Sex Roles (2013) 68:562–576
DOI 10.1007/s11199-013-0268-1

ORIGINAL ARTICLE

An Analysis of Hyper-Masculinity in Magazine Advertisements

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Published online: 26 February 2013

Abstract Hyper-masculinity is a gender-based ideology of exaggerated beliefs about what it is to be a man. HM consists of four inter-related beliefs, namely toughness as emotional self-control, violence as manly, danger as exciting, and calloused attitudes toward women and sex (Zaitchik & Mosher 1993). Adherence to HM is linked to a host of social and health problems in North America, such as dangerous driving and violence toward women (Parrot & Zeichner 2003). Advertising is believed to play a role in constructing hyper-masculinity (Kilbourne 1999). In this study, eight U.S. men's magazines published in 2007–2008, differentiated by readership age, education, and household income, were analyzed for hyper-masculine depictions in their advertisements. Using a behavioural checklist with good inter-rater reliability, it was found that 56 % (n=295) of 527 advertisements depicted one or more hyper-masculine beliefs. Some magazines depicted at least one hyper-masculine belief in 90 % or more of advertisements. In addition, reader age, education, and income were all inversely related to the prevalence of hyper-masculine beliefs, with HM depictions presented more often in advertisements targeting young, less educated, and less affluent men. Implications of these findings for the well-being of men and society are discussed.

Keywords Hyper-masculinity · Hypermasculinity · Advertisements · Gender · Media · Masculinity · Socio-economic status · Social-demographics

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Introduction

Hyper-masculinity (HM), an extreme form of masculine gender ideology, is comprised of a cluster of beliefs that includes toughness, violence, dangerousness, and calloused attitudes toward women and sex (Zaitchik and Mosher 1993). Examination of U.S. magazine advertisements reveals that HM depictions of men appear to be commonplace (Kilbourne 1999). For example, *Genderads.com* is a website that displays North American advertisements depicting hyper-masculine men (Lukas 2002). In one example for sunglasses from this website, a tough, impassive-looking man appears to be choking a woman. His fist is clenched around her neck and she appears to be gasping. In another advertisement, for jeans, three aggressive-looking men appear to be attacking a woman in an alley. Advertisements depicting men as tough and violent (particularly towards women) is disturbing, because gender portrayals in advertisement images do more than sell products. They also perpetuate stereotypes and present behavioural norms for men and women (Allan and Coltrane 1996; Das 2010; Furnham and Mak 1999; Paek et al. 2010).

The goal of the present content analysis is to determine the prevalence of such hyper-masculine depictions in a sample of highly circulated, U.S. magazine advertisements targeting male readers stratified by age, education, and household income. All research reviewed in this paper refers to studies conducted in the United States, unless otherwise stated. The importance of conducting media content analyses of portrayals of men and their masculinity (particularly harmful forms of masculinity) has been noted (Rudy et al. 2010). Of 114 mass media content analyses published in *Sex Roles: A Journal of Research,* only three studies (3 %) focused entirely on men (Rudy et al. 2010). The authors concluded that the scarcity of content analysis research exclusive to men might be detrimental because media

depictions of men may have become increasingly harmful over the past 100 years. Thus, the present study aims to address this research gap by determining the prevalence of hyper-masculinity in U.S. men's magazine advertisements.

Another aim of the study is to determine if HM depictions are more likely to be present in U.S. advertisements targeting young and lower socio-economic status (SES) men, as opposed to older and higher SES men. The former groups of men are theoretically and empirically most at-risk of adopting HM beliefs and behaviours, such as interpersonal violence and violence against women (Mosher and Tomkins 1988; Zaitchik and Mosher 1993). These researchers theorized that young and lower SES men are more likely to take on HM beliefs and behaviours because they are differentially exposed to socializing forces, such as advertisements and other media, that promote HM (Mosher and Sirkin 1984; Zaitchik and Mosher 1993). Therefore, the present study aims to provide empirical support for this theory by demonstrating that young and lower SES men are most targeted by HM depictions in one socializing agent, namely magazine advertising.

Although this paper deals specifically with U.S. media and has important implications for HM behaviours in U.S. men and culture, it is also potentially important to readers from other countries and cultures. HM beliefs and behaviours are not only linked to health and societal problems but also to religious, ethnic, and cultural values that vary from country to country (Alaniz and Wilkes 1995; Gerami 2003; Hardin 2002; Saez et al. 2009). Thus, this study documents the prevalence of HM in U.S. media, which can be used as a reference for comparative international research. For example, it can be useful in determining similarities and differences in levels of HM in advertisements from other cultures and/or countries that, similar to the United States, are believed to be highly hyper-masculine (e.g., Latino culture, Hispanic countries; Saez et al. 2009).

Next, we will present a literature review to provide sufficient background information to justify the relevance and importance of the present study. The following review will (a) briefly conceptualize hyper-masculinity (HM); (b) provide a theoretical framework for the role of mass media in contributing to HM; and (c) explain why advertisements aimed at different social-demographic target audiences may differ in degree of HM advertising content.

Conceptualizing Hyper-Masculinity

Hyper-masculinity (HM) refers to the gender-based ideology of what it means to be a man, when carried out in an exaggerated way (Mosher and Sirkin 1984; Mosher and Tomkins 1988; Zaitchik and Mosher 1993). HM is comprised of four, inter-related beliefs (Zaitchik and Mosher 1993). First, calloused (insensitive) attitudes toward sex and women is defined as the belief that intercourse with women is a source of male power and female submission, and that sex is acceptable without empathic concern for the female's subjective experience. It reflects the attitude that sexual intercourse can be equated with sexual dominance over women. Sex becomes an aggressive and depersonalized act for HM men rather than an intimate and personal one. Second, violence as manly is defined as the belief that violent aggression is an acceptable expression of masculine power and dominance. It reflects the attitude that verbal and/or physical aggression is an acceptable expression of dominance over other men. Third, danger as exciting is defined as the belief that survival in dangerous situations is manly. It reflects the attitude that survival in dangerous situations displays dominance and power over the environment. Fourth, toughness as emotional self-control is defined as the belief that anger is the only legitimate male emotion, and that expression of other emotions (particularly inferior 'feminine' emotions such as sensitivity and empathy) is a sign of weakness. To an HM man, masculinity necessarily involves mastery of his emotions in the form of inhibiting the expression of fear, distress, and shame (Mosher and Sirkin 1984; Zaitchik and Mosher 1993). The four HM beliefs are believed to be intertwined and represent an integrated personality constellation (Mosher and Sirkin 1984). Together, these components reflect a man's desire to appear powerful and to be dominant in interactions with men, women, and the environment (Mosher and Tomkins 1988).

Operationalizing Hyper-masculinity

The Hypermasculinity Inventory (HMI, Mosher and Sirkin 1984) was created to operationalize the concept of HM (Zaitchik and Mosher 1993). The HMI includes three subscales that measure (a) Violence as Manly, (b) Calloused Attitudes Towards Sex and Women, and (c) Danger as Exciting, using a forced-choice design. For example, one item of the Violence as Manly subscale asks respondents to choose between "It's natural for men to get into fights" (scored 1) and "Physical violence never solves an issue" (scored 0) (Mosher and Sirkin 1984, p. 155). An overall HMI score is generated by adding all individual item scores. Mosher and Sirkin (1984) found that the inter-correlations of the subscales were approximately .60, indicating a strong relationship among them. This structural feature was consistent with their model of a personality constellation with related but distinct components. The HMI was later expanded to include a fourth subscale that measures the Toughness as Emotional Self-control component of HM (Zaitchik and Mosher 1993).

The HMI has strong predictive validity for problematic social behaviour, which has been demonstrated with both

correlational and experimental research (e.g., Krahe and Fenske 2002; Lackie and DeMan 1997; Mosher and Anderson 1986; Mosher and Sirkin 1984; Parrot and Zeichner 2003; Smeaton and Byrne 1987; Suarez-Al-Adam et al. 2000; Wells et al. 2011; Zaitchik and Mosher 1993). For example, HM as measured by the HMI has been found to be directly related to increased violence against women (e.g., Lackie and DeMan 1997; Smeaton and Byrne 1987; Suarez-Al-Adam et al. 2000; Parrot and Zeichner 2003), interpersonal violence between men (e.g., Wells et al. 2011), dangerous driving and accidents (Krahe and Fenske 2002; Mosher and Anderson 1986; Zaitchik and Mosher 1993), and drug and alcohol abuse (e.g., Mosher and Anderson 1986; Mosher and Sirkin 1984). If HM is highly prevalent in advertisements aimed at men, it may encourage men to adopt hyper-masculine behaviours that contribute to associated problems for men, women, and society (Katz 1995; Zaitchik and Mosher 1993).

Theoretical Framework: Role of the Media in Hyper-Masculine Development

Mosher and Tomkins (1988) theorized that hyper-masculinity results from gender role socialization in societal, cultural, and familial spheres. They hypothesized that, during childhood, excessive parental use of contempt and humiliation socializes the inhibition of emotions of fear and distress in boys, fostering an exaggerated masculine style (Mosher and Anderson 1986). Boys experience shame and self contempt when they fail to attain the masculine ideals of courage and stoicism (Mosher and Sirkin 1984; Zaitchik and Mosher 1993). In addition to early family socialization, U.S. culture and the mass media continue the hyper-masculine socialization (Mosher and Tomkins 1988; Zaitchik and Mosher 1993). The cultural ideology of HM, as transmitted via mass media, reinforces the earlier parental socialization of males by exhibiting and widely praising HM ideology (Mosher and Tomkins 1988). The mass media justifies and normalizes HM socialization in other spheres as well (e.g., peers) (Zaitchik and Mosher 1993). The resonance between HM displays in the media and other socializing forces validates these behaviours and beliefs for HM men (Mosher and Tomkins 1988; Zaitchik and Mosher 1993). For reasons cited below, the HM ideology present in U.S. media and culture may be even more pervasive and influential than socialization into HM via other socializing realms (Zaitchik and Mosher 1993).

Two prominent theories have been cited as helping to explain how hyper-masculine media, including advertising, influence men's beliefs and attitudes. Cultivation theory, originally formulated by Gerbner (1966), holds that mass media not only express social and cultural patterns, but cultivate them as well by mirroring back to consumers images of reality. These images reflect the interests of the creators of mass media (e.g., to sell products) and can be highly inaccurate. Nonetheless, consumer beliefs and attitudes are subtly shaped by whatever images mass media repeatedly present to them. In over four decades of research, cultivation theory has been applied to content areas as diverse as fear of crime, gender and family roles, political beliefs, and attitudes toward mental health (Morgan and Shanahan 2010). In every area, research has demonstrated that greater exposure to a particular mass media image leads to greater acceptance of it by consumers. Indeed, cultivation theory's widespread applicability and empirical support, involving hundreds of studies, have become so great that Morgan and Shanahan state that the theory is close to reaching "paradigmatic status" (p. 348).

The second prominent explanation for the influence of hyper-masculine advertising is social learning theory (Bandura 1977), which subsequently has been expanded to increasingly include social structural (Akers 1998) and cognitive (Bandura 1986) elements. Social learning theory argues that people learn culturally appropriate behaviour, including that related to gender-roles, via observation of others, modeling, and differential reinforcement. Mass media are major sources of modeling and reinforcement, especially for young people, who consumer media targets voraciously, often with problematic consequences (Snethen and Puymbroeck 2008). Similar to cultivation theory, the core mechanisms of social learning theory has been generally validated in hundreds of studies, over several decades, although the causal interpretation of some findings remains controversial (Brauer and Tittle 2012).

HM mass media may be most influential for males who are already receptive to HM norms, values, and worldview (Zaitchik and Mosher 1993). Next, we will argue that young and lower SES men are most at-risk of taking on HM. If this is correct, HM advertising aimed at these groups of men, in particular, may be especially detrimental (Mosher and Tomkins 1988).

Hyper-Masculinity and Social-Demographic Characteristics

Although any man may take on hyper-masculine gender ideology, it is differentially enacted as a function of developmental period during the life cycle (Mosher and Tomkins 1988). HM gender ideology is most likely to be enacted during adolescence and young adulthood, developmental periods during which peer group support for HM behaviours is believed to be high (Beale Spencer et al. 2004; Zaitchik and Mosher 1993). During adolescence, boys start to identify more strongly with the masculine stereotype than they did during childhood. Conformity to societal expectations is promoted during adolescence, in part because sanctions are applied by parents, teachers, peers, and the media to boys

who display gender inappropriate behaviour (Hill and Lynch 1983). As adolescent boys enter young adulthood, they are primed to continue to identify with masculine stereotypes and to perform learned masculine behaviours. For example, young male peer groups often celebrate and reinforce hyper-masculine ideology (Mosher and Tomkins 1988). During young adulthood, masculine norms of "being tough," as well as related traits such as aggression, are heightened (Mills 2001). The social price of not conforming is very high. Non-conforming males are often excluded, bullied, or labelled with terms implying the 'inferior' status of a homosexual or girl, such as 'fag' or 'sissy' (Katz 2006). Males who demonstrate that they are prepared to engage in, or at least condone, aggressive behaviour in certain circumstances (e.g., harassing girls and women) are usually able to avoid becoming themselves the recipients of unwelcome harassment and to increase their status in the social hierarchy (Mills 2001). Empirical research has demonstrated that young adult men are more likely than middle-aged and older men to espouse HM beliefs as part of their masculine identity. For example, young adult men are significantly more likely than middle-aged and older men to indicate agreement with survey statements espousing violence and risk-taking (Smiler 2006).

Beyond developmental period, males with low socio-economic power (e.g., working class men) are also at a greater risk of developing HM than men with higher socio-economic power (Klein 2006; Pyke 1996; Zaitchik and Mosher 1993). Lower SES males are embedded in enduring social and economic structures in which they experience powerlessness and lack of access to resources (e.g., money, opportunities, respect) (Donaldson 1993; Pyke 1996), whereas higher SES men have greater access to financial, social, and political power. As a result, lower class men are restricted primarily to other forms of interpersonal power, such as physical strength and aggression, in constructing their masculinity (Connell and Messerschmidt 2005; Pyke 1996). Lower SES males who do not have adequate access to power and resources through pro-social means (e.g., education, gainful employment) may come to believe that violence and other HM behaviours (e.g., control and dominance of women) are viable alternative means of gaining power and resources (Klein 2006). Consistent with this understanding, Allwood and Bell (2008) found that 'acceptance of violence cognitions' (i.e., believing that it is acceptable to use violence to get what you want) mediated the positive association between violence exposure and violent behaviours by working-class 7th and 8th grade adolescents. It appears that many boys exposed to violent representations develop beliefs that support violence as an acceptable way of obtaining what they want or need (i.e., they learn that violence serves an instrumental function). Disproportionately, these boys then act accordingly. Also consistent with this premise, it has been well documented that neighbourhood disadvantage is etiologically related to development of aggressive and/or violent behaviour by males (e.g., Jenson 2007; Markowitz 2003). For example, neighbourhood disadvantage (measured using neighbourhood census data) has been shown through regression analyses to positively predict sixth grade boys' proactive aggression and violence (i.e., behaviour that is calculated and goal-oriented) (Fite et al. 2009). In contrast, neighbourhood disadvantage did not predict reactive aggression and violence (i.e., behaviour acted out in response to a threat) in the above study.

In conclusion, the mass media plays a role in normalizing and validating HM behaviours and beliefs, particularly for young and lower SES males, who are most at risk of taking on HM (Mosher and Tomkins 1988). It is for these subgroups of men that HM media may be most influential. Therefore, determining if HM is highly prevalent in media, including advertising aimed specifically at these groups of men, is important (Zaitchik and Mosher 1993).

Men's Magazine Advertisements and Hyper-Masculinity

Advertisements are constructed in part by using social knowledge, including ideals and values about masculinity (Kervin 1990). Advertisements do not necessarily represent men as they really are, but instead use socially desirable versions of masculinity to infuse those characteristics into the product being sold (Kervin 1990; Kilbourne 1999). If advertisers know that certain groups of men are more likely to be receptive to HM, they may use representations consistent with HM to sell whatever is being advertised to them (Katz 1995; Kilbourne 1999). Advertisers may pair culturally ideal masculine representations, such as powerful, hyper-muscular, and tough male models, with products in order to enhance their appeal (Katz 1995). Advertisers send the message that, by buying the product, masculinity can be enhanced, making the consumer feel and appear to others as stronger, tougher, and more powerful (Katz 1995). Because there is great societal pressure for men to conform to the cultural ideal of masculinity, men may be especially persuaded to buy the product if they feel insecure about not living up to the proscribed standard of masculinity (Kervin 1990). Less innocently, these representations may influence consumers' beliefs about gender, normalizing HM behaviours and presenting them as acceptable (Kilbourne 1999).

Although it is theorized that hyper-masculinity is highly prevalent in advertising (especially those advertisements targeting young and low SES men), there is insufficient empirical evidence to confirm this claim (Garst and Bodenhausen 1997; Kilbourne 1999; Scharrer 2001). The limited evidence thus far suggests that HM themes are present in mainstream magazine advertising, although only qualitative analyses have been conducted (Katz 1995; White

and Gillett 1994). For example, Katz (1995) found that White males were represented in such advertising as being naturally violent. In general, violent masculinity was depicted as a biological fact and as socially rewarded. Other themes related to HM, including toughness and dominance over women, were also found. In another qualitative study, White and Gillett (1994) analyzed advertisements in issues of *Flex*, a magazine aimed at young, working class men. They were interested in learning how masculinity was constructed specifically for this social-demographic group, whom the researchers suspected were at-risk of experiencing a sense of powerlessness and insecurity about their masculinity due to their less advantaged socio-economic position. The researchers found that *Flex* advertisements represented readers as powerless and weak, as well as not living up to the dominant masculine ideal of toughness and aggression. Not surprisingly, the products and services advertised in the magazine were marketed to readers as solutions to their masculine shortcomings.

These qualitative analyses have provided valuable information regarding portrayals of hyper-masculinity in media targeting men. However, the actual prevalence of HM images in magazine advertising has not been determined quantitatively by examining the proportion of advertisements depicting HM. Quantitative analyses would complement past qualitative findings of HM in magazine advertising, thereby producing a more complete picture of the extent of hyper-masculinity in such advertising. A second research gap concerns the possibility that the proportion of hyper-masculinity in magazine advertising may vary by the social-demographics, such as age and SES, of the intended readers. As discussed above, it is important to understand the prevalence of HM in advertisements aimed at high-risk groups specifically. Given that (a) HM has been suggested to be most prevalent among young and/or lower SES men; (b) advertisers likely know this and use such depictions to sell products to these men; and (c) HM depictions targeting young and lower SES men might be particularly detrimental to them, it would be valuable to compare the proportion of HM in magazine advertisements aimed at these hypothesized at-risk readers, as opposed to older and higher SES readers.

The Present Study: Research Questions and Hypotheses

Our literature review led to the following research questions: (a) How prevalent overall are hyper-masculine depictions in men's magazine advertisements and (b) to what extent are age and SES (i.e., education and income) of the intended target audience related to prevalence of HM depictions? Specifically, the following was hypothesized:

Hypothesis 1: Advertisements in magazines aimed at younger readers will contain a higher proportion of HM beliefs (i.e., at least one of the four HM beliefs, as well as each of the HM beliefs individually) than will advertisements aimed at older readers.

Hypothesis 2: Advertisements aimed at readers who are less educated will contain a higher proportion of HM (i.e., at least one of the four HM beliefs, as well as each of the HM beliefs individually) than will advertisements aimed at readers who are more highly educated.

Hypothesis 3: Advertisements targeting readers with lower incomes will contain a higher proportion of HM (i.e., at least one of the four HM beliefs, as well as each of the HM beliefs individually) than will advertisements aimed at readers with higher incomes.

To answer these research questions and hypotheses, a quantitative content analysis was conducted of magazine advertisements targeting male readers who vary by age, level of education, and household income. Our methodology followed Neuendorf's (2002) definition of content analysis as a "summarizing, quantitative analysis of messages that relies on the scientific method, including attention to objectivity/intersubjectivity, a priori design, reliability, validity, generalizability, replicability, and hypothesis testing" (Neuendorf 2002, p. 10). The depiction of each of the four hyper-masculine beliefs (i.e., danger as exciting, violence as manly, toughness as emotional self-control, and calloused attitudes towards sex and women) (Zaitchik and Mosher 1993) was assessed in each of the advertisements. In order to address the issue of overall prevalence, we calculated the proportion of advertisements that depicted any hyper-masculinity (i.e., at least one of the four hyper-masculine beliefs), as well as each of the four beliefs individually. Next, in order to answer our specific hypotheses, chi-square analyses were conducted to determine if there were significant differences in the proportion of hyper-masculine advertisements, both for any HM belief and for individual HM beliefs, between groups of men's magazines targeting readers differing by age, education, and income.

Method

Sample

In order to create a sample of magazine advertisements aimed at men with varying social-demographic characteristics, we examined a list of U.S. magazines on the website of Mediamark Research and Intelligence (MRI 2007). MRI is accredited by the Media Rating Council (MRC), a non-profit industry association promoting valid and reliable media research (MRI 2007). Its list consists of magazines included in the Survey of the American Consumer, a representative, national readership survey that is conducted every

year with approximately 26,000 American consumers, face-to-face in their homes. The magazine readership information given for the magazines surveyed includes average age, ratio of men to women readers, and average household income (HHI). The magazines on this list represent a wide range of men's magazines varying by thematic content. Magazines with readerships that are at least 70 % male and with circulation rates of at least 500,000 were identified from the Mediamark list. This was to ensure that the magazines in our sample were read by a relatively large audience of men. The readership HHI of these magazines was noted. As both education and income are related to SES, next an effort was made to obtain data on the proportion of readers who had attended college. In some cases, this additional information was obtained by contacting individual magazine representatives or by visiting magazine websites. However, disappointingly, most magazine websites did not contain such educational information and/or requests for it directly from publishers were unsuccessful. Therefore, these latter magazines were ineligible for our sample.

Our final sample consisted of all eight magazines for which we were able to obtain complete information on age, education (i.e., percent of readers who had attended college), and household income. These magazines represent a wide variety of thematic content of interest to men including men's lifestyle, sports, gaming, hobbies/recreation, business, and computers and technology. Although the sample included only eight magazines, it was deemed acceptable because it represented a variety of magazines read by a wide range of men in terms of social-demographic characteristics. Further, the sample included magazines that had relatively large circulations, from 669,000 (Wired) to 3,246,000 (Game Informer) (MRI 2007). Typical readers ranged from 22 to 50 years of age, 26 %–94 % had attended some college, and their yearly household income ranged from $53,000–$137,000.

To facilitate comparisons, the eight magazines were divided into non-independent groups according to reader age, education, and income. More specifically, the magazines were divided into three comparison age groups: target audience age 20–29, target audience age 30–39, and target audience age 40–50. Three education groups were also created, namely less than 50 % of the readership have attended college, 50–79 % have attended college, and above 79 % have attended college. Lastly, three income groups were created, consisting of median yearly HHI of $59,000 or less, median HHI of $60,000–$90,000, and median HHI above $90,000. These eight magazines, their corresponding readership characteristics, and the number of ads shown in each are found in Table 1. Two issues of each magazine were examined (November, 2007 and April, 2008). To mitigate against possible seasonal effects, the months November and April were purposively chosen to represent both an early- and late-year issue of the magazine. If we had limited our sample to only one time during the year (as opposed to two widely-spaced times), it may have been over-represented by ads of a certain theme, such as a holiday theme in December. Our strategy helped to ensure that our sample contained a variety of ad types.

Unit of Analysis

The primary unit of analysis was any advertisements containing at least one image of a man. Advertisements were not limited to only full page ads (i.e., half-page and quarter-page ads were also coded). This decision was made because an examination of advertisements in men's magazines indicated that ads that were not a full-page often contained images of men that were relatively as large as those images of men found in full page ads (and therefore likely as noticeable to readers). Although it was impossible to determine the exact age of the man or men in the advertisements, he needed to appear at least 18 years of age for the advertisement to be included. Images could be photos, illustrations, or symbols (e.g., stick figures or cartoons), as long as they clearly depicted a man. To determine if any HM traits were present, the coders examined all text and visual cues in the advertisement.

Measurement and Coding Instrument

Coding of advertisements was conducted using an instrument designed to serve as a checklist for the four HM beliefs

Table 1 Men's magazines selected for analysis by target audience group

Magazine	Age	Household income (in thousands)	Education
Playboy (n=37)	30–39	< $59	< 50 %
Field and stream (n=79)	40–50	< $59	< 50 %
Game informer (n=54)	20–29	< $59	50 %–79 %
Maxim (n=62)	20–29	$60–$90	50 %–79 %
Esquire (n=75)	40–50	$60–$90	50 %–79 %
Wired (n=71)	30–39	$60–$90	>79 %
Fortune (n=57)	40–50	> $90	>79 %
Golf digest (n=92)	40–50	> $90	>79 %

This information came from MRI (2007) and from consulting magazine publisher websites. n refers to the number of advertisements that were coded in each magazine. Magazine issues were from November, 2007 and April, 2008

(violence as manly, calloused attitudes towards women and sex, danger as exciting, and toughness as emotional self-control; Zaitchik and Mosher 1993). The checklist items were based upon this conceptualization, as well as items from the subscales of the Hyper-masculinity Inventory (HMI; Mosher and Sirkin 1984). Utilization of the HMI helped to ensure the construct validity of coding decisions. The HMI is a valid measure of the HM beliefs that have been shown to highly associated with male physical and sexual violence, as well as other problematic behaviours (Mosher and Sirkin 1984). As such, creating HM codes based on this scale was deemed as valid. The checklist items were worded as much as possible in behavioural terms. This allowed for specific behaviours to be coded objectively (as either present or not), which increased the likelihood that the instrument would be reliable.

The coding instrument can be found in Table 2. As can be seen, each advertisement was coded for all four hyper-masculine beliefs. Each belief was assessed by having the coders determine yes or no to the set of checklist items for each HM belief. If the coders stated yes to any of the checklist items for that HM belief, it was considered to be present. Therefore, each ad could have from zero to four of the HM beliefs. Only one (i.e., at least one) of the four HM beliefs needed to be present for HM to be considered present in the ad (i.e., "any HM" overall). If ads portrayed more than one belief, we did not attempt to determine if there was a predominant one. This decision was made in order to be consistent with the HMI scoring, which does not determine which of the HM belief subscales is most endorsed by respondents (Mosher and Sirkin 1984). The decision to code for both "any HM," as well as the four HM beliefs individually, was consistent with the conceptualization of HM as being comprised of four separate, yet inter-related beliefs (Zaitchik and Mosher 1993).

Coding Procedure: Inter-rater Reliability

Coding was conducted independently by two of the authors (one female and one male, both under age 35). The use of authors as coders was deemed legitimate because the coding instrument was comprised of a checklist of relatively objective behaviours that minimized reliance on coders' subjective impressions. In addition, the coding procedure included strict attention to establishing good inter-rater reliability. The procedure for obtaining inter-rater reliability of the

Table 2 Hyper-masculinity codes and reliability

Violence As Manly (k=.94)
Does it appear that an act of physical violence is being carried out, is about to be carried out, or condoned? (e.g., slapping, choking, hitting, stomping?)
Does it appear that an act of verbal violence is being carried out, is about to be carried out, or condoned? (e.g., yelling, name calling?)
Does it appear that multiple acts of physical and or verbal violence are being carried out, are about to be carried out, or condoned?
Are any weapons present/discussed and/or being used (e.g., fists, guns, bombs?)
Calloused Attitudes Towards Women and Sex (k=.88)
Does it appear that having/obtaining heterosexual intercourse is portrayed as an integral part of being a man (e.g., to be a 'stud')?
Does it appear that using any means necessary to obtain sex is appropriate?
Does it appear that men are dominant and women are submissive (e.g., portrayed as more important, or in a dominant position to women)?
Is a 'calloused relationship' between men and women displayed (e.g., if a woman and a man are both present, does the relationship between them appear hostile, disrespectful, or antagonistic)?
Does it appear that an act/acts of physical violence against a woman is being carried out or condoned (e.g., slapping, choking)?
Does it appear that an act/acts of verbal violence against women is being carried out or condoned (e.g., yelling, name calling)?
Does it appear that an act/acts of sexual violence against women is being carried out or condoned (e.g., sexual assault)?
Toughness as Emotional Self-Control (k=.82)
Does it appear that a man/men is/are depicted as being rugged, rough, or hardy (e.g., tough cowboy or tough cop)?
Does it appear that a message is sent that it is important for men to be in control and/or powerful?
Does it appear that a man/men is/are depicted as being stoic (e.g., showing no emotion, cold)?
Does it appear that a man/men is/are depicted as being angry (e.g., scowling, glaring)?
Does it appear that being extremely muscular is important for men?
Danger as Exciting (k=.90)
Does it appear that partaking in drugs, tobacco, and alcohol use/activities is fun/exciting?
Does it appear that partaking in gambling/and or taking risks with money is exciting/fun?
Does it appear that "partying" (e.g., attending wild, uninhibited parties) is fun/exciting? Does it appear that fast, dangerous driving is fun/exciting?
Does it appear that adrenaline-junky or risky/dangerous sports are fun and exciting?
Is there an element of danger in the ad? (e.g., dark alley setting, war zone, explosives present)?

HM ratings followed guidelines formulated by Lombard et al. (2002) for content analysis research. First, inter-rater reliability was examined informally after the initial instrument design and preliminary coder training. This step to checking the reliability of coding checklist was accomplished using a sample of advertisements from three magazines (*Golf Digest*, *Maxim*, *Game Informer*) published in 2008. These advertisements were chosen because they were the same titles, but not the same issues, to be used in the final analysis (as per Lombard et al.'s recommendation). During this step, the coding instrument and instructions were assessed and refined. Both coders examined the ads in these three magazines against the checklist to determine if the checklist items had face validity (i.e., were the items adequately worded to capture HM behaviours in the ads). In this stage, minor changes in wording of items were made to ensure that the checklist could be reliably used by multiple coders.

Once it appeared likely that adequate inter-rater agreement would be obtained using the checklist, its reliability was more formally assessed using a coder pre-test. For this pre-test, the two coders independently rated all of the advertisements in one issue of *Game Informer*, *Esquire*, and *Fortune* magazine from the year 2007 which were not part of the analysis proper. These three magazines were chosen to represent different readership ages, education, and household income. The size of the sample used to establish inter-rater reliability at pre-test was set to equal at least 10 % of the full sample (again as recommended by Lombard et al. 2002)

Inter-rater reliability in the pre-test was assessed using Cohen's kappa statistic. Cohen's kappa statistic yields a conservative estimate of reliability by taking into consideration coder agreement based on chance (Dewey 1983). Overall, 99 advertisements were coded for each HM belief. The coding instrument (i.e., checklist) proved to be reliable (violence as manly, k=.96; calloused attitudes towards women and sex, k=.89; toughness as emotional self-control, k=.81; and danger as exciting, k=.91). Next, the coders together re-examined each advertisement about which they initially disagreed, determined the source of disagreement, and decided how best to minimize disagreement in the analysis proper. In the analysis proper, both coders rated all of the available advertisements (N=527). After coding was complete, inter-rater agreement was again measured for the target magazine issues. The coding instrument as a whole was found to be reliable (k=.86). Kappa was also calculated individually for each of the four HM codes (see Table 2). The small number of advertisements for which there was initial disagreement were then re-examined by both coders and discussed in an attempt to reach agreement, which proved possible for all of the advertisements in question.

Results

We will first present overall descriptive results concerning the number and proportion of advertisements depicting hyper-masculinity in each magazine. As can be seen in Table 3, the proportion of advertisements depicting any hyper-masculine belief (i.e., at least one of the four) is much higher in certain magazines, such as *Game Informer* (.94) and *Playboy* (.95), than in certain other magazines, such as *Golf Digest* (.22) and *Fortune* (.20). The proportions concerning each individual HM belief are also presented in Table 3. Again, some magazines (e.g., *Playboy*) depicted individual hyper-masculine beliefs (e.g., violence as manly) much more so than others (e.g., *Golf Digest*). Similarly, Table 3 shows that certain magazines contained a much higher average number of hyper-masculine beliefs than others (e.g., *Game Informer* had the highest average number at 3.6 out of a maximum possible 4.0 HM beliefs per advertisement, whereas *Fortune* had the lowest average number at only 0.2 out of 4.0).

Prevalence of Advertisements Depicting Hyper-Masculinity

In order to answer "How prevalent overall are depictions of HM in men's magazine advertisements?" the proportion of

Table 3 Proportion of advertisements containing hyper-masculine beliefs by magazine

Magazine	Violence	Calloused	Toughness	Danger	Any HM belief	Ave. # of HM beliefs per Ad (out of 4.0)
Playboy (n=35)	.17	.52	.60	.54	.95	2.3
Game informer (n=51)	.74	.07	.80	.68	.94	3.6
Maxim (n=52)	.08	.31	.60	.45	.84	2.0
Esquire (n=50)	.03	.12	.52	.13	.67	.90
Wired (n=35)	.07	.09	.24	.33	.49	.87
Field n stream (n=38)	.15	.12	.18	.23	.49	.80
Golf digest (n=20)	.01	.03	.14	.07	.22	.30
Fortune (n=11)	.00	.00	.12	.09	.20	.23

n=total number of advertisements that contained at least one HM belief

advertisements in the total sample that contained at least one of the four HM beliefs, as well as each of the four HM beliefs separately, was calculated. At least one hyper-masculine belief was depicted in 56 % (n=295) of the total sample of 527 advertisements that were coded. Of the four individual HM beliefs, 'toughness as emotional self-control' and 'danger as exciting' (depicted in 36 % and 28 % of advertisements, respectively) were present in advertisements more often than were 'violence as manly' and 'calloused attitudes towards women and sex' (both of which were depicted in 13 % of advertisements).

Prevalence of Advertisements Depicting Hyper-Masculinity by Target Audience

In order to answer "To what extent are demographic variables (specifically age, education, and income) of the intended target audience related to depiction of hyper-masculinity?" ads were compared by target reader age (20–29, 30–39, and 40–50), education (< 50 % attended college, 50 %–79 % attended college, and >79 % attended college), and household income (≤ $59,000, $60,000–$90,000, and >$90,000). These proportions are presented in Table 4. The proportion of advertisements decreased steadily as the age of the target audience increased, for each HM belief and for any HM (i.e., at least one of the four beliefs). Similarly, the proportion of advertisements decreased as education and household income of the target audience increased. The vast majority of advertisements targeting young, less educated, and less affluent men depicted hyper-masculine beliefs, whereas only a minority of advertisements targeting older, more educated, and more affluent men did so. For example, .89 (89 %) of advertisements targeting men age 20–29 depicted HM overall, compared to .40 (40 %) of advertisements targeting men age 40–50. It is also evident from Table 4 that 'danger as exciting' and 'toughness as emotional self-control' were the most highly depicted hyper-masculine beliefs, regardless of age, education, or income of the target audience.

Hypothesis Testing: Preliminary Analyses

Chi-square tests were conducted to assess if the identified Table 4 differences in proportion of advertisements depicting any HM belief (i.e., at least one of the four) as well as each of the individual HM beliefs (e.g., violence as manly) by age, education, and income of the target readership were significant. These chi-square tests were computed to test our main hypotheses. Prior to conducting the chi-square analyses, correlations were calculated between individual social-demographic characteristics of readers, and between social-demographic characteristics and HM beliefs. As expected, the social-demographic characteristics were significantly correlated with each other (p<.01). Age was moderately correlated with education (r=.56) and household income (r=.69), whereas education and household income were strongly correlated (r=.83). Bivariate correlations, as well as part correlations, representing the strength of association between social-demographic characteristics and hyper-masculinity beliefs, are presented in Table 5. Each of the part correlations in Table 5 is between one of the social-demographic characteristics (e.g., age) and one of the HM beliefs (e.g., violence as manly), factoring out the influence of the other two social-demographic characteristics (e.g., education and household income). As expected, all correlations between the social-demographic characteristics and HM beliefs were negative, ranging from small to moderate in strength of association. The correlations displayed in Table 5 show that age was more strongly associated with each of the HM beliefs than were either education or household income. Of the individual HM beliefs, 'violence as manly' was most strongly associated with readership social-demographic characteristics (r= −.29 to r= −.47), whereas 'calloused attitudes toward women and sex' was most weakly associated (r= −.20 to r= −.22).

Table 4 Proportion of Advertisements Depicting Hyper-Masculinity by Age, Education, and Household Income of Target Audience Groups

	Target audience age			Target audience college attendance			Target audience income (in thousands)		
HM Belief	20–29 n=117	30–39 n=102	40–50 n=308	<50 % n=91	50–79 % n=216	>79 % n=220	<$59 n=170	$60–90 n=208	>$90 n=149
Violence as manly	.39	.10	.05	.51	.08	.03	.34	.06	.01
Calloused to women	.20	.23	.07	.25	.17	.04	.19	.16	.02
Toughness as control	.69	.36	.24	.71	.42	.17	.46	.45	.16
Danger exciting	.56	.38	.13	.60	.26	.15	.43	.29	.07
Any HM belief	.89	.65	.40	.95	.65	.30	.77	.66	.21

n refers to the total number of ads coded for HM per each target readership age, education, and household income group

Table 5 Bivariate and part correlations between hyper-masculinity beliefs and predictor variables (age, education, and income)

	Target audience age		Target audience college attendance		Target audience household income	
HM Belief	Bivariate	Part	Bivariate	Part	Bivariate	Part
Violence as exciting	−.47	−.38	−.30	−.27	−.29	−.23
Calloused attitudes towards women	−.22	−.10	−.20	−.06	−.21	−.02
Toughness as emotional control	−.47	−.33	−.34	−.13	−.33	−.08
Danger as exciting	−.43	−.32	−.28	−.07	−.29	−.06
Any HM	−.62	−.40	−.49	−.17	−.48	−.08

All correlations sig. at $p<.01$

Proportion of Advertisements Depicting Hyper-Masculine Beliefs by Age group

The results of the chi-square tests are found in Table 6. Our first hypothesis was that advertisements in magazines aimed at younger men would contain a higher proportion of HM (i.e., at least one of the four beliefs, as well as each of the four HM beliefs individually) than those aimed at older men. As can be seen from Table 6, the results of the overall chi-square tests for age groups were significant at $p<.001$ for each of the HM beliefs. In addition, follow-up tests indicated that each of the age groups were significantly different (i.e., advertisements aimed at the youngest group depicted more HM than all other groups and advertisements aimed at the middle age group depicted more HM than those aimed at the oldest target audience group). The only exception was between the youngest and middle age groups for 'calloused attitudes towards women and sex.' Thus, Hypothesis 1 was largely supported.

Proportion of Advertisements Depicting Hyper-masculinity by Education Target Groups

Our second hypothesis was that advertisements targeting readers with lower education would contain a higher proportion of HM (i.e., at least one of the four beliefs, as well as each of the four HM beliefs individually) than advertisements aimed at more highly educated readers. The results of these chi-square tests are also found in Table 6. As can be seen, the results of the overall chi-square tests for education target groups were significant at $p<.001$ for each of the HM beliefs. In addition, follow-up tests indicated that ads aimed at the least educated group depicted more HM than all other groups. Again, the only exception was between the least and middle

Table 6 Summary of Chi-square tests of hyper-masculinity beliefs by target audience groups

	Any HM	Violence	Calloused	Toughness	Danger
Age X^2 Tests					
Overall X^2 Test	90.79***	85.36***	26.77***	77.21***	83.30***
Age groups 1vs.2	15.97***	21.93***	.75, p=.42	22.46***	5.24*
Age groups 1vs.3	83.74***	81.58***	15.06***	77.38***	79.83***
Age groups 2vs.3	23.12***	5.21*	24.08***	7.52**	33.57***
Income X^2 Tests					
Overall X^2 Test	104.09***	91.27***	22.92***	47.02***	49.59***
Income groups 1vs.2	2.58 p=.07	48.31***	.40 p=.31	1.89 p=.68	6.96*
Income groups 1vs.3	88.34***	57.63***	22.97***	40.52***	50.45***
Income groups 2vs.3	70.75**	6.43*	19.20***	38.27***	25.97***
Education X^2 Tests					
Overall X^2	122.39***	135.60***	30.63***	80.98***	62.79***
Education grps 1vs.2	28.39**	69.15***	2.70 p=.12	23.40***	31.09***
Education grps1vs.3	107.20***	105.73***	31.30**	87.10***	61.11***
Education grps 2vs.3	54.40***	6.59***	19.63***	31.54***	7.30**

*$p<.05$. ** $p<.01$. *** $p<.001$. df=2 for all overall chi-squares and 1 for all follow up tests. Age group 1=age 20–29 (n=117); Age group 2=age 30–39 (n=102); Age group 3=age 40–50 (n=308); Income group 1=< $59,000 ($n$=170); Income group 2=$60,000 to $90,000 ($n$=208); Income group 3=> $90,000 ($n$=149); Education group 1 =>50 % college (n=91); Education group 2=50 %–79 % college (n=216); Education group 3=>79 % college (n=220)

educated groups for 'calloused attitudes towards women and sex.' Thus, Hypothesis 2 was largely supported.

Proportion of Advertisements Depicting Hyper-Masculine Beliefs by Income Group

Our third hypothesis was that advertisements aimed at less affluent audiences would contain a higher proportion of HM (i.e., at least one of the four HM beliefs, as well as each of the HM beliefs individually) than advertisements targeting more affluent audiences. As can be seen from Table 6, the results of the overall chi-square tests for income were significant at $p < .001$ for each of the HM beliefs. In addition, follow-up tests indicated that the income groups differed significantly. The only exceptions were between the lowest and middle income groups for 'any HM', 'toughness as emotional control' and 'calloused attitudes towards women and sex.' Thus, Hypothesis 3 was largely supported.

Discussion

As suggested by previous qualitative studies (White and Gillett 1994), our quantitative study confirmed that, more often than not, advertisements in magazines targeted at men depict hyper-masculine ideology. Fifty-six percent of all advertisements analyzed depicted one or more HM beliefs. This proportion increased to 90 % or more for some magazines. In one sense, these findings are not surprising, given the profit-motive of advertising. Advertisers create HM representations that are consistent with accepted and/or idealized masculine beliefs (e.g., toughness as emotional control), as opposed to counter-cultural representations (e.g., empathy), in order to appeal widely to men and to sell products (Kervin 1990).

Our results also indicate that HM in magazine advertising is systematically related to the age, education, and household income of the male readers. Disproportionately, advertisements that depicted hyper-masculinity were targeted at younger, less educated, and less affluent readers. In contrast, only a minority of advertisements targeted at relatively older, well-educated, and affluent men depicted HM. This pattern was largely expected, as HM is more likely to be enacted by young men because they are in a developmental period during which social support for hyper-masculine behaviours is believed to be high (e.g., Zaitchik and Mosher 1993). In addition, males with lower social and/or economic power are likely at greatest risk of developing and accepting HM cognitions (Beale Spencer et al. 2004). For males in this group, behaviours such as acting tough and fighting may be viewed as acceptable, alternative ways of gaining power, respect, and desired resources (Allwood and Bell 2008). The present results support the idea that age and socio-economic power are both inversely related to acceptance (perhaps even idealization) of hyper-masculine ideology among males, and that advertisers purposively use this knowledge when tailoring advertisements for their intended audiences; however, more research is needed before these claims can be fully substantiated.

The results also point to readership age as being more strongly related to advertisements depicting HM than either education or income. The age of target readers was most strongly, negatively correlated with the frequency of hyper-masculinity depicted in the advertisements. This is a novel finding as, to our knowledge, the relationship between HM depictions in advertising and audience characteristics such as age, education, and income has not been previously examined quantitatively. One explanation for why age was the most strongly related magazine demographic may be that young men actively seek out sources of gender information, such as gender messages found in advertising, to learn how to display masculinity. In particular, it may be that HM matters more for younger men than for older men because the former are at the most overtly competitive and insecure stage of life, when obtaining women, economic security, and social status are major challenges. Older men are more likely to have already met these challenges, or at least to have adopted other priorities, so HM beliefs may be less relevant to them. Consequently, young men may be relatively more sensitive to, and influenced by, advertisers' use of gender cues regarding ideal masculine models and messages. To the extent that this is true, young men would also be most likely to purchase products with the intent of boosting their masculine image. Thus, advertisers use masculine ideals in advertising specifically to exploit these tendencies.

The results of the present study support the conclusion that certain HM beliefs are especially widely depicted in advertisements aimed at men. Regardless of the audience targeted, 'toughness as emotional self-control' and 'danger as exciting' were depicted more so than 'violence as manly' and 'calloused attitudes towards women and sex'. At least two explanations for this finding appear plausible. First, masculine ideology valuing toughness and danger may be more accepted generally by men than are overt violence and callousness towards women and sex. Therefore, advertisers focus on these beliefs in an attempt to influence the widest possible audience of potential consumers. Alternatively but not inconsistently, it may be that depicting overt acts of violence and callousness toward women and sex in advertisements is less socially and/or politically acceptable, particularly among women. Consequently, advertisers may not wish to risk a public backlash or invite more restrictive government regulation of advertising. Nonetheless, our findings show that a sizeable proportion of advertisements depict men as violent, and as holding callous attitudes

towards women and sex, particularly when the target men are young, less educated, and less affluent.

Implications

We argue that advertisements containing images that promote hyper-masculinity have critical implications for both men and society. Gender identity in general, as well as masculine attitudes and behaviour in particular, are learned (e.g., Watts 2010). Although the main goal of advertising may be to sell goods and services to consumers, it is also a major socializing agent within our culture that influences the development of masculine ideals and norms (Kervin 1990). The internalization of dominant masculine ideals as part of the socialization process has been identified as a destructive force that contributes to men's social and health problems, such as violence (Watts 2010). Repeated exposure to advertisements depicting HM as not only acceptable, but desirable and socially sanctioned, may influence the male audience's ideas about HM, leading to internalization of hyper-masculine beliefs (Allan and Coltrane 1996). On one hand, advertising may reinforce pre-existing hyper-masculine beliefs formed via other gender socialization agents (e.g., family, peers). On the other hand, it may also contribute to harmful gender attitudes and beliefs, particularly when the audience is young (Signorielli 1993). The finding that HM was most widespread in advertisements targeting young males indicates that such advertising may play a strong role in perpetuating and reinforcing development of HM beliefs.

The notion that HM depictions in advertising may promote hyper-masculine beliefs and behaviour in society is alarming, given the consequences associated with hyper-masculinity. Considerable evidence exists that HM is strongly related to violence against women (Parrot and Zeichner 2003; Suarez-Al-Adam et al. 2000). Violence against women is a widespread social problem and is recognized to be a public health priority, both in North America and elsewhere in the world (El-Mouelhy 2004; Krantz and Garcia-Moreno 2005). HM beliefs and behaviours are linked to other health and societal problems as well, including interpersonal violence generally, drug and alcohol abuse, dangerous driving, accidents, treatment program drop-out rates, medical mistrust, and high-risk sexual behaviours (Catlett et al. 2010; Hammond 2010; Mankowski and Maton 2010; Watts 2010; Wilson et al. 2010). Underlying each of these problems for men are social beliefs and norms. The manner in which men are portrayed in advertising plays a role in maintaining and reinforcing stereotypes of men (Allan and Coltrane 1996; Furnham and Mak 1999). Further, through advertising as an agent of socialization, it also influences the ways that males see themselves and learn what are appropriate gender behaviours (e.g., Signorielli 1993).

The results of the present study suggest that hyper-masculine advertising should be an important target in prevention efforts. For example, Katz (2006) has argued that prevention programs aimed at reducing violence against women should target selected or at-risk men (i.e., the primary perpetrators) by challenging their values and beliefs linking masculinity to violence and other harmful behaviour. Educational films such as *Tough Guise* (Jhally 1999), which critically examines the relationship between socially-constructed masculinities, media, and violence, could play a useful role in preventive efforts. Similarly, Mankowski and Maton (2010) recommend incorporating analyses of men's masculinity into the design, implementation, and evaluation of batterer intervention programs. In this regard, it is important to recognize that men's negotiation and enactment of their masculinity is a process that is more unconscious than conscious (Watts 2010). Media examples linking men's masculinity to violence may help bring this process into greater consciousness. Program content addressing the intersection of media portrayals of masculinity, social class, and power may be particularly instructive to men by illuminating the power dynamics in abusive relationships.

The results also yield practical implications for the advertising industry. Efforts to educate advertisers, advertising agencies, and publishers (especially those targeting particularly vulnerable readers), as well as the general public, regarding the potential negative consequences of HM ads would be a good first step. However, if such education did not lead to improved self-regulation by the industry, more forceful external regulation may be warranted. Such efforts would be aimed at curtailing the use of HM depictions within ad campaigns targeting men at high risk of HM development (e.g., young men). Perhaps the most effective influence on advertisers would be consumers declining to purchase products advertised in this way.

Limitations and Strengths

A limitation of the present study is its small magazine sample size (N =8 magazines; 16 issues). We acknowledge that our decision to limit the study sample to magazines for which we were able to locate both the education level (i.e., college attendance) and household income of magazine target audiences drastically restricted our potential sample size. We did so because neither income nor education alone fully captures the important construct of SES. Further, a relatively small sample size of highly circulated magazines seemed justified for an exploratory study. Nonetheless, other magazines popular with men were ineligible for this study due to lack of information about their readership. Also, we only examined two issues per magazine, which may not represent the full range of advertisements in each magazine.

Future researchers will undoubtedly want to examine HM in a wider variety and larger number of men's magazines.

Another limitation of the present study is that magazines targeting very low household income readers (e.g., household income less than $25,000) could not be included in the sample. Although magazines that appeared to target such readers (e.g., XXL) were contacted directly, full readership information was unavailable. Theoretically, very low-income men may be most at-risk of accepting HM ideology. Therefore, advertisements targeting this audience may be most hyper-masculine (Pyke 1996). However, very low income men may be unable generally to purchase pricey magazines (the average cost of the sample magazines was over $7.00 CDN). Consequently, advertisers may rely on other media (e.g., television) to reach this audience.

Our study is also limited because it concentrates on a sample of U.S. magazines and is therefore not necessarily generalizable to other U.S. media or media from other countries. Advertising from these other sources may not contain the same pattern of HM depictions of men.

A potential limitation is that both coders were not blind to the purposes of the study. There is a movement towards the use of blind coders for gender content analysis research, which has the potential of increasing the validity of content analysis research because coders are unbiased by knowledge of study hypotheses (Neuendorf 2011). Nonetheless, as Neuendorf discusses, content analysis research utilizing coders who are not blind to the study purposes continues to be acceptable in content analysis research, so long as good inter-rater reliability is established. Furthermore, our coding instrument was comprised of a checklist of relatively objective behaviours that minimized reliance on coders' subjective impressions. Thus, in our opinion, the authors' knowledge of the purposes of the research did not influence the coding of the advertisements.

A final limitation is that, partially due to the study's exploratory nature, HM beliefs were simply coded as either present or absent in the advertisements. Similarly, the severity of the HM portrayed in the ads was not coded. More detailed information about the behaviour and/or roles of the men portrayed in the ads was either absent from them or not coded.

A strength of the present research was the inclusion of magazines targeting a wide variety of male readers. Gender alone gives men power, but this power is differentially distributed, based upon social-demographic characteristics such as income and education (Mankowski and Maton 2010). Moreover, other characteristics, such as ethnicity and sexual orientation, also mediate men's access to power (Fischgrund et al. 2012). These factors affect how boys and men construct beliefs about and enact their masculinity (Mankowski and Maton 2010). For example, although masculinity is linked in the media to power, dominance, and control for all men, the significance of this connection may be even stronger for males who are non-White. This is due to the fact that men of colour appear relatively infrequently in the media compared to White males and are even more likely to be stereotyped (Jhally 1999). As one example, Jhally reports that, when Black and Latino men appear in media, they are very often presented either as criminals or as aggressive athletes (e.g., boxers). Future research should examine differences in presentation of media HM by ethnicity and other social characteristics.

Future Research

The results of this study point in several additional directions concerning future research. Future researchers may want to conduct content analyses of other media forms aimed at men (e.g., sports-related TV commercials). Further, as our study was exploratory and analyzed a relatively small sample of men's magazines, future researchers may want to determine the prevalence of HM in other samples of magazine advertisements aimed at different populations of men. As one example, a study might be designed to determine if magazines that are of the same type or theme (e.g., sports-related) also vary in prevalence of HM by target audience characteristics. Similarly, future researchers may also want to examine the prevalence of HM in media from other countries. These studies would provide more detailed information regarding the extent of hyper-masculine portrayals in advertising generally.

Research that is experimental and/or longitudinal is needed to understand the effect of hyper-masculine portrayals on men. Men can either accept or resist masculine ideologies (Watts 2010). Therefore, it would be important to conduct research to determine how men comprehend media images and the extent to which different aspects of hyper-masculinity are either accepted or resisted, as well as the characteristics of male viewers or the advertisements themselves that lead to acceptance or resistance.

In conclusion, the widespread depiction of hyper-masculinity in men's magazine advertising may be detrimental to both men and society at large. Currently, many men (especially those who are relatively younger, less educated, and less affluent) are exposed to advertisements showing that being a man means being tough, dangerous, violent, and callous toward women and sex. Although theoretically men as a group can resist the harmful aspects of hyper-masculine images, the effects of such images cannot be escaped completely (Watts 2010). In our opinion, becoming a man should not be this difficult, limiting to their humanity, or fraught with risk to health and well-being.

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