The Soviet Union collapsed in 1991, and all of the former Soviet republics and satellite states have since declared their independence. Travel restrictions and visa requirements typical of the Soviet era have been lifted, opening up new destinations and new opportunities for study. Despite the historic change in the political climate, very little social science research has appeared in Western journals from any of the former Soviet republics. Especially remarkable is an absence of any quantitative empirical research investigating the male role in Ukraine. Research in this region and on this population can provide a number of benefits. First, it enhances cross-cultural understanding of the variable nature of the male role in general. Second, it may stimulate further research in a set of attitudes and beliefs about the male role which likely has a significant impact on the social and emotional health of Ukrainian men, during an era of historic transition.

ABSTRACT This study represents a collaboration between Western and Ukrainian researchers interested in generating a structural model of masculinity in Ukrainian culture. Using the Multicultural Masculinity Ideology Scale (Doss & Hopkins, 1998) and exploratory factor analysis, we explored the factor structure of a sample of Ukrainian men (N = 187). Data was obtained from four public universities in two large cities in Ukraine. Principle components analysis with oblique rotation revealed four components: Sexuality/Prosperity, Stoic Protector, Competitive Perseverance, and Reserved Sexuality. Sexuality/Prosperity and Reserved Sexuality resembled components found in Russia, with the former demonstrating the most favorable psychometric properties. Stoic Protector and Competitive Perseverance appeared to be unique, though with weaker evidence of validity and reliability. Implications, limitations, and suggestions for future research are discussed.

KEYWORDS Masculinity ideology, gender roles, post-Soviet Ukraine, factor analysis

The Soviet Union collapsed in 1991, and all of the former Soviet republics and satellite states have since declared their independence. Travel restrictions and visa requirements typical of the Soviet era have been lifted, opening up new destinations and new opportunities for study. Despite the historic change in the political climate, very little social science research has appeared in Western journals from any of the former Soviet republics. Especially remarkable is an absence of any quantitative empirical research investigating the male role in Ukraine. Research in this region and on this population can provide a number of benefits. First, it enhances cross-cultural understanding of the variable nature of the male role in general. Second, it may stimulate further research in a set of attitudes and beliefs about the male role which likely has a significant impact on the social and emotional health of Ukrainian men, during an era of historic transition.
Gender, Economy and Health in Ukraine

After the collapse of communism, an unprecedented decline in population began in Ukraine. Between 1989 and 2001, there was a precipitous drop from 52 million to 49.3 million. This trend has not significantly slowed and as of 2009, the population is currently estimated at 45.6 (State Statistics Committee of Ukraine, n.d.) due to a wide variety of health concerns. Chief among them are HIV/AIDS and tuberculosis (see Feshbach & Galvin, 2005). This is a net loss of 6.4 million people since 1989, which is roughly two and a half times the population of Ukraine’s largest city, Kiev. Population decline however is a complex phenomenon with various links to public health. Jarosewich (1997) suggests that in an unstable economy, couples may be unable to support more than one child. Contributing factors may include an ill spouse or aging parents. Men’s health problems seem particularly relevant. For example, fertility rates among men are lower than previous generations, and may be indicators of the enduring legacy of Chernobyl (Jarosewich). Lifestyle choices may also be problematic since 20% of men in Ukraine abuse alcohol (Nordstrom, 2007). Furthermore, male deaths exceed female deaths by 6:1 because of a post-communist rise in violent death (i.e., drowning, murder, and accident) and stress related diseases such as stroke, heart attack, high blood pressure (Jarosewich; McKee & Shkolnikov, 2001). Suicide among men in the military is the leading cause of death (Nordstrom, 2007). In the general population, male suicides outnumber female suicides by approximately five to one (Kryzhanovskaya & Pilyagina, 1999). According to Nordstrom (2007) the Ministry of Public Health has responded by making the mental health of Ukrainian citizens a top priority and establishing a graduate program in public health in Kiev. Issues of reproductive and sexual health in Ukraine are also on the United Nation agenda. Population Fund (2006) cites specific concerns that Ukrainian men avoid dealing with issues of sexual and reproductive health. This places them and their partners at risk for unwanted pregnancies and sexually transmitted diseases. To support mentioned political initiatives, efforts will be needed to understand men and how they are responding to the demands of post-Soviet era in a country that is trying to separate itself from its Soviet past, and redefine its identity.

The Study of Men/Masculinity and Gender Roles in Ukraine

Research in the field of men and masculinity has grown dramatically in Western nations, resulting in many refinements in clinical practice (for an overview, see Brooks & Good, 2001). These refinements include treatment of special sub-populations (Robertson & Newton, 2001) assessment procedures (Cochran, 2005) and treatment of specific problems evidently common to men in North America and in Ukraine, such as substance abuse (Landrine, Bardwell, & Dean, 1988), depression (Pollack, 1998), and interpersonal violence (Lisak, 2001).

Much of the cited clinical literature is built upon early theoretical models, which were operationalized into assessment scales (Brannon & Juni, 1984; Levant, 1992; Thompson & Pleck, 1986). These scales verify or refine conceptual
models describing what is normally expected of men (that is, the socially constructed belief systems for the male role) in North American culture by assessing individuals’ agreement with or endorsement of those belief systems. Assessing individuals’ internalization or acceptance of a socially constructed belief system about the male role is the study of masculinity ideology. The definition of this term cited most frequently by western researchers is “...endorsement and internalization of cultural belief systems about masculinity and male gender, rooted in the structural relationship between the two sexes” (Pleck, Sonenstien, & Ku, 1993, p. 88). Endorsement of the socially constructed belief system is associated with traditional attitudes towards male roles. Implied is the assumption that male social roles will vary in a way that will meet the needs of a particular culture during a particular era (Kimmel & Messner, 1989). A classic example of a model of the male role is Brannon’s “Blueprint for Manhood” (1976) which postulates four themes: “No Sissy Stuff” (avoidance of appearing feminine), “The Big Wheel” (seeking status or power), “Sturdy Oak” (invulnerability to external threats), and “Give ’Em Hell” (threat of violence or seeking dangerous adventure).

At present, there is no theoretical or empirically derived model of the social role for men in Ukraine which might serve as a starting place for researchers interested in this field. Therefore, the purpose of this study is to take this initial step and shed light on the male role among men in Ukraine. Contemporary gender roles in Ukraine are influenced by a number of factors including Soviet ideology, Ukrainian history, the fall of communism, and dramatic changes in the Ukrainian economy. These elements interact within a larger context of a society that is in the process of establishing a national identity and distancing itself from a totalitarian past.

The resurrection of traditional gender roles, in which men were responsible for providing for the family, and women were confined to domestic duties (childcare, cooking, cleaning, etc.), seems integral to this process. During the Soviet era, gender equality in the workplace was a well known organizing principle of the communist state, and the prototypical Soviet worker was considered sexless (Kerig, Alyoshina, & Volovich, 1993). Ashwin (2000) contends that political expediency was the primary motivation for this policy rather than concern for women’s rights. The true objective of Marxist gender equity was to undermine the patriarchal social structure of rural peasant culture. This was accomplished by offering women education and employment while freeing them of childcare duties via state sponsored nurseries (Ashwin). Meanwhile men were recruited for the task of nation building, and their individual identity was “defined by his position in relation to the state” (Meshcherkina, 2000, p. 106). In effect, this positioned the state as the universal patriarch relative to husband and wife, leaving men feeling redundant and on the periphery of family life (Ashwin).

Despite official policy, most top level jobs and government positions were filled by men during this era (Shireav, 1999) and women were still left responsible for most domestic duties (Bodrova, 1997). Also problematic was the decline in birthrates in the European republics (including Ukraine) which was blamed on women’s involvement in the workplace. This prompted a contra-
diction of the official gender policy given overt education in stereotypical gender roles ("sex upbringing" or polovoe vospitanie) in school curricula (Attwood, 1996).

The end of communism caused a backlash against many previously held beliefs about consumerism, capitalism, private ownership of businesses, and Soviet ideas about gender equity. It is thus not surprising that conceptions of feminism imported from the West were viewed by the public with suspicion, and equated with the failed policies of the past (Bilaniuk, 2003; Pavlychko, 1996). As feminism was apparently being rejected, capitalism was embraced. Powerful images unique to Ukrainian culture appeared in marketing strategies and in popular consciousness. This is exemplified by the use of Cossacks in advertising. Cossacks were a people from southern Ukraine and European Russia known for both their independence and military prowess. They are routinely depicted as having exaggerated masculine and feminine traits (Bureychak, 2007). In terms of public consciousness, debate continues on the meaning and contemporary salience for women of ancient Ukrainian images such as the Goddess Berehynia (Kis, 2003; Pavlychko, 1996). This combination of forces essentially idealizes and nationalizes pre-communist gender roles by associating them with Ukrainian imagery. It also drove men out into the business world (Meshcherkina, 2000; Yurchak, 2002) and encouraged women to concentrate on the roles of wife and mother (Pavlycho, 1996). Recent research confirms this trend. Findings from Shapiro et al. (2003) and Yakushko (2005) indicate Ukrainian men and women seem to strongly endorse pre-communist gender roles for both sexes.

Masculinity Ideology and Cross-Cultural Research

Much has been learned about etic (by which we mean: applicable to many cultures) and emic (here: specific to one particular culture) components of masculinity in western society (Brannon, 1976; Levant et al., 1992) and various sub-populations (Fischer & Good, 1998). The same cannot be said about Ukrainian society either before or after separation from the Soviet Union. Though evidence indicates there are more “traditional” scores on measures of gender in Ukraine (Shapiro et al., 2003; Yakushko, 2005), there is no structural model of the male role which could describe what those differences might be.

The notion of masculinity ideology, as defined above, is based on the social constructionist perspective on the male role which assumes gender roles are social constructions that vary in meaningful ways across societies and historical eras (Kimmel & Messner, 1989). Research testing this variability has proceeded on two fronts. One approach has used exploratory and confirmatory factor analysis procedures to investigate possible differing structures of masculinity ideology. Samples investigated include men in America (Doss & Hopkins, 1998; Fischer, Tokar, Good, & Snell, 1998), African Americans and Chileans (Doss & Hopkins, 1998), men in South Korea (Janey & Lee, 2002), and Russia (Janey et al., 2006). With the exception of the last mentioned, few studies have been conducted that investigate potentially differing structural aspects of masculinity ideology in any of the former Soviet Republics.
A second line of approaches attempts to place cultures on a continuum between traditional and non-traditional beliefs using instruments presumed to tap into etic components of the male role in patriarchal societies (Levant, Wu, & Fischer, 1996). This approach has been used with African Americans (Levant & Majors, 1997), dwellers of northern American regions and the American south (Levant, Majors, & Kelly, 1998), men and women in China (Levant et al., 1996), and men and women in Russia (Levant et al., 2003). There is credible evidence suggesting a convergence of masculine ideals among male dominated societies supporting this etic approach (Gilmore, 1990). However, Gibbons, Hamby, and Dennis (1997) suggest this procedure is less than ideal since it risks the artificial imposition of etic components that might not have any meaning in the culture under investigation. Perhaps more problematic would be the omission of emic components which are presumed to exist (Kimmel & Messner, 1989).

It seems that a viable alternative course of action would be utilizing instruments validated with the population for which they were designed. Given that no such assessment tool exists relevant for Ukrainian culture, we propose a compromise of employing an instrument that has been shown to be a valid and reliable measure of masculinity ideology and demonstrates the capacity to reveal unique emic components of masculinity ideology across several different cultures. The Multicultural Masculinity Ideology Scale (MMIS: Doss & Hopkins, 1998) seems to meet both criteria.

Previous use of the MMIS suggests an etic component of Achievement among Americans of European heritage, African Americans, Chileans (Doss & Hopkins, 1998), Koreans (Janey & Lee, 2002), and Russians (Janey et al., 2006). Emic components from these samples show substantial variety, and include Sensitivity, Pose (a facade of invulnerability and objectivity), Responsibility, Sexual Responsibility, Toughness (Doss & Hopkins, 1998) as well as Dedicated Provider, Emotional Stability/Availability, and Composed Sexuality among Russians (Janey et al.).

The primary purpose of the current study is to take a first step toward the construction of a thematic model describing male role expectations from the perspective of Ukrainian men, using the MMIS and exploratory factor analysis procedures. A secondary objective is to test the reliability and validity of the MMIS using a sample of Ukrainian men. To these ends, this study was guided by the following hypotheses:

1. Analysis will reveal components resembling achievement and sexuality, which have been common threads across all previous studies using the MMIS, including Russia.
2. In addition and because of commonalities in political and economic factors, we hypothesize an etic component similar to the component of Dedicated Provider revealed in Russia in previous research (Janey et al, 2006).
3. Next, since Ukraine is in the process of forging a new national identity separate from its Soviet past, emic components unique to Ukrainian men will emerge.
4. Finally, components will demonstrate favorable psychometric properties indicating construct validity of the derived components.
METHOD

PARTICIPANTS

Data was collected from four Ukrainian universities, three of which are located in Odessa ($n = 87$) and one in Kirovohrad ($n = 102$). Both cities are far south of Kiev, reasonably isolated from the social and political influence of the capital, and home to a largely ethnic Ukrainian population.

The sample was composed of 191 male undergraduate and graduate students. All participants were volunteers and completed the questionnaire either as part of course research participation requirements or for extra course credit. The age of the participants ranged from 15 to 44 ($M = 19.47$, $SD = 4.94$). Responses on the MMIS from all four university samples were compared; since no significant differences were found, the data was combined. Additional data describing the sample are shown in Table 1.

<table>
<thead>
<tr>
<th>Variables</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Religion</strong></td>
<td></td>
</tr>
<tr>
<td>Russian Orthodox</td>
<td>68.2</td>
</tr>
<tr>
<td>Catholic</td>
<td>.5</td>
</tr>
<tr>
<td>Protestant</td>
<td>2.2</td>
</tr>
<tr>
<td>Muslim</td>
<td>2.2</td>
</tr>
<tr>
<td>Jewish</td>
<td>7</td>
</tr>
<tr>
<td>Other</td>
<td>14</td>
</tr>
<tr>
<td><strong>Marital Status</strong></td>
<td></td>
</tr>
<tr>
<td>Single</td>
<td>82</td>
</tr>
<tr>
<td>Married</td>
<td>12.6</td>
</tr>
<tr>
<td>Divorced</td>
<td>3.1</td>
</tr>
<tr>
<td>Separated</td>
<td>2.3</td>
</tr>
<tr>
<td><strong>Year in College</strong></td>
<td></td>
</tr>
<tr>
<td>First year</td>
<td>44.4</td>
</tr>
<tr>
<td>Second year</td>
<td>21.9</td>
</tr>
<tr>
<td>Third year</td>
<td>14.4</td>
</tr>
<tr>
<td>Forth year</td>
<td>11.2</td>
</tr>
<tr>
<td>Fifth year +</td>
<td>8</td>
</tr>
<tr>
<td><strong>College Major (f)</strong></td>
<td></td>
</tr>
<tr>
<td>Technical</td>
<td>24.4</td>
</tr>
<tr>
<td>Humanities</td>
<td>41.8</td>
</tr>
<tr>
<td>Arts</td>
<td>1.1</td>
</tr>
<tr>
<td>Business</td>
<td>8.6</td>
</tr>
<tr>
<td>Engineering</td>
<td>2.7</td>
</tr>
<tr>
<td>Other</td>
<td>14.4</td>
</tr>
<tr>
<td><strong>Family of Origin Monthly Income (Hryvna)</strong></td>
<td></td>
</tr>
<tr>
<td>$\leq 600$</td>
<td>10</td>
</tr>
<tr>
<td>600-1250</td>
<td>24</td>
</tr>
<tr>
<td>1250-2500</td>
<td>41</td>
</tr>
<tr>
<td>2500-5000</td>
<td>20</td>
</tr>
<tr>
<td>$5000 \leq$</td>
<td>5</td>
</tr>
</tbody>
</table>
Measures

Male Role Norms Scale. The Male Role Norms Scale (MRNS; Thompson & Pleck, 1986) is a 26-item measure used to assess endorsement of masculinity related norms. The MRNS was derived from the Brannon Masculinity Scale (Brannon & Juni, 1984), which was in turn based on Brannon’s Blueprint for Manhood (Brannon, 1976). The MRNS is scored on a five-point Likert scale, ranging from (1) “strongly disagree” to (5) “strongly agree.” Higher scores indicate higher levels of endorsement of traditional masculinity. Principal component factor analysis indicated three sub-constructs: Toughness, Anti-Femininity, and Status (Thompson & Pleck, 1986). Internal reliability estimates ranged from .74 to .81 (Thompson & Pleck).

Multicultural Masculinity Ideology Scale. The Multicultural Masculinity Ideology Scale (MMIS; Doss & Hopkins, 1998) is a 35-item measure devised to assess masculinity similarly to the MRNS. Items were developed based on a review of the empirical and non-empirical masculinity literature, which included non-Anglo sources (Doss & Hopkins). The MMIS is scored on a five-point Likert scale, ranging from (1) “strongly disagree” to (5) “strongly agree,” with higher scores indicating higher levels of masculinity.

Doss and Hopkins (1998) used a principal-component analysis including samples from Chilean, African-American and Anglo-American populations. Two common etic components were revealed: Hypermasculine Posturing and Achievement. Alpha coefficients were .81 and .72, respectively. Emic components for the Chilean sample were Toughness (.59), Pose (.58), and Responsibility (.48). The only emic components in the African-American and Anglo-American samples were Sexual Responsibility (.43) and Sensitivity (.70) (Doss & Hopkins). More recent research with a Russian sample (Janey et al., 2006) identified four components: Achievement Pose, Aggressive Sexuality, Dedicated Provider, and Emotional Availability/Stability. Internal consistency estimates of these factors in the Russian study were .77, .47, .41, and .51, respectively.

Marlowe-Crowne Social Desirability Scale. The 13-item short form of the Marlowe-Crowne Social Desirability Scale (SDS; Crowne & Marlowe, 1960) was used to test for cultural differences in social desirability and to examine discriminant validity of the MMIS. Items are rated as either “true” or “false,” and high scores indicate the tendency to respond in a manner understood as viewed favorably by others. The 13-item short form was developed following a principal factor analysis, and it has been found to have acceptable reliability estimates (.76) and a strong correlation with the 33-item Marlow-Crowne SDS (r = .93, p < .001). While the original study (Doss & Hopkins, 1998) used the 6-item short form, alpha coefficients seemed low (a = .39 - .47). As such, it was decided a more thorough test of this variable would be desirable (i.e., 13-item short form). Internal reliability for this sample was .87.
DEMOGRAPHIC QUESTIONNAIRE. A demographic questionnaire was devised to assess age, religion, marital status, year in college, college major, and family of origin monthly income.

TRANSLATION. Russian is no longer considered the national language of Ukraine, but it is still taught in schools and considered lingua franca in post-Soviet regions such as Ukraine (Bilaniuk, 2003). All measures were translated into Russian by a Russian graduate student in a graduate-level English language program. Back translation (Brislin, 1970) was performed by linguists fluent in both Russian and English. Difficult to translate items were translated with input from the principal investigators. The majority of items (72%) were either word-for-word translations or had only slight differences in sentence structure. Twenty five percent of items were judged to have subtle differences, yet retained the same general meaning. Two items proved problematic, lacking identical meaning in Russian. For example, “tough” in item 12 from the MMIS translated as “durable and stoic” in Russian. “When the going gets tough, the tough get going” in item 11 of the MRNS is an English expression that lacks a direct Russian equivalent. It was translated as “only the strongest can succeed and prevail.” It should be noted that in 1989, the Ukrainian legislature (Verkhovna Rada) adopted Ukrainian as the official state language. However, Russian and Ukrainian are linguistically similar, and Russian is still widely spoken, written and understood by the sample, and in general in Ukraine (Bilaniuk).

RESULTS

An initial sample of 191 men was obtained. Data was screened for outliers and cases with missing data. Three were deleted with Mahalanobis distance, which exceeded $p < .001$ with degrees of freedom equal to the number of variables ($\chi^2(35) = 66.58$). One case was deleted because of incomplete responses on the MMIS, and three other cases had isolated missing values in less than 10% of the total number of items included in the questionnaire. These missing values were replaced with means. This left a remaining sample of 187 for further analysis. According to Kass and Tinsley (1979), a sample size of 5-10 participants per variable is appropriate to conduct factor analysis. Since the Multicultural Masculinity Ideology Scale (MMIS) contains 35 variables, a sample of 175 to 350 would be indicated. Thus, a final sample of 187 was sufficient with a 5.34 participants-to-variables ratio.

PRINCIPAL COMPONENTS ANALYSIS

To estimate the number of components to retain for the MMIS, a principal components analysis was performed. This is consistent with previous analyses using the MMIS, and principal components analysis is preferred over other exploratory factor analysis procedures when the objective is an empirical summary of data (Tabachnik & Fidell, 2007), as was the case with this study. The number of components to be retained for rotation was determined according to four criteria: (a) eigenvalues greater than 1.0, (b) percentage of total variance
explained by each component, (c) Cattell’s (1966) scree test, and (d) interpretability of the solution. Scree plots indicated the presence of 13 components with eigenvalues greater than 1.0, with a marked discontinuity occurring after four. Therefore, solutions that were investigated ranged from 2 to 11.

Correlations between components for the MMIS were large enough ($r$ (187) = .05 to .28) to exceed the recommendations of Tabachnik and Fidell (2007) for orthogonal rotation. Thus, oblique rotation was utilized for further extractions, making the variance explained by each component an approximation. Components were retained if they were interpretable as a masculinity construct and had four or more items loading at $|.40|$ or higher. Solutions from 5 to 11 resulted in components with three or fewer items loading at the specified limit. A three component solution resulted in a reproduced correlation matrix with more than half (52%) of residuals with absolute values > .05, suggesting the presence of another component. A four-component solution appeared to be more interpretable and accounted for 33.1% of the variance. It included 25 of the 35 MMIS items with loadings of $\leq .40$ with no cross loadings $\geq .40$. Thus, all 25 items were included for interpretation. Table 2 presents the MMIS items and the component matrix for the four-component solution following oblique rotation.

Component 1 was composed of nine items, which accounted for 14.2% of the variance. This component appeared to represent the nexus between prosperity and potential for provision of material wealth and sexuality. Highest loading items were 31 (“A guy should have sexual intercourse as early as he can in life”), 11 (“In a relationship guys should have sexual intercourse as often as possible”), and 21 (“Even if a guy is not rich, he should try to look that way”). This component was labeled Prosperity/Sexuality.

The second component accounted for 7.5% of the variance and contained six items. Items generally suggested a stoic, emotionally reserved and confident attitude toward life (Items 10, 12, 7, and 9). The second highest loading item was 24 (“A man should not always have to protect his family”; reverse scored). Therefore, this component was labeled Stoic Protector.

The third component contained five items and accounted for 6.2% of the variance. This component was labeled Competitive Perseverance because it contained items concerning attitudes that could be viewed as common among men in a wide variety of competitive situations, such as sports or competitive arenas such as business. The following items are included in the third component: 30 (“Being athletic or good at a sport should be important for a guy”), 26 (“Guys should be competitive”), 16 (“A guy should put his best effort into every part of his life”), and 17 (“Courage should not be a necessary part of being a guy”; reverse scored).

The six items of the forth component accounted for 5.0% of the variance. Four of the six items were highly suggestive of sexuality: 34 (“For a guy, sexual intercourse should not be the goal of making out”), 18 (“Being a virgin should not be an embarrassment to a guy”), 4 (“A guy should prove his masculinity by having sex with a lot of people”), and 27 (“A guy should have sexual intercourse only in emotionally committed relationships”). Two other items loading on this component were 5 (“Guys should not try to solve problems by...
Table 2

MMIS Items and Component Matrix Loadings for Four-Component Solution with Orthogonal Rotation

<table>
<thead>
<tr>
<th>Component</th>
<th>I</th>
<th>II</th>
<th>III</th>
<th>IV</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>One: Sexual Prosperity (α = .72)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>31. A guy should have sexual intercourse as early as he can in his life.</td>
<td>.61</td>
<td>.11</td>
<td>-.07</td>
<td>-.21</td>
<td>3.06</td>
<td>1.09</td>
</tr>
<tr>
<td>11. In a relationship, guys should have sexual intercourse as often as possible.</td>
<td>.56</td>
<td>.26</td>
<td>-.11</td>
<td>-.21</td>
<td>3.47</td>
<td>1.11</td>
</tr>
<tr>
<td>19. Even if a guy is not rich, he should try to look that way.</td>
<td>.52</td>
<td>*</td>
<td>.14</td>
<td>*</td>
<td>3.06</td>
<td>1.09</td>
</tr>
<tr>
<td>23. In a relationship, guys should have sexual intercourse before having oral sex.</td>
<td>.52</td>
<td>*</td>
<td>.13</td>
<td>.13</td>
<td>3.3</td>
<td>.94</td>
</tr>
<tr>
<td>25. The best way a man can care for his family is to get the highest paying job he can.</td>
<td>.52</td>
<td>*</td>
<td>-.30</td>
<td>-.11</td>
<td>3.45</td>
<td>1.13</td>
</tr>
<tr>
<td>6. Providing for his family should be a man’s main goal in life.</td>
<td>.51</td>
<td>*</td>
<td>-.39</td>
<td>.20</td>
<td>3.82</td>
<td>1.04</td>
</tr>
<tr>
<td>20. A guy should always have a woman he is dating.</td>
<td>.49</td>
<td>.30</td>
<td>*</td>
<td>-.24</td>
<td>3.41</td>
<td>1.09</td>
</tr>
<tr>
<td>32. Showing emotion is not a sign of weakness in a guy. (R)</td>
<td>.49</td>
<td>.28</td>
<td>-.08</td>
<td>.27</td>
<td>3.33</td>
<td>1.08</td>
</tr>
<tr>
<td>33. A guy should take risks to reach his goals.</td>
<td>.41</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>3.84</td>
<td>.78</td>
</tr>
<tr>
<td>Two: Stoic Protector (α = .60)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. A guy should be confident in everything he does.</td>
<td>*</td>
<td>.62</td>
<td>*</td>
<td>*</td>
<td>4.27</td>
<td>.67</td>
</tr>
<tr>
<td>24. A man should not always have to protect his family. (R)</td>
<td>*</td>
<td>.54</td>
<td>.24</td>
<td>-.13</td>
<td>4.29</td>
<td>.98</td>
</tr>
<tr>
<td>3. A guy should not have male friends that are homosexual.</td>
<td>*</td>
<td>.49</td>
<td>*</td>
<td>*</td>
<td>3.6</td>
<td>1.3</td>
</tr>
<tr>
<td>7. Male friends should not show affection to each other. (R)</td>
<td>.24</td>
<td>.49</td>
<td>*</td>
<td>*</td>
<td>3.75</td>
<td>1.07</td>
</tr>
<tr>
<td>12. To be a guy, you’ve got to be tough.</td>
<td>*</td>
<td>.44</td>
<td>-.21</td>
<td>-.25</td>
<td>4.11</td>
<td>.81</td>
</tr>
<tr>
<td>9. Guys should have a positive attitude towards life and not let things get them down.</td>
<td>-.29</td>
<td>.43</td>
<td>*</td>
<td>*</td>
<td>4.16</td>
<td>.61</td>
</tr>
</tbody>
</table>

Table continued on next page
fighting”; reverse scored), and 29 (“A guy should not look for danger just for the thrill of it”). This component reflects both an interest in relations with women and a reserved attitude towards aggressive or otherwise risky behavior. Thus, this theme was labeled Reserved Sexuality.

**Reliability and Validity**

In the present study, alphas for the MRNS were somewhat lower than results from previous research: .67 (Status), .55 (Toughness), and .49 (Anti-Femininity). Internal consistency estimates for the MMIS were .72, .60, .38, and .56 for Sexuality/Prosperity, Stoic Protector, Competitive Perseverance, and Reserved Sexuality, respectively. Construct validity of the MMIS was tested using the Male Role Norms Scale (MRNS; Thompson & Pleck, 1986). Correlations of all variables are presented in Table 3.

As expected, Sexuality/Prosperity demonstrated significant correlations with all three components of the MRNS, with values ranging from $r(187) = .49$.
for Anti-femininity to $r = .46$ for Toughness. Correlations for other components with the MRAS were significant, though somewhat lower (Stoic Protector $r = .23$ to .35 and Competitive Perseverance $r = .28$ to .32). Correlations with Reserved Sexuality were not significant ($r = -.06$ to -.04). One caveat is the Cronbach alphas of the MRNS obtained in this sample, which suggest lower overall reliability than findings from previous research using this scale.

Divergent validity was established using the 13-item short form of the Marlowe-Crowne Social Desirability Scale. Correlations with all four components ($r = -.01$ to -.12) were not significant. Thus, none of the components appear affected by tendencies to respond in ways that would be viewed as favorable by others.

**DISCUSSION**

**LIMITATIONS**

Before interpreting the results of this exploratory factor analysis, it is necessary to discuss several limitations. First, it would be premature to offer any firm conclusions about masculinity ideology in Ukraine using the MMIS. As with any quantitative research design, results are constricted by the assessments used and the questions they contain. Had other masculinity scales been used, analysis could have revealed male role components in Ukrainian populations differing substantially from those reported here.

In addition, this sample cannot be considered representative. Therefore, results cannot be generalized beyond Ukrainian men attending universities in urban areas of Southwestern Ukraine. This is of particular relevance for two reasons. First, there are likely salient cultural differences between eastern regions (oblasts) and those in the west, with eastern areas being more Russian in cultural orientation, and western areas identifying more strongly with Europe (Fedynsky, 2008). Second, unique distinctions pertinent to gender role socialization have been drawn between rural and city dwellers in Post-Soviet society (Kerig et al., 1993).
Lastly, as indicated, all instruments were back translated in Russian with due care; however, there were some items that did not translate directly. It is not known how the use of a Russian translation may have influenced the interpretations and responses of the participants.

CONCLUSIONS

With these limitations in mind, it is possible to suggest some tentative conclusions about masculinity ideology among men in Ukrainian society. The first and second hypotheses stated that analyses would reveal components characteristic of achievement and sexuality, as well as a component suggestive of Dedicated Provider found in Russia (Janey et al., 2006). These hypotheses were partially supported with Sexuality/Prosperity, and Reserved Sexuality.

Sexuality/Prosperity is similar to the Dedicated Provider (kormilets) component suggested in previous research conducted in neighboring Russia (e.g., Janey et al., 2006). It is also a plausible emic component, in that results from all previous use of the MMIS (including Russia) lacked a similar connection between achievement and female companionship. This lends partial support to the third hypothesis projecting the existence of unique emic components in Ukraine. This result suggests that Ukrainian men perceive a link between prosperity (presumably based on career achievement) and their value as potential mates. Such a connection may carry further significance considering the unpredictability of what Yurchak (2002) described as a “man’s economy” in the former Soviet Union, and how failure could undermine men’s status at home (Kiblitskaya, 2000). Pilkington (1996) was more explicit, suggesting that a man’s inability to earn a wage in the supposed new land of opportunity could threaten his masculinity, especially given the “…general context of a society in which the cultural stereotype of girls evaluating men by the size of their wallet is omniscient” (p. 257).

The first hypothesis was more clearly supported by the second component, Reserved Sexuality. The overall set of items is reminiscent of Composed Sexuality found among Russian men, as it shares three of the highest loading items (Janey, et al., 2006). It may also be roughly consistent with the puritanical and ambivalent attitudes surrounding sex and sexuality transmitted by a parental cohort that came of age during the Soviet era (Omelchenko, 2000).

The appearance of this component may represent the proverbial “tip of the iceberg.” It underscores a topic of grave concern in Ukraine and all of the former Soviet republics, given rising rates of sexual activity among post-Soviet youth (Kon, 2009) combined with growing rates of HIV/AIDS infection, a lack of information about birth control, and the use of abortion as a primary method of contraception in Ukraine (Jarosewich, 1997). Ukraine may be in a more flexible position than Russia to respond to this situation, with public discourses of sex education less obviously tinged with what Kon describes as a “growing wave of nationalism, xenophobia and militarism” disguised as a “moral renaissance” in Russia. Considering what is at stake in terms of public health, future research on the mediating influence of masculinity ideology and
receptiveness to sex education programs seems to be an investment that could pay substantial dividends. The appearance of Competitive Perseverance and Stoic Protector components support the third hypothesis since they appear to be specific to men in Ukraine. The latter component is similar to the Protector theme first described by Gilmore (1990). It revealed attitudes recognizing a responsibility to protect family combined with the emotional demeanor necessary for that function. An intriguing feature is item #3, pertaining to having male friends that are homosexual. The loading of this item is unambiguous, and it suggests that part of the protector theme includes protection from what men in this sample viewed as sexual deviance. This would be consistent with lingering homophobia in public consciousness of former Soviet republics (Omelchenko, 2002).

Competitive Perseverance demonstrated the weakest psychometric properties, thus interpretation must be cautious and highly speculative. Yet because of the exploratory nature of this study, further comment seems warranted. It could be viewed in two ways. First, this generation of post-Soviet men may be endorsing the attitudes and skills needed in market economies that rewards risk-taking in a competitive entrepreneurial society. If so, this is a notable shift in terms of era and national identity in two ways. Kerig et al. (1993) suggest during the Soviet era male tendencies such as initiative were discouraged in favor of passivity. Furthermore, older Russian men from Moscow viewed careers in business as more feminine than careers in engineering or science, because of the negotiation that business sometimes requires (Shevchenko, 2002).

A second interpretation requires less inference: It may be that organized sports are a unique emic feature of masculine ideals among young men in Ukraine. The relationship between sports and the male role has been central in Western literature (Robertson & Newton, 2001), and much of professional sports marketing in Europe and North America targets men. Considering the weaker evidence of validity and lower internal consistency, this speculation requires confirmation in future research.

Recommendations for future research are relevant in a discussion of the last hypothesis, which projected that derived components would demonstrate favorable psychometric properties indicating construct validity of the MMIS. This hypothesis was clearly supported for Sexuality/Prosperity, since it correlated significantly with the MRNS, and had an acceptably high level of internal consistency. For the other three components, indices of construct validity were lower.

Overall, the results reported here are most applicable to the construction of a Ukrainian Masculinity Ideology scale. A substantial contribution of the MMIS might be the use of Sexuality/Prosperity as a sub-scale. Because of low internal reliability and validity measures, the utility of the other three components as theoretical constructs would be limited, which could guide the generation of similar related items. This process of generating more items for testing can be accomplished via interviews with men, or perhaps using open ended questions in questionnaires. It might also be advisable to include items generated from a comprehensive survey of relevant Ukrainian literature that pertains to the male role. Whorley and Addis (2006) have further suggested soliciting the
input of women, who are a generally neglected resource in designing masculinity ideology scales.

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