

Measuring a Macho Personality Constellation

DONALD L. MOSHER AND MARK SIRKIN

University of Connecticut

A Hypermasculinity Inventory was developed to measure a macho personality constellation consisting of three components: (a) calloused sex attitudes toward women, (b) violence as manly, and (c) danger as exciting. The 30 forced-choice items were selected by a two-stage internal consistency item analysis. Issues of substantive and structural validity were addressed by considering item content, test format, homogeneity of items, and the factor structure of items. The Cronbach α coefficient for the Hypermasculinity Inventory was .89 in the present sample of 135 college men. External validity was assessed by correlating scores of the Hypermasculinity Inventory with self-reported drug use, $r(135) = .26, p < .01$, aggressive behavior $r(135) = .65, p < .001$, and dangerous driving, $r(136) = .47, p < .001$, following alcohol consumption, and delinquent behavior during the high school years, $r(135) = .38, p < .01$. Construct validity was supported further by a pattern of theoretically meaningful correlations with the Personality Research Form (D. N. Jackson, 1974, Goshen, NY: Research Psychologists Press). The discussion considered further research that is needed to adduce additional evidence for the construct validity of the Hypermasculinity Inventory as a measure of the macho personality pattern.

The lyrics of a recent disco song proclaim, "I want to be a macho man!" "Macho" is a word with sharply contrasting subjective values in contemporary culture. *Machismo* is the Spanish word for the essence or spirit of masculinity. Horowitz (1967, p. 9) described *machismo* as "the Latin American cult exalting virility in speech, action, dress, virility expressed by bravado, courage, ruthlessness." In Hispanic cultures, the macho must defend his masculine identity from any assault on his masculine status or sexual potency. Interpersonally, he must sexually subjugate women, and with men, he must display a cool and aloof self-confidence as he is ever ready to respond to veiled insults during verbal dueling with verbal or physical aggressive action (Gillen, 1955; Hewes, 1953-1954; Ramirez, 1966; Romano, 1960). The concept of the *macho* has spread from Hispanic culture into American culture. The women's movement reacted to the exaggerated hypermasculine style of some American

Requests for reprints should be sent to: Dr. Donald L. Mosher, Department of Psychology, University of Connecticut, Storrs, CT 06268.

men by choosing *macho* as the epithet to characterize the rigidly sex-role stereotyped, calloused, aggressive man who was, if not openly hostile, unlikely to understand or to sympathize with their perspective.

The present investigation defines a macho personality constellation, develops a forced-choice inventory to measure hypermasculinity, and provides initial evidence of the predictive and construct validity of the inventory designed to measure the macho pattern.

This project is an extension and refinement of prior research on calloused sex attitudes toward women. Although the research on calloused sex attitudes provided some evidence for the construct validity of the inventory (Kier, 1972; Mosher, 1971a, 1971b), two psychometric limitations were obvious: (a) all items were keyed in a single direction, and (b) the times were obviously and blatantly calloused. Therefore, the inventory was subject to acquiescent and social desirability response sets.

Macho Constellation

Since Mosher (1971b) had viewed calloused sex attitudes as only one component of a hypermasculine style, it seemed useful to specify other elements in the constellation. The *macho personality constellation* is defined as an affective-cognitive structure (Izard, 1977) that has developed from repeated interactions of fundamental emotions with cognitions, including beliefs and attitudes, in situations in which the masculine self-concept was formed. During early and middle childhood, the parental use of contempt and humiliation to socialize the emotions of fear and distress in boys is hypothesized to be of major importance in fostering an exaggerated masculine style. The hypermasculine boy experiences shame and self-contempt when he fails to attain the masculine ideals of courage and stoicism through inhibiting his fear and his cry of distress. Enculturation in the masculine value of heroism continues during adolescence during participation in male peer group activities, including sports and less acceptable dangerous, delinquent, or aggressive behaviors. The view of masculinity as heroic is joined with a conception of women as dominion and as sexual object who exist as reward for the conquering hero. A set of beliefs and attitudes becomes bonded to emotions, particularly interest-excitement, that motivate a hypermasculine style and hypermasculine actions. The macho personality constellation is posited to consist of three related components: (a) calloused sex attitudes toward women, (b) a conception of violence as manly, and (c) a view of danger as exciting. These components reflect the macho man's desire to appear powerful and to be dominant in interactions with other men, women, and the environment. Violence as Manly refers to the attitude among some men that violent aggression, either verbal or physical, is an acceptable, even preferable, masculine expression of power and dominance toward other men. Calloused sex attitudes embody some men's attitudes that sexual

intercourse with women establishes masculine power and female submission, and is to be achieved without empathic concern for the female's subjective experience. Danger as Exciting reflects the attitude that survival in dangerous situations, including "tempting fate," is a manly display of masculine power over the dangerous environment. Any situation that challenges or threatens masculine identity activates this structure, thereby motivating and organizing the personality for participation in hypermasculine behaviors such as dangerous risk-taking, exploitative sex, or violence.

For this investigation this theory of hypermasculinity was used to generate a sample of forced-choice items for each of the three specified components which were then subjected to a two-stage internal consistency item analysis. The psychometric properties of the resulting hypermasculinity inventory were examined. Scores on the hypermasculinity inventory were correlated with several self-report measures and the scales on the Jackson (1974) *Personality Research Form* to determine if the resulting correlations and pattern of personality traits were consistent with theoretical expectations of a macho personality constellation.

METHOD

Subjects

One hundred thirty-five male college students from the University of Connecticut volunteered for this research to meet a requirement of an introductory psychology course. The majority of the students were 19 years old, from middle-class, Catholic families living in suburbs or small towns in Connecticut.

Procedure

The males signed up for an experiment on "Sexual Attitudes." The subjects were seen in small groups where the experiment was explained, and, if they wished to participate as they all did, they signed an informed consent. The subjects then anonymously completed the Hypermasculinity Inventory, A Substance Use Questionnaire, A Checklist of Adolescent Behavior, A Drinking and Behavior Survey, and the Personality Research Form. At the end of approximately 2 h the subjects were debriefed.

Measures

Drug Use. A Substance Use Questionnaire originally developed by Kopplin, Greenfield, and Wong (1977) was modified by grouping 32 specific drug names into 10 categories. The 10 categories were alcohol, stimulants, codeine, depressants, heroin, opium, marijuana, hashish, hallucinogens, and tobacco. Frequency of use was indicated from 0, "never"; 1, "once"; 2, "few times a year"; 3, "once or twice a month"; 4, "once or twice a week"; and 5 "daily."

High school delinquency. The Kulik, Stein, and Sarbin (1968) checklist of adolescent antisocial behavior was modified by adding six items to assess aggressive behavior and by asking for reports of behavior during high school. Items were rated according to the frequency of occurrence during the senior year of high school: 0, "never"; 1, "once or twice"; 2, "several times"; 3, "often"; and 4, "very often." A cluster analysis of the original scale on a sample of 100 incarcerated delinquents and 100 high school boys yield four oblique dimensions or clusters: (1) delinquent role, $n = 10$, α coefficient = .77; (2) drug abuse, $n = 4$, α coefficient = .72; (3) parental defiance, $n = 5$, $\alpha = .71$; and (4)

assaultiveness, $n = 5$, α coefficient = .47. The Cronbach α coefficient for the six added items assessing fighting and aggression was .68. In addition to this empirical grouping of items, a rational division of the 30 items was also examined: (1) drugs and alcohol, $n = 8$, α coefficient = .80; (2) fighting, $n = 8$, α coefficient = .70; (3) antiauthority, $n = 8$, coefficient = .69; (4) law-breaking, $n = 5$, α coefficient = .31; and (5) sexual experience in high school, $n = 1$.

Drinking and Behavior Survey. A 16-item Drinking and Behavior Survey was constructed to assess drinking behavior and aggressive behavior following the consumption of alcohol. Sample driving items are: "I have had an auto accident after drinking," and "After drinking I have drag-raced or raced in my car." Sample aggressive behavior items are: "When drinking I am more argumentative than usual," and "After drinking I have been involved in a bar room brawl or gang fight." Endorsement by frequencies were scaled as follows: 0, "never or not at all"; 1, "once"; 2, "twice"; 3, "three times"; 4, "more than three times." Cronbach α coefficients for the 8 item driving subscale, the 8 item aggressive behavior, and all 16 items were .54, .85, and .85, respectively.

Personality Research Form. Jackson (1974) developed the Personality Research Form (Form E) to measure 20 personality traits and two indexes of response bias. Jackson provided explicit, theoretically based definitions of particular traits largely taken from Murray's (1938) needs. Further psychometric properties considered throughout scale development include careful selection of homogeneous items, suppression of response biases, and attention to convergent and discriminant validity. Corrected split-half reliabilities for the 22 scales as measured by 16 items based on a college sample as reported in the *PRF Manual* ranged from .50 to .91 with a median of .70.

RESULTS

Development of the Hypermasculinity Inventory

An item pool of forced-choice items was constructed to represent the referents suggested by theory to indicate the presence of a macho personality syndrome. Many items are statements taken from all male peer groups when discussing fighting, sex, and dangerous exploits. There were 70 calloused sex items, 91 violence as manly items, and 60 danger as exciting items in the original pool. First, these items were administered to 60 college men, and each of the items comprising the three subscales was correlated with the summed subscale score. The 30 items with the highest item-total correlation were selected for each subscale. Second, this selected 90-item pool was administered to a sample of 135 college men. Again, each item from a subscale was correlated with the summed total of items in that subscale. The 30 item-total correlations for Calloused Sex Attitudes ranged from .28 to .63 with a median of .48; for Violence as Manly from .15 to .63 with a median of .44, and for Danger as Exciting from .09 to .60 with a median of .41. Only 3 items of the 90 were not significantly correlated with their respective subscale totals. Cronbach α coefficients were computed to measure the reliability of the 30-item subscales on this sample as follows: Calloused Sex, $r = .88$; Violence, $r = .86$; and Danger, $r = .82$.

Although each of these subscales could be used independently, the logic of a personality constellation posits that each subscale is one component of a configuration. To measure the macho pattern, 30 items were

selected to include the 10 items from each subscale that had the highest item-subscale total correlations. This 30-item Hypermasculinity Inventory had a Cronbach α coefficient of .89, a mean of 11.03, and a standard deviation of 6.79. The items appear in Table 1 along with the subscale key, means (proportion of endorsement), standard deviation, and item-total correlations.

The respective means, standard deviations, and Cronbach α coefficients for the three subscales were: Violence, 3.84, 2.84, and .79; Danger, 3.87, 2.44, and .71; and Calloused Sex, 3.33, 2.63, and .79. Violence was significantly correlated with Danger, $r(135) = .63, p < .001$, and Calloused Sex, $r(135) = .60, p < .001$. Danger was significantly correlated with Calloused Sex, $r(135) = .58, p < .001$. Since these correlations were moderate in size and below the level of the obtained α coefficients, it seemed prudent to factor analyze the inventory to determine if one or three factors would emerge. Therefore, the responses to this 30-item Hypermasculinity Inventory were factor analyzed using the method of principal axes. The first factor accounted for 24% of the variance, and each item loaded on this factor with weights ranging from .33 to .60. Eight other factors accounted for from 7% to 4% of the variance, respectively, but their factor loadings did not aggregate by subscales. The final communality estimates per item ranged from .45 to .77. The factor analysis revealed the presence of a single, predominant, latent variable that was relatively homogeneous and which was named the macho personality pattern.

TABLE 1
HYPERMASCULINITY INVENTORY ITEMS AND ITEM STATISTICS

Hypermasculinity Inventory items ^a	
1.	1. After I've gone through a really dangerous experience my knees feel weak and I shake all over.
	2. After I've been through a really dangerous experience I feel high.
2.	1. I'd rather gamble than play it safe.
	2. I'd rather play it safe than gamble.
3.	1. Call me a name and I'll pretend not to hear you.
	2. Call me a name and I'll call you another.
4.	1. Fair is fair in love and war.
	2. All is fair in love and war.
5.	1. I like wild, uninhibited parties.
	2. I like quiet parties with good conversations.
6.	1. I hope to forget past unpleasant experiences with male aggression.
	2. I still enjoy remembering my first real fight.
7.	1. Some people have told me I take foolish risks.
	2. Some people have told me I ought to take more chances.
8.	1. So-called effeminate men are more artistic and sensitive.
	2. Effeminate men deserve to be ridiculed.
9.	1. Get a woman drunk, high, or hot and she'll let you do whatever you want.
	2. It's gross and unfair to use alcohol and drugs to convince a woman to have sex.

TABLE 1—*continued*

10. 1. I like fast cars and fast women.
2. I like dependable cars and faithful women.
11. 1. So-called prick teasers should be forgiven.
2. Prick teasers should be raped.
12. 1. When I have a few drinks under my belt, I mellow out.
2. When I have a few drinks under my belt, I look for trouble.
13. 1. Any man who is a man needs to have sex regularly.
2. Any man who is a man can do without sex.
14. 1. All women, even women's libbers, are worthy of respect.
2. The only woman worthy of respect is your own mother.
15. 1. You have to fuck some women before they know who's boss.
2. You have to love some women before they know you don't want to be boss.
16. 1. When I have a drink or two I feel ready for whatever happens.
2. When I have a drink or two I like to relax and enjoy myself.
17. 1. Risk has to be weighed against possible maximum loss.
2. There is no such thing as too big a risk, if the payoff is large enough.
18. 1. I win by not fighting.
2. I fight to win.
19. 1. It's natural for men to get into fights.
2. Physical violence never solves an issue.
20. 1. If you're not prepared to fight for what's yours, then be prepared to lose it.
2. Even if I feel like fighting, I try to think of alternatives.
21. 1. He who can, fights; he who can't, runs away.
2. It's just plain dumb to fist fight.
22. 1. When I'm bored I watch TV or read a book.
2. When I'm bored I look for excitement.
23. 1. I like to drive safely avoiding all possible risks.
2. I like to drive fast, right on the edge of danger.
24. 1. Pick-ups should expect to put out.
2. So-called pick-ups should choose their men carefully.
25. 1. Some women are good for only one thing.
2. All women deserve the same respect as your own mother.
26. 1. I only want to have sex with women who are in total agreement.
2. I never feel bad about my tactics when I have sex.
27. 1. I would rather be a famous scientist than a famous prizefighter.
2. I would rather be a famous prizefighter than a famous scientist.
28. 1. Lesbians have chosen a particular life style and should be respected for it.
2. The only thing a lesbian needs is a good, stiff cock.
29. 1. If you are chosen for a fight, there's no choice but to fight.
2. If you are chosen for a fight, it's time to talk your way out of it.
30. 1. If you insult me, be prepared to back it up.
2. If you insult me, I'll try to turn the other cheek.

Item statistics^b

Item No.	Subscale and alternative key	Item mean	SD	Item-whole correlations ^c
1	Danger, 2 ^d	.39	.49	.47
2	Danger, 1	.34	.48	.40

TABLE 1—*continued*

Item No.	Subscale and alternative key	Item mean	SD	Item-whole correlations ^c
3	Violence, 2	.53	.50	.45
4	Cal Sex, 2	.26	.44	.49
5	Danger, 1	.60	.49	.50
6	Violence, 2	.35	.48	.56
7	Danger, 1	.59	.49	.44
8	Violence, 2	.42	.50	.50
9	Cal Sex, 1	.44	.50	.45
10	Danger, 1	.20	.40	.40
11	Cal Sex, 2	.44	.50	.55
12	Violence, 2	.35	.48	.53
13	Cal Sex, 1	.40	.49	.51
14	Cal Sex, 2	.10	.30	.42
15	Cal Sex, 1	.24	.43	.41
16	Danger, 1	.42	.50	.44
17	Danger, 2	.13	.33	.45
18	Violence, 2	.34	.48	.53
19	Violence, 1	.41	.50	.47
20	Violence, 1	.31	.47	.48
21	Violence, 1	.30	.46	.44
22	Danger, 2	.60	.49	.42
23	Danger, 2	.28	.45	.41
24	Cal Sex, 1	.35	.48	.44
25	Cal Sex, 1	.62	.49	.43
26	Cal Sex, 2	.16	.37	.43
27	Danger, 2	.33	.47	.52
28	Cal Sex, 2	.32	.47	.57
29	Violence, 1	.36	.48	.53
30	Violence, 1	.46	.50	.45

^a In items 8, 11, and 24 the phrase "so-called" was added, post facto, to the nonmacho alternative to ensure that a nonsexist alternative was provided.

^b $N = 135$

^c Item-whole correlations are based on original 90-item scale and are significant beyond the .001 level.

^d The macho alternative for the item follows the subscale name.

Macho Syndrome and Drug Use

Table 2 contains the means and standard deviations of drug use and correlations with scores from the Hypermasculinity Inventory. From Table 2 it can be seen that the macho personality pattern was significantly correlated with the frequency of use of alcohol, stimulants, depressants, marijuana, and hashish. The Danger as Exciting subscale was the most important contributor to these correlations, and it also yielded significant correlations with the use of opium, codeine, and hallucinogens. The Violence as Manly items made only a minor contribution to explaining

TABLE 2
DRUG USAGE MEANS, STANDARD DEVIATIONS, AND CORRELATIONS WITH HYPERMASCULINITY
INVENTORY

Drug	Mean ^a	SD	Correlation with			
			Macho	Violence	Danger	Cal Sex
Combined drugs	12.48	6.25	.26**	.12	.32**	.25**
Alcohol	3.78	.78	.28**	.18*	.32**	.23**
Stimulants	.71	.95	.31**	.24**	.35**	.21*
Codeine	1.20	.96	.12	.01	.20*	.10
Depressants	.40	.82	.25**	.17*	.28**	.20*
Heroin	.01	.08	-.04	-.09	-.03	.02
Opium	.30	.73	.12	.03	.17*	.11
Marijuana	2.72	2.72	.24**	.09	.27**	.26**
Hashish	1.34	1.34	.20*	.10	.24**	.19*
Hallucinogens	.43	.43	.14	.04	.21*	.14
Tobacco	1.55	1.55	-.01	-.04	-.03	.03

^a $N = 134$.

* $p < .05$.

** $p < .01$.

the variance in drug use; the exceptions being small but significant correlations between Violence and the use of alcohol and depressant drugs.

Macho Syndrome and Alcohol Behavior

Not only is the more frequent use of alcohol associated with the macho constellation, but this constellation was also related to changes in driving and aggressive behavior following alcohol consumption. The means, standard deviations, and correlations of alcohol-related behaviors with the Hypermasculinity Inventory scores are presented in Table 3. The correlation between dangerous driving and the macho syndrome was significant and moderately high, with the Danger as Exciting items sharing the most common variance. The correlation between the macho syndrome and the eight items measuring aggressive behavior associated with alcohol consumption was not only highly significant but quite substantial. In fact, these correlations were similar in magnitude to the Inventory subscale intercorrelations.

Table 4 contains the means, standard deviations, and correlations of delinquent behaviors during the high school years with the Macho Syndrome. The macho syndrome was significantly correlated with the total self-reported delinquency during the high school years. The largest correlation was between the macho pattern and the theoretically grouped fighting items or the cluster grouped aggression items. The items in the Violence as Manly subscale made the largest contribution to that result.

TABLE 3
DRINKING AND BEHAVIOR SURVEY AND COMPONENT GROUPING AND CORRELATIONS WITH
HYPERMASCULINITY

Item groupings ^a	Inventory and subscales: correlation ^b with			
	Macho score	Violence	Danger	Cal Sex
Combined items (all)	.65	.54	.67	.47
Driving items	.47	.35	.51	.36
Aggression items	.65	.54	.67	.47

^a $N = 134$.

^b All correlations are significant ($p < .001$).

The next largest correlation among the delinquent behaviors with the macho pattern were with a cluster measuring delinquent role and a question concerning the frequency of sexual relations with girls during the high school years. During the high school years, the macho constellation was correlated with reported drug use, only when alcohol was included; the items from the Danger as Exciting subscale contributing most to the shared variance. Delinquent acts that broke laws were reported infrequently in this college sample, but a significant, small correlation was found

TABLE 4
DELINQUENCY SCALE AND COMPONENT GROUPING RELIABILITY AND CORRELATIONS WITH
HYPERMASCULINITY

Item grouping ^a	Inventory and subscales: Correlation with			
	Macho score	Violence	Danger	Cal Sex
All items	.38**	.28**	.40**	.31**
Theoretical groups				
Drugs and alcohol	.27**	.15	.30**	.25**
Fighting	.47**	.48**	.44**	.28**
Antiauthority	.13	.02	.18*	.14
Law breaking	.18*	.08	.18*	.21*
Sex experience	.36**	.32**	.32**	.29**
Cluster groups				
Delinquent role	.38**	.29**	.39**	.30**
Drug usage	.10	-.02	.13	.15
Parental defiance	.03	-.07	.10	.07
Assaultiveness	.20*	.08	.19*	.25**
Aggression	.47**	.50**	.44**	.28**

^a $N = 133$.

^b This group of items was added to the original cluster groups.

* $p < .05$.

** $p < .01$.

between law breaking and the macho constellation. The assaultiveness cluster was also significantly correlated with the Hypermasculinity Inventory scores, and in particular with Calloused Sex Attitudes. Defiance of school and parental authorities had no significant relationship with scores from the Hypermasculinity Inventory with the exception of a small, significant correlation with endorsement of the Danger as Exciting items.

Macho Constellation and Personality Patterns

Table 5 contains the means, standard deviations, and correlations of the scales from the Jackson Personality Research Form and the scores from the Hypermasculinity Inventory. The macho personality constellation was significantly positively correlated at less than the .001 level with Play, Impulsivity, Exhibition, and Aggression and, negatively, with Understanding, Harm-Avoidance, and Cognitive Structure. Smaller, significant

TABLE 5
CORRELATIONS BETWEEN JACKSON'S PRF TRAITS AND THE HYPERMASCULINITY INVENTORY

PRF traits ^a	Correlation with			
	Macho score	Violence	Danger	Cal Sex
Abasement	-.11	-.15	-.10	-.04
Achievement	-.04	.03	-.07	-.06
Affiliation	.17	.14	.25**	.05
Aggression	.29**	.29**	.17	.29**
Autonomy	.25**	.13	.29**	.23**
Change	.13	.10	.24**	.01
Cognitive structure	-.30**	-.19*	-.38**	-.23
Defendence	.14	.20*	.11	.06
Dominance	.24**	.26**	.17*	.19*
Endurance	-.01	.06	.04	-.13
Exhibition	.40**	.35**	.41**	.26**
Harm avoidance	-.36**	-.32**	-.47**	-.16
Impulsivity	.44*	.35**	.44**	.35**
Nurturance	-.22*	-.17	-.15	-.25**
Order	-.19*	-.17	-.19*	-.14
Play	.48**	.34**	.52**	.38**
Sentience	-.10	-.10	-.07	-.08
Social recognition	.03	.10	-.04	-.01
Succorance	-.13	-.16	-.12	-.06
Understanding	-.47**	-.42**	-.35**	-.43
Infrequency	.15	.14	.13	.12
Social desirability	-.18*	-.11	-.11	-.23**

^a $N = 132$.

* $p < .05$.

** $p < .01$.

correlations ($p < .01$) were present between the macho syndrome and higher levels of Autonomy and Dominance and lower levels of Nurturance. Still smaller, but significant ($p < .05$), negative correlations were found between the macho pattern and Order and Desirability. The Danger as Exciting subscale contributed the most variance to the correlations with Play, Harm Avoidance, Impulsivity, Exhibition, Cognitive Structure, and Autonomy. In addition, the Danger as Exciting items were significantly correlated with Affiliation and Change. The Violence as Manly subscale was a major contributor to the relationship with Aggression and Dominance; in addition, that subscale had a small but significant positive correlation with Defendance. The Calloused Sex Attitudes subscale was significantly, positively, correlated with Aggression and significantly, negatively, correlated with Nurturance and Desirability.

DISCUSSION

A theoretical conception of a macho personality constellation as composed of Calloused Sex Attitudes, a belief in Violence as Manly, and a conception of Danger as Exciting was the basis for generating an item pool of 221 items. Two internal consistency item analyses on different samples of subjects were used to reduce the items to a pool of 90 items and then to a final 30-item Hypermasculinity Inventory with 10 items selected to assess each component in the macho constellation. The *substantive* aspect of validation (Loevinger, 1957), which is that items comprising the inventory should reflect on theoretical grounds the appropriate universe of content, seems to be well met. The selected items are descriptive indices of a macho constellation consisting of three related components: (a) Calloused Sex Attitudes, (b) Violence as Manly, and (c) Danger as Exciting. A forced-choice format was selected to meet two *structural* considerations. The choice between item pairs was believed to mirror the role of decision making in the pattern itself. The nonreflective decisions to engage in dangerous, aggressive, or calloused sexual behaviors in life, which typify the macho constellation, might be paralleled by the selection of the somewhat undesirable macho alternatives with an amused bravado during the administration of the inventory. A second concern was that the content of items reflective of the syndrome might have proved to be too undesirable unless paired with somewhat undesirable alternatives. In some instances the choice can be compared to being a "macho" or a "wimp." The success of the pairings was attested to by the acceptably small, although significant, negative correlation between the Hypermasculinity Inventory and the PRF Desirability scale. Certainly, a social desirability response set would not offer a plausible alternative explanation for the pattern of relationships with the PRF scales. A final *structural* concern was the relationship among the hypothesized components and

the personality syndrome. Since item properties were assumed to be additive, homogeneity of the Hypermasculinity Inventory was expected, and the α coefficient of .89 reflects a homogeneous macho syndrome. The items had a factor structure consistent with the concept of a constellation; that is, there was a general factor on which all items loaded and several small factors that did not aggregate by subscale. The intercorrelations of the subscales, approximately .60, indicated strong relationships among them, but were less than the α coefficients for the 10-item subscales which were in the .70s. These structural features of the Hypermasculinity Inventory were consistent with the model of a constellation, with related but distinct components, that permits the items to be summed. Ascribing to Nunnally's (1978) arguments favoring homogeneous test construction, the authors advise using the Hypermasculinity Inventory to generate a single score for the macho constellation rather than employing the separate subscale scores as individual predictive variables.

Evidence for external validity was uniformly positive. Since past research on Calloused Sex Attitudes had focused on the sexual domain, emphasis was given to domains relevant to dangerous and violent behavior. The substantial correlation between the macho syndrome and aggressive behavior after alcohol consumption was as high as the subscale intercorrelations. This datum highlights the importance of drinking alcohol in a macho culture of violence in which aggression can be directed at other men or at women following drinking. The use of several classes of drugs and dangerous driving after drinking alcohol may provide exciting forms of danger for the macho man in college. Engaging in other delinquent acts also appears to be a correlate of this syndrome. The Hypermasculinity Inventory appears to be a promising measure of the macho syndrome which is particularly relevant to studies of male violence, delinquent or criminal behavior, and alcohol- and drug-related behavior. Of course, the macho syndrome is expected to relate to sexual aggression, especially rape and probably wife and child abuse. Concerns with such issues and a feminist perspective motivated the development of the Inventory.

The construct validity of the macho syndrome as measured by the Hypermasculinity Inventory was investigated by studying the pattern of relationships to a series of personality traits as measured by a widely recognized and accepted inventory of personality in general. From the pattern of correlations found between the Hypermasculinity Inventory and the *Personality Research Form*, it is possible to write a description of the macho personality syndrome by selecting phrases from Jackson's descriptions of high scorers on each trait or from his lists of defining trait adjectives (Jackson, 1974, pp. 6-7). The macho man does many things "just for fun," spends a good deal of time participating in games,

sports, social activities, and other amusements; does not want to understand many areas of knowledge and does not value synthesizing ideas or logical thought; tends to act on the "spur of the moment," without deliberation, giving vent readily to feelings, wishes, and volatile emotions; wants to be the center of attention and engages in behavior which wins the notice of others; enjoys exciting activity, especially if danger is involved, and does not avoid risk of bodily harm; does not want the uncertainty of decisions removed by definite knowledge since he prefers to rely on guesses or probabilities; enjoys combat and argument and is sometimes willing to hurt people to get his way or to "get even"; attempts to control or influence his environment and to influence or direct other people; does not give sympathy and comfort or offer others a "helping hand"; is not concerned with keeping personal effects and surroundings neat and organized; and does not describe himself in terms judged as desirable. Using selected defining adjectives, the macho man can be described as playful, pleasure-seeking, frivolous; noncurious, unreflective, illogical; hasty, reckless, impulsive; fearless, adventurous, risk-taking; imprecise, nonexact, disliking structure; aggressive, hot-tempered, belligerent; rebellious, nonconforming; controlling, domineering; unsympathetic, discouraging; disorganized, and inconsistent. The small, significant correlations with Hypermasculinity subscales can be interpreted as tendencies, when seeking danger and excitement, to like new and different experiences, especially in the company of friends (the theory would specify male friends), and as tendencies toward violence through suspecting that people (the theory would specify male strangers) mean him harm or are against him.

The macho personality constellation warrants further research. Further evidence of the Hypermasculinity Inventory as a measure of the macho constellation might employ it in laboratory experiments assessing alcohol intake and aggressive behavior against men and women; aggressive behavior against women following sexual arousal, anger instigation, and/or exposure to violent pornography; the facilitating effect of male groups on aggressive behavior or pain tolerance, etc. That is, much work remains to be done in the laboratory and in naturalistic settings to explore the apparently fertile construct of the macho personality pattern and the apparently useful Hypermasculinity Inventory as its operational definition.

REFERENCES

- Gillen, J. (1955). Ethos components in modern Latin American culture. *American Anthropologist*, 57, 488-500.
- Hewes, G. W. (1953-1954). Mexicans in search of the "Mexican": Notes on Mexican national character studies. *American Journal of Economics and Society*, 13, 209-223.
- Horowitz, I. L. (1967). Cuban communism. *Trans-action*, 4, 7-15.
- Izard, C. E. (1977). *Human emotion*. New York: Plenum.

- Jackson, D. N. (1974). *Personality Research Form—Form E*. Goshen, NY: Research Psychologists Press.
- Kier, R. G. (1972). *Sex, individual differences, and film effects on responses to sexual films*. Unpublished doctoral dissertation, University of Connecticut, Storrs.
- Kopplin, D. A., Greenfield, T. K., Wong, H. Z. (1977). Changing patterns of substance use on campus: A four-year follow-up study. *The International Journal of the Addictions*, 12, 73–94.
- Kulik, J. A., Stein, K. B., & Sarbin, T. K. (1968). Dimensions and patterns of antisocial behavior. *Journal of Consulting and Clinical Psychology*, 32, 375–382.
- Loevinger, J. (1975). Objective tests as instruments of psychological theory. *Psychological Reports* 3, 635–694.
- Mosher, D. L. (1971a). Psychological reactions to pornographic films. In *Technical report on the commission on obscenity and pornography: Vol. 8. Erotica and social behavior*. Washington, DC: U.S. Govt. Printing Office.
- Mosher, D. L. (1971b). Sex callousness toward women. In *Technical Report of the Commission on Obscenity and Pornography: Vol. 8. Erotica and social behavior*. Washington, DC: U.S. Govt. Printing Office.
- Murray, H. (1938). *Explorations in personality*. New York: Oxford Univ. Press.
- Nunnally, J. C. (1978). *Psychometric theory* (2nd ed.). New York: McGraw-Hill.
- Ramirez, S. (1966). *El Mexicano: Psicología de sus motivaciones* (4th ed.). S. A. Mexico: Edit. Libreria Carlos Cesarman.
- Romano, V. O. I. (1960). Donship in a Mexican-American community in Texas. *American Anthropologist*, 62, 966–976.