits associated with it, such as group acceptance or advancing in one's career; likewise, nonconformity is posited to have costs associated with it, such as group rejection (Mahalik, 2000c). Thus, readers are cautioned about making the conclusion that conformity is associated with only bad things for men, whereas nonconformity is only associated with good things. Future research should examine what benefits are associated with conformity as well as what costs are associated with nonconformity.

The results for the social desirability analyses highlight an important feature in measuring masculinity using self-report measures. Namely, unlike feminine norms that are mostly prosocial (e.g., nurturing others), some masculine norms are politically incorrect (e.g., being a playboy) and even illegal (e.g., violence). Brooks and Silverstein (1995) called many of the behaviors associated with conformity to traditional masculinity the "dark-side of masculinity." Thus, it should not be surprising that social desirability was related to some of the CMNI subscales. We believe these constructs are difficult at best to measure in a self-report format without some impres-

sion management occurring for the person completing the inventory. However, we also believe these constructs (e.g., conformity to violence norms, non-intimate sexual relations, and patriarchy) deeply affect the lives of individuals, families, and communities and are important for psychologists to examine in our work with men. Thus, we recommend that research using the CMNI apply statistical means to control for the effects of social desirability on these variables.

Study 4

To examine additional evidence for the concurrent validity of the CMNI, Study 4 examined CMNI scores in relation to measures of social dominance, aggression, and the desire to be more muscular. As social dominance reflects a person's degree of preference for inequality among social groups (Pratto, Sidanius, Stallworth, & Malle, 1994) and is associated with less favorable attitudes toward women's rights (Heaven, 1999; Pratto et al., 1994), we hypothesized that CMNI total would be related to social dominance and that the Power Over Women, Playboy, and Disdain for Homosexuals subscales would relate to social dominance. We also hypothesized that aggression should be related to the CMNI total score and subscale scores on Winning, Risk-Taking, Violence, Power Over Women, and Dominance. Finally, as the desire to be more muscular has to do with being more physically powerful (McCreary & Sasse, 2000), we hypothesized that the drive for muscularity should be related to the CMNI total and subscale scores on Winning, Violence, and Dominance.

Method

Participants and procedures. One hundred fifty-seven men participated in this part of the study. These men participated in Study 1; however, they also completed additional measures for Study 4. These men averaged 20.29 years ($SD = 5.51$) and were mostly Caucasian (124 Caucasian, 5 African American, 17 Asian or Asian American, 6 Hispanic/Latino, 2 biracial, and 3 "other"). Most men reported that they were single (146 single, 6 married, 1 divorced, and 4 in committed same-sex relationships) and heterosexual (150 heterosexual, 7 homosexual). Of this group, 71 were freshmen, 62 sophomores, 4 juniors, 7 seniors, and 13 graduate students.

These participants completed the demographics form and CMNI described in Study 1 (alphas for this study ranged from .70 to .92 for the 11 Masculinity Norms, and $\alpha = .94$ for the total score). Addition-

ally, participants completed two of the three measures described below.

Measures. The following measures were used for this study. The Social Dominance Orientation Scale (SDO; Pratto et al., 1994) assesses “one’s degree of preference for inequality among social groups” (p. 741). The SDO consists of 16 statements (e.g., “Some groups of people are simply inferior to other groups”) to which respondents indicate their level of positive or negative feelings on a 7-point Likert scale (i.e., 0 = *very negative* to 7 = *very positive*). Research has found that men tend to score higher than women (Pratto et al., 1994; Sidanius, Levin, Liu, & Pratto, 1999) on the SDO. Additionally, SDO scores are related positively to out-group prejudice against groups such as Blacks and homosexuals (Pratto et al., 1994; Whitley, 1999), associated with less favorable attitudes toward women’s rights (Heaven, 1999; Pratto et al., 1994), and linked to support for actions ranging from the Gulf War to the beating of Rodney King (Sidanius & Liu, 1992). Pratto et al. (1994) reported the SDO to have internal consistency estimates averaging .83 across their samples, with test–retest reported to be .83 over 3 months. In this study, $\alpha = .90$.

The Aggression Questionnaire (TAQ; Buss & Perry, 1992) consists of 29 items answered on a 5-point Likert scale based on how accurately the item describes the person’s behavior and beliefs (i.e., 1 = *not at all accurate* to 5 = *very accurate*) related to aggression. The TAQ was developed from the well-established Buss–Durkee Hostility Inventory by Buss and Perry (1992). It has been found to relate signifi-

cantly to other measures of aggression (O’Connor, Archer, & Wu, 2001), as well as to hostility, anger, and some psychological problems (Ruchkin & Eismann, 2000). Although only the total score is examined in this study, the TAQ is reported to have internal consistency estimates ranging from .72 to .89 across its four factors, with test–retest reliability over 9 weeks being .72 to .80. In this study, alpha for the total aggression score was .82.

The Drive for Muscularity Scale (DMS; McCreary & Sasse, 2000) assesses attitudes and behaviors reflecting a person’s desire to increase his or her muscularity. Each of the 15 items is scored on a 6-point scale from 1 = *never* to 6 = *always*, with higher scores indicating a greater drive for muscularity. Validity evidence for the scale includes differentiating males from females and finding that DMS scores were related to trying to gain weight, frequency of weight training, and being uncorrelated with the drive for thinness (McCreary & Sasse, 2000). Additionally, results indicated that DMS scores related significantly to higher depression and lower self-esteem for men but not women, supporting the differential salience of muscularity for men. Internal consistency estimates for men on the DMS were .84 in McCreary and Saase (2000) and .85 in this study.

Results

Table 6 contains the correlations between CMNI scores (i.e., total and the 11 Masculinity Norms) and the total scores from the other measures of interest. Because social dominance has been found to be

Table 6
Correlations of CMNI Scores With Total Scores on the Social Dominance Orientation Scale, the Aggression Questionnaire, and the Drive for Muscularity Scale

CMNI score	Social dominance	Aggression	Muscularity
Winning	.17	.47***	.33**
Emotional Control	.28**	.26**	.05
Risk-Taking	.04	.21	-.01
Violence	.32**	.49***	.22
Power Over Women	.58***	.36***	.17
Dominance	.12	.46***	.26
Playboy	.38***	.10	-.01
Self-Reliance	.24	.37***	.25
Primacy of Work	.26	.22	.02
Disdain for Homosexuals	.16	.46***	.25
Pursuit of Status	.05	.24	.17
Total score	.48***	.55***	.29**

Note. $n = 73$ for Social Dominance; $n = 88$ for Aggression; and $n = 62$ for Muscularity. CMNI = Conformity to Masculine Norms Inventory.
** $p < .01$ (one-tailed). *** $p < .001$ (one-tailed).

higher in men than women, and we believe masculinity norms should relate positively to aggression and the drive to be muscular, we conducted these analyses at the one-tailed level of significance. Results indicated that the CMNI total score correlated significantly to the SDO such that higher conformity to masculine norms in the United States were associated with more positive feelings toward inequitable social relationships. In relation to our hypotheses, Power Over Women and Playboy subscales related positively to Social Dominance, but Disdain for Homosexuals did not. Additionally, Emotional Control and Violence related significantly to Social Dominance scores.

Examining aggression, the CMNI total score correlated significantly to the total score for TAQ such that higher conformity to masculine norms predicted participants reporting more aggression. Specific to our hypotheses, aggression scores were related significantly to Winning, Violence, Power Over Women, and Dominance but not to Risk-Taking. In addition, aggression scores related significantly to Emotional Control, Self-Reliance, and Disdain for Homosexuals.

Examining the desire to be more muscular, the CMNI total score correlated significantly to the DMS such that higher conformity to masculine norms was associated with the desire to be more muscular. Additionally, Winning was significantly correlated to DMS scores, but Violence and Dominance scores were not.

Discussion

The results from this study supported the hypotheses that the CMNI total score would relate to each of these three constructs, but there was mixed support for the hypotheses examining the masculinity norms. Specifically, disdaining homosexuals did not relate to social dominance even though homosexuals are a group that has unequal status in U.S. society; however, results did support that the CMNI subscales that had to do with women (i.e., Power Over Women and Playboy in this heterosexual sample) were related to social dominance. It appears that conformity to these two masculinity norms reflects respondents' preference for inequitable relationships with women, supporting previous findings that social dominance was a negative predictor of attitudes toward women's rights (Heaven, 1999).

Although aggression seems to be a risky interpersonal strategy, the Risk-Taking subscale was not related to aggression scores. A number of other hypo-

thesized relationships between masculinity norms and aggression were supported, though. Results from these analyses also indicated that Violence and Dominance subscales were the most strongly related to aggression. We think these results fit well with the findings from Study 3 that CMNI scores were strongly associated with Hostility on the BSI.

Finally, although wanting to be more muscular was associated with conformity to winning norms, it was not related to violence or dominance norms as hypothesized. It is interesting to examine these results in relation to the previous findings on aggression. That is, being more muscular did not relate to being violent or dominant but was tied more to competing versus others.

Study 5

To examine another indicator of the reliability of the CMNI, Study 5 examined the temporal stability of the CMNI total and 11 Masculinity Norms subscales.

Method

Forty men participated in this part of the study. Thirty-two of these men were also participants in Study 1, but in addition to the data they provided, participants also completed the CMNI again 2–3 weeks after the first administration. Eight of the men participated only in the test–retest study. The 40 men averaged 24.23 years ($SD = 6.78$), were mostly Caucasian (35 Caucasian, 2 Asian or Asian American, and 1 Hispanic/Latino, 1 biracial, and 1 “other”). Most men reported that they were single (30 single, 7 married, 1 divorced, and 2 in committed same-sex relationship), and most reported that they were heterosexual (36 heterosexual, 4 homosexual). Of this group, there were 9 freshmen, 8 sophomores, 2 seniors, and 21 graduate students.

Results

To examine the temporal stability for a 2–3 week time period, we correlated CMNI scores at Time 1 with CMNI scores at Time 2. Test–retest coefficients were .95 for the total CMNI score, and .87 for Winning, .90 for Emotional Control, .88 for Risk-Taking, .76 for Violence, .74 for Power Over Women, .75 for Dominance, .91 for Playboy, .80 for Self-Reliance,

.67 for Primacy of Work, .96 for Disdain for Homosexuals, and .51 for Pursuit of Status.

General Discussion

The results from the five studies provide some initial support for the reliability and validity of the CMNI for the mostly Caucasian, heterosexual, and young adult student population sampled. Specifically, results from the studies suggest that the CMNI has 11 distinct factors, as well as relatively high internal consistency estimates and test–retest reliabilities over a 2–3 week period.

There was strong support across all studies for the validity of CMNI total score as it related to all the constructs of interest. An examination of the Masculinity Norms subscales reveal that many of the subscales also received strong support for their validity. Specifically, there was evidence that most of the CMNI subscales differentiated men from women and men who reported high-risk behavior from those who did not. Additionally, there was strong convergent validity and support for most of the hypothesized relationships examining the concurrent validity of the CMNI.

Two of the Masculinity Norms subscales, however, received more mixed support. Specifically, Pursuit of Status did not differentiate (a) college men from women or (b) men who say “yes” to high-risk health behaviors from those who say “no.” However, the scale had good convergent validity with other masculinity measures, with the three highest significant correlations occurring between Pursuit of Status and Success/Power/Competition, Breadwinner, and Admired and Respected. As such, these significant findings suggest that the Pursuit of Status scores are related to pursuit of status issues (i.e., being successful, having money and respect). The same is true for the Primacy of Work subscale. That is, despite having strong reliability, it did not differentiate important groups from each other but did relate to other masculinity subscales in predicted ways (i.e., Conflict Between Work and Family, Breadwinner, Male Machine, and Success/Power/Competition). As these two constructs are important in the masculinity literature (e.g., see David & Brannon’s, 1976, “Big Wheel”), and the scale has good reliability and convergent validity, we recommend that future research focus on examining these issues in samples of men and women who are not college students or men and women who subscribe to traditional gender roles. Failure to find predicted differences in these samples would lead to the conclusion that these subscales are not tapping masculinity.

Potential Uses for the CMNI

The CMNI was developed as a tool for use by clinicians and researchers to examine masculinity issues with individuals by assessing conformity to an array of masculinity norms. As psychologists have advocated increasingly for integrating a gendered perspective into assessment and treatment with clients (e.g., Brown, 1986; Brooks & Good, 2000; Gilbert & Scher, 1999; Good, Gilbert, & Scher, 1990; Mahalik, 1999a, 1999b), once normed, the CMNI may provide such a tool for the assessment of a large number of masculine norms when working with male clients, allowing a richer understanding of the salient aspects of masculinity for a given individual. Although research must be done to determine if interventions that incorporate interpretation of the CMNI with clients is helpful and for what issues, we speculate that it may be useful to explore with male clients how their positions on any of the masculinity norms both benefit them in daily living and contribute stress to their relationships, work, and health. Clinical interventions might focus on helping male clients to change aspects of their gendered self in which the costs associated with conformity or nonconformity outweigh the benefits the client experiences.

The CMNI might be used for a variety of research purposes. However, some of the most obvious questions to test using it would be the premises of Mahalik’s (2000c) model. For example, to test whether group and individual factors filter the communication of gender role norms, one could examine as predictors of CMNI scores variables such as SES, cultural membership, and the gender role norms of important peer groups—as examples of group factors—as well as variables such as self-esteem or attachment to parents—as examples of individual factors. Another example of research testing premises in the model would be to test the supposition that there are benefits and costs for the individual and others for both conforming to, and not conforming to, a variety of gender role norms. Testing this could be done in a variety of ways using family income, identity development, health-related behaviors, quality of relationships, or a host of other variables to determine benefits and costs for the individual and others to conformity or nonconformity to an array of masculinity norms.

Limitations

The fact that the samples were mostly Caucasian, heterosexual, college students in the United States is a limitation to both the generalizability of the findings and our knowledge about the psychometric

properties of the CMNI with other groups of men. As masculinity is a culturally defined construct (Mead, 1935; Pleck, 1981) that varies as a function of life stage (Levinson, Darrow, Klein, Levinson, & McKee, 1978), race and ethnicity (Lazur & Majors, 1995), and changes through history (Kimmel, 1996), it is important from a psychometric perspective to examine other groups of men to determine if the CMNI has the same 11-factor structure and acceptable psychometric properties with other groups of men.

It is also vitally important from a theoretical and clinical perspective to examine groups of men from diverse backgrounds in future research. Specifically, because Mahalik (2000c) believed that gender role norms from the most powerful culture in a society affect the experiences of persons in that group, as well as persons in all other groups, we believe that "minority men" (e.g., racial minorities, sexual orientation minorities) and men from less powerful groups (e.g., lower SES groups) have presented to them from the media and everyday living, and they must come to terms with the dominant culture's notions of masculinity.

Lazur and Majors (1995) addressed this issue when they wrote,

For a man of color, defining his own gender role involves integration of the dominant society's restrictions. Measuring himself against the standard that dictates the male gender role for the dominant culture yet denies equal access to the opportunities that sustain that standard evokes in the man of color frustrations, unexpressed emotions, and a drive for survival. (p. 340)

Thus, using the CMNI with minority men would allow one the opportunity to explore these issues in research and clinical practice. For example, how does racial identity contribute to minority men's identification with or nonidentification with masculine norms from the dominant culture? The same dynamics should also be relevant for issues such as acculturation, sexual identity development, or an array of other sociocultural variables. Again, because there are both benefits and costs to conformity and nonconformity to masculine norms in the dominant culture, we believe a measure that focuses specifically on the dominant culture's construction of masculinity has utility, and indeed is essential to assess, for scientists and practitioners in addressing minority men's concerns.

In conclusion, we believe that the results of these studies offer initial evidence supporting the reliability and validity of the 11-factor CMNI. Given that psy-

chologists are increasingly integrating a gendered perspective into their work, the CMNI may provide a useful tool in working with male clients, as well as examining important questions of interest to psychologists, such as what benefits and costs occur to individuals, families, and communities as a function of conformity and nonconformity to masculine norms. Addressing such questions offers the promise of helping us to better understand those forces that guide and constrain men's lives.

References

- Addis, M. E., & Mahalik, J. R. (in press). Men, masculinity, and the contexts of help-seeking. *American Psychologist*.
- Arrindell, W. A., Kolk, A. M., Pickersgill, M. J., & Hageman, W. J. (1993). Biological sex, sex role orientation, masculine sex role stress, dissimulation and self-reported fears. *Advances in Behavior Research and Therapy*, 15, 103-146.
- Bandura, A., Ross, D., & Ross, S. A. (1963). Imitation of film-mediated aggressive models. *Journal of Abnormal and Social Psychology*, 66, 3-11.
- Bartlett, M. S. (1950). Tests of significance in factor analysis. *British Journal of Psychology*, 3, 77-85.
- Bem, S. L. (1974). The measurement of psychological androgyny. *Journal of Consulting and Clinical Psychology*, 42, 155-162.
- Bem, S. L. (1981). Gender schema theory: A cognitive account of sex-typing. *Psychological Review*, 88, 354-364.
- Blazina, C., & Watkins, C. E., Jr. (1996). Masculine gender role conflict: Effect on men's psychological well-being, chemical substance usage, and attitudes toward help-seeking. *Journal of Counseling Psychology*, 43, 461-465.
- Brannon, R., & Juni, S. (1984). A scale for measuring attitudes toward masculinity. *JSAS Catalog of Selected Documents in Psychology*, 14, 6.
- Brooks, G. R., & Good, G. E. (2000). *The new handbook of psychotherapy and counseling with men*. San Francisco: Jossey-Bass.
- Brooks, G., & Silverstein, L. B. (1995). Understanding the dark side of masculinity: An interactive systems model. In R. F. Levant & W. S. Pollack (Eds.), *The new psychology of men* (pp. 280-336). New York: Basic Books.
- Brown, L. S. (1986). Gender role analysis: A neglected component of psychological assessment. *Psychotherapy*, 23, 243-248.
- Buss, A. H., & Perry, M. (1992). The aggression questionnaire. *Journal of Personality and Social Psychology*, 63, 452-459.
- Cialdini, R. B., & Trost, M. R. (1999). Social influence: social norms, conformity, and compliance. In D. Gilbert, S. Fiske, & G. Lindzey (Eds.), *The handbook of social psychology* (Vol. 2, pp. 151-192). Boston: McGraw-Hill.
- Courmoyer, R. J., & Mahalik, J. R. (1995). Cross-sectional gender role conflict examining college-aged and middle-aged men. *Journal of Counseling Psychology*, 42, 559-568.

- Courtenay, W. H. (2000). Constructions of masculinity and their influence on men's well-being: A theory of gender and health. *Social Science and Medicine*, *50*, 1385–1401.
- Crowne, D. P., & Marlowe, D. (1960). A new scale of social desirability independent of psychopathology. *Journal of Consulting Psychology*, *24*, 349–354.
- David, D. S., & Brannon, R. (1976). *The forty-nine percent majority: The male sex role*. Reading, MA: Addison-Wesley.
- Derogatis, L. R. (1993). *Brief Symptom Inventory: Administration, scoring and procedures manual—II*. Minneapolis: National Computing Systems.
- Efthim, P. W., Kenny, M. E., & Mahalik, J. R. (2001). Failing to live up to gender ideals: Examining shame, guilt, and externalization in relation to gender role stress. *Journal of Counseling and Development*, *78*, 430–438.
- Eisler, R. M. (1995). The relationship between masculine gender role stress and men's health risk: The validation of the construct. In R. F. Levant & W. S. Pollack (Eds.), *A new psychology of men* (pp. 207–225). New York: Basic Books.
- Eisler, R. M., & Skidmore, J. R. (1987). Masculine gender role stress: Scale development and component factors in the appraisal of stressful situations. *Behavior Modification*, *11*, 123–136.
- Eisler, R. M., Skidmore, J. R., & Ward, C. H. (1988). Masculine gender role stress: Predictor of anger, anxiety, and health-risk behaviors. *Journal of Personality Assessment*, *52*, 133–141.
- Fischer, E. H., & Turner, J. L. (1970). Orientation to seeking professional psychological help: Development and research utility of an attitude scale. *Journal of Consulting and Clinical Psychology*, *45*, 994–1001.
- Gilbert, L. A., & Scher, M. (1999). *Gender and sex in counseling and psychotherapy*. Needham Heights, MA: Allyn & Bacon.
- Good, G. E., Dell, D., & Mintz, L. B. (1989). Male role and gender role conflict: Relations to help-seeking in men. *Journal of Counseling Psychology*, *36*, 295–300.
- Good, G. E., Gilbert, L. A., & Scher, M. (1990). Gender aware therapy: A synthesis of feminist therapy and knowledge about gender. *Journal of Counseling and Development*, *68*, 376–380.
- Good, G. E., & Mintz, L. B. (1990). Gender-role conflict and depression in college aged men: Evidence for compounded risk. *Journal of Counseling and Development*, *69*, 17–20.
- Good, G. E., Robertson, J. M., O'Neil, J. M., Fitzgerald, L. F., DeBord, K. A., Stevens, M., et al. (1995). Male gender role conflict: Psychometric properties and relations to distress. *Journal of Counseling Psychology*, *42*, 3–10.
- Green, P. E. (1976). *Mathematical tools for applied multivariate analysis*. New York: Academic Press.
- Harris, I. M. (1995). *Messages men hear: Constructing masculinities*. Bristol, PA: Taylor & Francis.
- Hayes, J. A. (1997). What does the Brief Symptom Inventory measure in college and university counseling center clients? *Journal of Counseling Psychology*, *44*, 360–367.
- Heaven, P. C. L. (1999). Attitudes toward women's rights: Relationships with social dominance orientation and political group identities. *Sex Roles*, *41*, 605–614.
- Isenhart, C. E. (1993). Masculine gender role stress in an in-patient sample of alcohol abusers. *Psychology of Addictive Behaviors*, *7*, 177–184.
- Kaiser, H. F. (1974). An index of factorial simplicity. *Psychometrika*, *39*, 31–36.
- Kimmel, M. (1996). *Manhood in America: A cultural history*. New York: Free Press.
- Lazur, R. F., & Majors, R. (1995). Men of color: Ethnocultural variations of male gender role strain. In R. F. Levant & W. S. Pollack (Eds.), *The new psychology of men* (pp. 337–358). New York: Basic Books.
- Levant, R. F., Hirsch, L., Celentano, E., Cozza, T., Hill, S., MacEachern, M., et al. (1992). The male role: An investigation of contemporary norms. *Journal of Mental Health Counseling*, *14*, 325–337.
- Levinson, D. J., Darrow, C. N., Klein, E. B., Levinson, M. H., & McKee, B. (1978). *The seasons of a man's life*. New York: Knopf.
- Mahalik, J. R. (1999a). Incorporating a gender role strain perspective in assessing and treating men's cognitive distortions. *Professional Psychology: Research and Practice*, *30*, 333–340.
- Mahalik, J. R. (1999b). Interpersonal psychotherapy with men who experience gender role conflict. *Professional Psychology: Research and Practice*, *30*, 5–13.
- Mahalik, J. R. (2000a). Men's gender role conflict as predictors of self-ratings on the Interpersonal Circle. *Journal of Social and Clinical Psychology*, *19*, 276–292.
- Mahalik, J. R. (2000b, August). *A model of masculine gender role conformity. Symposium—Masculine gender role conformity: Examining theory, research, and practice*. Paper presented at the 108th Annual Convention of the American Psychological Association, Washington DC.
- McCreary, D. R., & Sasse, D. K. (2000). An exploration of the drive for muscularity in adolescent boys and girls. *Journal of American College Health*, *48*, 297–304.
- McCreary, D. R., Wong, F. Y., Wiener, W., Carpenter, K. M., Engle, A., & Nelson, P. (1996). The relationship between masculine gender role stress and psychological adjustment: A question of construct validity? *Sex Roles*, *34*, 507–516.
- Mead, M. (1935). *Sex and temperament in three primitive societies*. New York: William Morrow.
- O'Connor, D. B., Archer, J., & Wu, F. W. C. (2001). Measuring aggression: Self-reports, partner reports, and responses to provoking scenarios. *Aggressive Behavior*, *27*, 79–101.
- O'Neil, J. M. (1981a). Male sex-role conflicts, sexism, and masculinity: Psychological implications for men, women, and the counseling psychologist. *Counseling Psychologist*, *9*, 61–81.
- O'Neil, J. M. (1981b). Patterns of gender role conflict and strain: Sexism and fear of femininity in men's lives. *Personnel and Guidance Journal*, *60*, 203–210.
- O'Neil, J. M. (1982). Gender role conflict and strain in men's lives: Implications for psychiatrists, psychologists, and other human service providers. In K. Solomon & N.

- B. Levy (Eds.), *Men in transition: Changing male roles, theory, and therapy* (pp. 5–44). New York: Plenum.
- O’Neil, J. M., Helms, B., Gable, R. David, L., & Wrightsman, L. (1986). Gender Role Conflict Scale: College men’s fear of femininity. *Sex Roles, 14*, 335–350.
- Pleck, J. H. (1981). *The myth of masculinity*. Cambridge, MA: MIT Press.
- Pleck, J. H. (1995). The gender role strain paradigm: An update. In R. F. Levant & W. S. Pollack (Eds.), *A new psychology of men* (pp. 11–32). New York: Basic Books.
- Pratto, F., Sidanius, J., Stallworth, L. M., & Malle, B. F. (1994). Social dominance orientation: A personality variable predicting social and political attitudes. *Journal of Personality and Social Psychology, 67*, 741–763.
- Rafuse, J. (1993). Men’s attitudes about seeking health care may put them at risk, conference told. *Canadian Medical Association Journal, 149*, 329–330.
- Robertson, J. M., & Fitzgerald, L. F. (1992). Overcoming the masculine mystique: Preferences for alternative forms of assistance among men who avoid counseling. *Journal of Counseling Psychology, 39*, 240–246.
- Ruchkin, V. V., & Eisemann, M. (2000). Aggression and psychological problems in juvenile male delinquents versus controls in Russia: Alternate ways of “letting off steam”? *Aggression and Violent Behavior, 5*, 217–225.
- Saurer, M. K., & Eisler, R. M. (1990). The role of masculine gender role stress in expressivity and social support network factors. *Sex Roles, 23*, 261–271.
- Sharpe, M. J., & Heppner, P. P. (1991). Gender role, gender role conflict, and psychological well-being in men. *Journal of Counseling Psychology, 38*, 232–330.
- Sherif, M. (1936). *The psychology of social norms*. New York: Harper.
- Sidanius, J., Levin, S., Liu, J., & Pratto, F. (1999). Social dominance orientation, anti-egalitarianism and the political psychology of gender: An extension and cross-cultural replication. *European Journal of Social Psychology, 30*, 41–67.
- Sidanius, J., & Liu, J. H. (1992). The Gulf War and the Rodney King beating: Implications of the general conservatism and social dominance perspectives. *Journal of Social Psychology, 132*, 685–700.
- Skidmore, J. R. (1988). *Cardiovascular reactivity in men as a function of masculine gender role stress, Type A behavior, and hostility*. Unpublished doctoral dissertation, Virginia Polytechnic Institute and State University.
- Spence, J. T., & Helmreich, R. L. (1980). Masculine instrumentality and feminine expressiveness: Their relationship with sex-role attitudes and behaviors. *Psychology of Women Quarterly, 5*, 147–163.
- SPSS (1999). *SPSS reference guide*. Chicago: SPSS, Inc.
- Theodore, H., & Lloyd, B. F. (2000). Age and gender role conflict: A cross-sectional study of Australian men. *Sex Roles, 42*, 1027–1042.
- Thompson, E. H., Grisanti, C., & Pleck, J. H. (1985). Attitudes toward the male role and their correlates. *Sex Roles, 13*, 413–427.
- Thompson, E. H., & Pleck, J. H. (1986). The structure of male role norms. *American Behavioral Scientist, 29*, 531–543.
- Thompson, E. H., & Pleck, J. H. (1995). Masculine ideologies: A review of research instrumentation on men and masculinities. In R. F. Levant & W. S. Pollack (Eds.), *The new psychology of men* (pp. 129–163). New York: Basic Books.
- U.S. Department of Health and Human Services. (1996). *Advance report of final mortality statistics, 1994*. (DHHS Publication No. PHS 96-1120). Hyattsville, MD: Public Health Service.
- Villemez, W. J., & Touhey, J. C. (1977). A measure of individual differences in sex stereotyping and sex discrimination: The Macho Scale. *Psychological Reports, 41*, 411–415.
- Walker, D. F., Tokar, D. M., & Fischer, A. R. (2000). What are eight popular masculinity-related instruments measuring? Underlying dimensions and their relations to socio-sexuality. *Psychology of Men and Masculinity, 1*, 98–108.
- Watkins, P. L., Eisler, R. M., Carpenter, L., Schechtman, K. B., & Fisher, E. B. (1991). Psychosocial and physiological correlates of male gender role stress among employed adults. *Behavioral Medicine, 17*, 86–90.
- Weinstein, M. D., Smith, M. D., and Wiesenthal, D. L. (1995). Masculinity and hockey violence. *Sex Roles, 33*, 831–847.
- Whitley, B. E. (1999). Right-wing authoritarianism, social dominance orientation, and prejudice. *Journal of Personality and Social Psychology, 77*, 126–134.
- Wisch, A., Mahalik, J. R., Hayes, J. A., & Nutt, L. (1995). The impact of gender role conflict and counseling technique on psychological help seeking in men. *Sex Roles, 33*, 77–89.

Received January 8, 2002

Revision received July 10, 2002

Accepted July 19, 2002 ■