

**AN EXPLORATION OF WOMEN'S CARDIOVASCULAR DISEASE WITHIN A
CORPORATE PARTNER MAGAZINE OF *THE HEART TRUTH*[®] CAMPAIGN**

by

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Abstract

The purpose of this research study was to explore the social construction of women's cardiovascular disease, identities and health within *Glamour* magazine, a corporate partner of *The Heart Truth*[®] campaign. *The Heart Truth* campaign was implemented as a United States (U.S.) national action plan in 2002 to increase women's awareness about their leading cause of death (i.e., cardiovascular disease), and encourage women to take action to manage various risk factors. By conducting an ethnographic content analysis of relevant information within the inaugural October 2003 issue of *Glamour*, the following themes were identified: (a) a culture of consumerism (overarching theme); (b) the oblivious, unknowledgeable, dependent woman at risk (sub-theme); and (c) attaining a particular version of a healthy, feminine woman. These findings reveal the problematic 'feminization' of cardiovascular disease through the promotion of heteronormative ideals and gendered social order, and dependency on broader institutions and corporations.

Keywords: women; cardiovascular disease; heart disease; media; magazine; women's health; health campaign

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CHAPTER I

Introduction

Cardiovascular disease is the leading cause of death in North American women, and has been historically perceived as a “man’s disease” and linked with affluence and high social status (Centers for Disease Control and Prevention [CDC], 2013; Heart and Stroke Foundation, 2012; Lefler, 2004; Roger et al., 2012; Wenger, 2004). Print media portrayals, American Heart Association information materials and events, and medical research of cardiovascular disease shifted from being androcentric in the 1950s to focussing on women’s symptoms and treatments in the 1990s. This shift in gender focus has been attributed to the second-wave feminist movement, the Women’s Health Movement, the implementation of the National Institutes of Health Women’s Health Initiative in 1991 and Revitalization Act in 1993 (Freedman et al., 1995; Miller & Kollauf, 2002; Moore, 2008; U.S. Department of Health and Human Services, n.d.; Swigonski & Raheim, 2011). With the implementation of the National Institutes of Health Women’s Health Initiative in 1991 and the Revitalization Act in 1993, women’s cardiovascular disease received greater medical attention and research funding (Freedman et al., 1995; U.S. Department of Health and Human Services, n.d.).

However, the underrepresentation of women in clinical trials for treatments, under-diagnosis of women, and under-treatment of women still exists in regard to cardiovascular disease (Chou et al., 2007; McCormick & Bunting, 2002; Melloni et al., 2010; Poon et al., 2012). Women have unique risk factor profiles, sustain cardiovascular disease events 10 years later, experience non-chest related symptoms, and have higher mortality rates and outcomes for individuals who sustain a cardiovascular event, when compared with their male counterparts (Hughes & Hayman, 2004; Moran & Walsh, 2013; Rodriguez & Foody, 2013; Tan, Gast, & van der Schouw, 2009). It has been noted that women of certain racial and ethnic minority groups

and women of lower socio-economic status backgrounds have been disproportionately affected by cardiovascular disease currently and for at least the past two decades (CDC, 2013; Cooper et al., 2000; Liburd, Jack, Williams & Tucker, 2005; Moran & Walsh, 2013; Robertson, 2001). Social health inequities influence the nature and quality of health care that can be obtained and one's ability to engage in lifestyle modification behaviours to manage risk factors (Liburd et al., 2005). As will be discussed subsequently, despite the "reality" of who is at risk for heart disease, the "at risk" woman is socially constructed in magazines and newspapers in a narrow manner, which does not capture with accuracy, who is at risk. In this regard, within the foregoing forms of media, the "at risk" woman emerges as post-menopausal, White and affluent, thereby excluding women of diverse races and ethnicities and those belonging to lower socio-economic status backgrounds (Clarke & Binns, 2006; Clarke, van Amerom, & Binns, 2007; Higgins, Naylor, Berry, O'Connor, & McLean, D, 2006; Savoie, Kazanjian, & Brunger, 1999).

Related to narrow risk portrayals of women and heart disease, there is a discrepancy between the reality of women's cardiovascular disease and women's awareness and perception of the disease and their risk factors (Miller & Kollauf, 2002). Knowledge about this disease has been linked with decreased likelihood of sustaining cardiac events and greater changes in modifiable risk factors such as physical activity (Korin et al., 2012; Mosca et al., 2006). However, awareness must translate into a correct understanding of personal risk in order for behavioural changes to take place (Kling et al., 2013). Cardiovascular disease claims more lives of women than deaths caused by all types of cancers, chronic lower respiratory disease, and motor-vehicle accidents combined (Roger et al., 2012). Despite cardiovascular disease being the leading cause of death and disability in women, women's knowledge and awareness is suboptimal; but has demonstrated a gradual rise with recorded increases starting in 1997 (Flink,

Sciacca, Bier, Rodriguez, & Giardina, 2013; Mosca, Hammond, Mochari-Greenberger, Towfighi, & Albert, 2013). The sub-groups of women that demonstrate least awareness tend to be those who are not included in the socially constructed “at risk” woman, such as African Americans, Hispanic Americans, and younger women (i.e., below 35 years of age) (Mosca et al., 2013). This trend is compounded when women discuss health issues with their physicians, since physicians frequently exclude discussing women’s risks of cardiovascular disease during medical appointments (Mosca et al., 2013). Self-reported barriers in adopting risk factor reduction lifestyle changes include confusion regarding the information provided in media reports, perceived lack of control, limited time, family obligations, financial limitations, and lack of confidence in abilities (Mosca et al., 2013; Mosca et al., 2006). Adding to this complexity, perception of risk does not always translate into actual behaviour change when cardiovascular health promotions are communicated within a risk prevention framework that focuses on health losses and fear appeals. Such appeals can result in maladaptive avoidance coping strategies such as ignoring one’s risks and doing nothing to try to reduce them (O’Keefe & Jensen, 2007; Ruiter, Abraham, & Kok, 2011). Milne, Orbell, and Sheeran (2002) reported that when specific action plans were paired with severity of coronary heart disease and participants reported high coping appraisals (e.g., response efficacy, self-efficacy), significant increases in physical activity participation were noted.

In response to recommendations put forth by over 70 experts who met to discuss the urgency of educating women about their “#1 killer”, the National Heart, Lung, and Blood Institute (NHLBI) launched *The Heart Truth*[®] campaign in 2002 (U.S. Department of Health and Human Services, 2013). The campaign’s tagline ‘Heart Disease Doesn’t Care What You Wear – It’s the #1 Killer of Women’ is paired with the centerpiece *The Red Dress*[®] to serve as an “urgent

wake-up call” to American women (U.S. Department of Health and Human Services, 2013). The primary target audience is women aged 40 to 60 years since a woman’s risk of cardiovascular disease rises within these ages (U.S. Department of Health and Human Services, 2013). The five-fold core messages that *The Heart Truth* campaign aims to convey are (a) heart disease is the leading cause of women’s deaths, (b) heart disease can also lead to significant reductions in quality of life by causing disability, (c) a single risk factor can increase chances of heart disease development and multiple risk factors dramatically increases these chances, (d) women are encouraged to talk to their doctors to determine their risk factors and take action to lower them, and (e) healthy lifestyle behaviours (e.g., diet and physical activity) can lower one’s risk by as much as 82% (Long, Taubenheim, Wayman, Temple, & Ruoff, 2008).

Numerous high profile events and programs were designed to promote these messages such as The *Red Dress Collection*SM Fashion Show which features well known female figures (e.g., actresses, singers, athletes, etc.) modelling red dresses during New York’s Fashion Week in February (U.S. Department of Health and Human Services, 2013). The campaign also aimed to reach women of diverse race and ethnic backgrounds by launching the Women of Color Initiative in 2004 and partnered with national organizations (e.g., AME Church Connectional Health Commission, National Coalition of Pastors’ Spouses, The League of United Latin American Citizens, etc.) and local organizations (e.g., local hospital wellness programs) to reach these populations (U.S. Department of Health and Human Services, 2013). The campaign messages were tailored to Hispanic women and African American women by highlighting their most relevant risk factors (i.e., overweight and obesity, type 2 diabetes, high blood pressure and physical inactivity), and a faith-based online toolkit is available to all interested persons to conduct activities and programs with these specific population segments (U.S. Department of

Health and Human Services, 2013).

The Heart Truth campaign partnered with corporate sponsor magazines such as *Glamour*, *Woman's Day*, and *Ladies' Home Journal* to disseminate the campaign messages to women with varied, though gender stereotyped, interests (e.g., fashion and beauty, wellness and family, healthy eating and recipes) (U.S. Department of Health and Human Services, 2013). *The Heart Truth* campaign has been successful in creating awareness about women's heart disease as the leading cause of death – this figure increased from 34% in 2000 to 48% in 2003, and later 68% in 2009 (Long, Taubenheim, Wayman, Temple, & Yu, 2010). Research was conducted that demonstrated the success of elements of *The Heart Truth* with regards to branding and social marketing strategies, and further, with the development of a personal connection with women (Harding, 2010; Long, 2006). The extensive market research that informed the tagline and symbol, audience segmentation research, and liaising with the fashion industry are some components of the campaign that received praise (Harding, 2010; Long, 2006). However, the success of the campaign was not apparent when women of diverse backgrounds in terms of race, ethnicity and sexual orientation, provided feedback about the campaign materials (Tindall & Vardeman-Winter, 2011; Vardeman-Winter & Tindall, 2010). These women had difficulties relating to the material and felt that their identities were excluded from the construction of campaign messages (Tindall & Vardeman-Winter, 2011; Vardeman-Winter & Tindall, 2010).

The influence of media messages on women's health and cardiovascular disease has been established; it is reported that 45% of women's knowledge about cardiovascular disease is obtained from magazines (which were not named in the published article) (Mosca, Ferris, Fabunmi, & Robertson, 2004). The discrepancy between women's perceptions versus the reality of health and illness has been credited to the media's problematic portrayals of cardiovascular

disease and its risk factors (Higgins et al., 2006). The major findings of analyses of North American print magazine and newspaper portrayals of cardiovascular disease and its risk factors include: a primary focus on medical frame; the ignorant and diseased female body versus the successful male patient; individual responsibility and accountability as solutions to address women's cardiovascular disease; lack of information about the social determinants of cardiovascular health; and, vague, inaccurate and contradictory presentations of women's cardiovascular disease (Campo & Mastin, 2007; Clarke, 1992; Clarke, 2010; Clarke & Binns, 2006; Clarke & van Amerom, 2008; Clarke et al., 2007; Edy, 2010; Gollust & Lantz, 2009; Higgins et al., 2006; Rock, 2005; Roy, 2008; Savoie et al., 1999). The following paragraphs briefly describe each of these findings. It should be noted that these findings were obtained from studies that looked at print newspapers and magazines that cater to both men and women for a variety of interests (e.g., *Time*, *Newsweek*, *The Globe and Mail*, *Prevention*, *Ladies' Home Journal*, *Chatelaine*, *Essence*, etc.) (Campo & Mastin, 2007; Clarke, 1992; Clarke, 2010; Clarke & Binns, 2006; Clarke & van Amerom, 2008; Clarke et al., 2007; Edy, 2010; Gollust & Lantz, 2009; Higgins et al., 2006; Rock, 2005; Roy, 2008; Savoie et al., 1999).

Print magazines and newspaper articles that specialize in women's interests and general topics construct cardiovascular disease prevention according to a medical frame wherein prestigious healthcare specialists, medical journals and institutions, and pharmaceutical companies are positioned as powerful experts and gatekeepers in women's cardiovascular health (Clarke, 1992; Clarke, 2010; Clarke & Binns, 2006; Clarke & van Amerom, 2008; Clarke et al., 2007; Higgins et al., 2006; Savoie et al., 1999). The emphasis on the glorification of medicine is contextualized through narrow discussions of cardiovascular health and disease that focus on the anatomy and physiology of the heart, and by describing cardiovascular disease in a fearful

manner (Clarke, 1992; Clarke, 2010; Clarke & Binns, 2006; Clarke & van Amerom, 2008; Clarke et al., 2007; Higgins et al., 2006; Savoie et al., 1999). In this way, disease prevention is constructed as a process that requires consultations with medical experts and prescription of pharmaceutical strategies, while excluding the immense benefits that women can enjoy from modifiable lifestyle behaviours such as regular moderate-to-vigorous physical activity and consumption of healthy diets. Stampfer, Hu, Manson, Rimm, and Willett (2000) reported that engaging in healthy lifestyles can decrease risk for coronary heart disease by up to 82%.

Cardiovascular disease is conveyed as a man's disease by contextualizing this disease as a symbol of successful manhood for affluent White male celebrities in political power (Clarke et al., 2007). Pre-menopausal hormones are posited to provide protection for women against this disease, whereas older women are described as being "at risk" for whom hormone replacement therapy must be prescribed (Clarke, 1992; Savoie et al., 1999). Women are constructed as heterosexual, married individuals who help prevent cardiovascular disease in their husbands; but, often are unaware of their own risk, and lack a supportive social network to assist with their cardiovascular health (Clarke et al., 2007).

Another narrative portrays women as the marginalized group who must seek recognition of their symptoms and advocate for their own treatment versus being the caretakers of their husbands' health (Clarke et al., 2007; Roy, 2008; Savoie et al., 1999). This narrative which portrays women as primarily heterosexual and married to men, further positions women as being blatantly under-recognized and undertreated for cardiovascular risk factors and symptoms by medical professionals (Clarke & van Amerom, 2008; Clarke et al., 2007; Savoie et al., 1999). In addition to women's needs to fight for treatment, women are encouraged to take individual accountability and be autonomous by adopting medicalized strategies to manage their

cardiovascular health and risk factors (Campo & Mastin, 2007; Clarke & Binns, 2006; Clarke & van Amerom, 2008).

These studies have also reported that the social determinants of cardiovascular health in various media sources focus on upstream changes (particularly, changes in the U.S. and Canadian Governments' decision-making processes) to address the issue of health inequity (Gollust & Lantz, 2009; Higgins et al., 2006). Cardiovascular disease prevention is discussed in terms of financially expensive cognitive stress-reduction strategies and novel scientific technologies according to the latest in women's research, which are not accessible by women of lower socio-economic backgrounds (Clarke & Binns, 2006; Clarke & van Amerom, 2008). Additionally, the higher incidence of cardiovascular disease in women belonging to racial and ethnic minority groups receives little attention, and environmental factors such as availability of bike trails and side-walks for physical activity opportunities, are largely excluded in the construction of this disease and adoption of prevention behaviours (Campo & Mastin, 2007; Edy, 2010).

The nature of women's cardiovascular disease is described vaguely and inaccurately. Symptoms of various types of cardiovascular diseases are labelled as "heart attacks", risk factors are credited to women's "luck" and genetic makeup, modifiable lifestyle factors are limited and inappropriately addressed in comparison with the American Heart Association guidelines, contradictory information is presented regarding cholesterol lowering drugs and hormone replacement therapy, and prevention strategies offered are narrowed to verbs such as "take action" without any specific advice (Clarke & Binns, 2006, Clarke et al., 2007; Edy, 2010; Savoie et al., 1999; Turner, Vader, & Walters, 2008). Cardiovascular disease in men is constructed as a symbol of high employment status and an indication of one's well-known

seniority in a stressful and demanding work-force (Clarke, 2010; Clarke & Binns, 2006; Clarke, et al., 2007). Furthermore, men are portrayed as being in greater control over their risk, and their treatment and recovery from advanced stages of cardiovascular disease is promised and discussed with optimism (Clarke, et al., 2007).

There are a number of gaps and contentious issues in the current literature about media portrayals of women's cardiovascular disease. First, the "at risk" woman is constructed as a post-menopausal, heterosexual, married, affluent woman who enjoys partaking in traditional caregiver roles (Clarke, 2010; Clarke et al., 2007; Clarke & van Amerom, 2008). Little is known about how cardiovascular disease risk is constructed for pre-menopausal women, in terms of greater diversity in women's life spheres (e.g., employment, housing, and recreation) and their potentially unhealthy lifestyles (e.g., unhealthy diets, sedentary lifestyles, regular smoking, etc.). Second, currently known media discourses about prevention and treatment place responsibility in the hands of medical professionals to provide medical cures and political leaders to create health care delivery and supportive environmental policy changes (Clarke, 2010; Clarke & Binns, 2006; Edy, 2010; Clarke & van Amerom, 2008; Higgins et al., 2006; Savoie et al., 1999). The limited current knowledge about media's portrayals of women's agency and autonomy in lifestyle behaviour changes requires further investigation.

Third, men's cardiovascular disease is portrayed in a positive light; as a symbol of success, and by drawing on male doctors as healers and popular male figures such as politicians as the typical "at risk" man (Clarke, 2010; Clarke & Binns, 2006; Clarke et al., 2007; Clarke & van Amerom, 2008). On the other hand, women's cardiovascular disease is conveyed as a shameful experience and a hindrance to a woman's career aspirations (Clark, 2010; Clarke et al., 2007). There is a lack of knowledge about how women's cardiovascular disease is constructed

with positive framing of risk factor management and disease prevention, and how these constructions are influenced by female celebrities and role models, and female family and community members. Finally, *The Heart Truth* campaign set out to educate women about their risk factors and prevention of cardiovascular disease with accurate and appropriate information (Wayman, Long, Ruoff, Temple, & Taubenheim, 2008). Currently known media discourses of women's cardiovascular disease entail vague, inaccurate and contradictory information (e.g., "heart attacks" take on the entire entity of cardiovascular disease, women are advised to "take action" without recommendations for said actions, prescribed medications are portrayed as women's only options in disease prevention, etc.) (Clarke, 1992; Clarke, 2010; Clarke & Binns, 2006; Clarke et al., 2007; Edy, 2010; Savoie et al., 1999; Turner et al., 2008). The investigation of the ways in which appropriate and accurate descriptions of women's cardiovascular disease pathology, risk factors and prevention/treatment are constructed in a corporate partner magazine of *The Heart Truth* campaign is required.

In order to address these gaps in the literature, the purpose of this study was to explore the constructions of women's cardiovascular disease in a women's interest magazine (i.e., *Glamour*) which is a corporate partner of *The Heart Truth* campaign. The following research questions guided this study: 1. How are cardiovascular disease and women's heart disease risk factors in relation to various life spheres (e.g., workplace settings, recreational preferences, etc.) portrayed/constructed in *Glamour*?, and 2. What are the potential implications of these heart disease messages/constructions for women's identities and health?

The methodology used to answer the above research questions was ethnographic content analysis (see Altheide, 1996), which is grounded in social constructionism. From a social constructionist perspective, individuals' identities are socially and culturally constructed from

messages communicated during social and cultural interactions (e.g., through the mass media) (Altheide, 1996). These identities are further viewed as social products that are constantly evolving and fluid, though these may *appear* to be fixed and unchanging, when there are limited or narrow constructions circulated at the cultural level (such as the case with media portrayals of women's heart disease) (Altheide, 1996). In turn, these socially and culturally identities may contribute to the development of attitudes and beliefs held by both society and/or people themselves (Altheide, 1996; Schwandt, 2007).

Operational Definitions

Discourse. Within the context of the mass media, a discourse may be defined as the institutional and cultural circulated set of ideas, knowledge, and values conveyed through language (Altheide, 1996; Lupton, 1992; McGannon & Spence, 2012; Schwandt, 2007, p. 72). Such a discourse is reflective of the collective social influences and structures from which these meanings stem versus an individual person's cognitions and self-identity, although a person may construct his/her daily experiences and health practices based on the meanings inherent within a discourse (McGannon & Spence, 2012).

Frame. A media frame refers to the perspective used to emphasize the parameters within which a certain topic is discussed, which separates the topic from others within a report (Altheide, 1996). For example, cardiovascular disease prevention may be framed as a medical issue as it pertains to treating the pathophysiology of a compromised cardiovascular system, or as a socio-economic issue as it pertains to addressing social inequities in public health.

Narrative. A media narrative refers to the story like presentation of a phenomenon, event or experience in ways that construct subject positions for the identities of the individuals involved within the story (Creswell, 2013; McGannon & Spence, 2012; Schwandt, 2007, p. 201).

The descriptions of situations and subject positions portrayed within a media narrative have implications for social action (McGannon & Spence, 2012).

This thesis document is comprised of five chapters. Within Chapter II, I seek to conduct a detailed literature review of women's cardiovascular disease, *The Heart Truth* campaign, and current scholarship regarding portrayals of cardiovascular disease and risk factors in the mass media. Then following, within Chapter III, I provide the underpinnings to this project, the methodology employed, and the research questions that guided data collection and analysis. In Chapter IV, I describe and discuss the findings of this project. Within Chapter V, I provide a conclusion by summarizing the findings, outlining potential future research directions, and discussing the practice implications of the results.

CHAPTER II

Literature Review

In this Chapter, I describe the nature and incidence of cardiovascular disease in women by focusing on the historical gendered construction of this disease, the current demographic disparities in women's cardiovascular disease, and women's knowledge, awareness and perceptions about their leading cause of death. It is important to contextualize women's disparities, awareness and perceptions of cardiovascular disease with the evolution of the social construction of this disease since women were highly excluded from these discussions historically (Clarke, 2010; King & Paul, 2006; Miller & Kollauf, 2002). Some of these narratives (e.g., construction of cardiovascular disease as a "man's disease") continue to be perpetuated in present day, and have been linked with women's disease prevention and health outcomes (Clarke, 2010; Miller & Kollauf, 2002; Roy, 2008). Next, the conception and development of *The Heart Truth* campaign is described. The significance of understanding women's health in a mediated society is noted, and the current understanding of the construction of cardiovascular disease and risk factors in various types of media sources are outlined. The gaps in current knowledge and the issues that remain contentious are identified. Finally, the research questions that guided this current study in filling these literature gaps and contentious issues are put forth.

Women's Cardiovascular Disease

As noted in the Introduction, cardiovascular disease is the leading cause of mortality among U.S. and Canadian women (CDC, 2013; Heart and Stroke Foundation, 2012; Kretsoulas, Shannon, Giacomini, Velianou, & Anand, 2013). "Cardiovascular disease" is an umbrella term that encompasses coronary heart disease, cerebrovascular disease, peripheral arterial disease, rheumatic heart disease, congenital heart disease, and deep vein thrombosis and pulmonary

embolism (World Health Organization [WHO], 2013). For every year since 1900 (except 1918), cardiovascular disease was the leading cause of death in the U.S. (Roger et al., 2012). It is projected that by 2030, 40.5% of individuals residing in the U.S. will be diagnosed with cardiovascular disease (Roger et al., 2012).

In a recent update by the American Heart Association, women's risk profiles were classified as "high risk", "at risk", and "ideal cardiovascular health" (Mosca et al., 2011, p. 1408). Women at high-risk for cardiovascular disease are those that present with clinical manifestations of coronary heart disease, cerebrovascular disease, peripheral arterial disease, abdominal aortic aneurysm, etc. (Mosca et al., 2011). At-risk women demonstrate at least one major risk factor (Mosca et al., 2011). Risk factors for cardiovascular disease include cigarette smoking, obesity and central adiposity, physical inactivity, hypertension, high cholesterol, diabetes or pre-diabetes, etc. (Mosca et al., 2011).

A Gendered Disease: Early Perspectives

Cardiovascular disease has been historically perceived as a "man's disease" (Wenger, 2004). This understanding dates back to 2600 BC where translations from Ebers papyrus revealed "If you find a man with cardiac discomfort, with pain in his arms, at the side of his heart, death is near" (Wenger, 2004, p. 558). Cardiovascular disease was believed to be an expected part of the aging process and was only considered as a cause of concern when it began presenting in young men (King & Paul, 1996). Younger women's incidences of cardiovascular disease in the earlier part of last century were not adequately documented (King & Paul, 1996). In 1927, women in maternity clinics with self-reported symptoms were diagnosed with "cardiac neurosis" (King & Paul, 1996). More recently, the experience of cardiovascular disease has been stereotyped as a dramatic "Hollywood heart attack" wherein a middle-aged, White male clutches

his chest in acute and severe pain before dropping to the floor (Lefler, 2004). This construction of cardiovascular disease as a male affliction has resulted in the understanding that women are at low risk for this disease, and the tailoring of health care services to cater to the needs of male patients (Lockyer & Bury, 2002). Two incorrect assumptions have carried forward from the last century regarding cardiovascular disease and influence practitioners and women's beliefs about the incidence of cardiovascular disease in women (Lockyer & Bury, 2002). First is the belief that cardiovascular disease is more likely to be experienced by men than women (Lockyer & Bury, 2002). The second incorrect assumption is that cardiovascular disease is associated with individuals belonging only to high socio-economic status backgrounds (i.e., "the disease of affluence") (Lockyer & Bury, 2002, p. 433).

The portrayals of cardiovascular disease in periodical literature of past decades is worthy of discussion since these portrayals contributed to the formation of what is often taken for granted public knowledge and beliefs (Roy, 2008). The understanding of cardiovascular disease has echoed the evolution of gendered social roles (King & Paul, 2006; Miller & Kollauf, 2002). Periodical publications about cardiovascular disease from the late 1950s till the mid-1960s focussed on male-specific symptoms and treatment, and the disease continued to be portrayed as a male affliction (Miller & Kollauf, 2002). The limited information for women reflected their traditional caretaker and homemaker roles as they pertained to preventing cardiovascular disease in their husbands or assisting their husbands' cardiovascular event recovery (Miller & Kollauf, 2002). An example of this portrayal is noted by the title of a *Good Housekeeping* magazine article published in 1965; "What you can do to help your husband avoid a heart attack" (Miller & Kollauf, 2002). Another article titled "Medicine: Be glad you're a woman – you'll live longer" published by *Ladies' Home Journal* in 1964 further exemplifies the social construction of gender

in relation to heart disease, as it reported that women's sex hormones provided them with protection against cardiovascular disease (Clarke, 1992).

Cardiovascular disease literature during the 1970s was predominantly gender neutral and demonstrated a unified perspective (Miller & Kollauf, 2002). This portrayal of gender neutrality is illustrated by the title of an article published by *Reader's Digest* in 1973 which lacks indication of gender; "How to recognize and survive a heart attack: Early warning signs" (Miller & Kollauf, 2002). The shift away from andro-centrism can be linked with two major social and political movements that occurred during the late 1960s and early 1970s, which were; the second-wave feminist movement during which women gained a greater political voice and set out to regain women's control over their own bodies (among other agendas), and the Women's Health Movement that challenged the male-dominated medical establishment and the andro-centric understanding of the human body (Miller & Kollauf, 2002; Moore, 2008). Second wave liberal feminist theories promoted androgynous constructions of human bodies as a strategy to overcome the oppression of women that resulted from patriarchal domination and the exclusion of women from health discourses (Swigonski & Raheim, 2011). Feminine qualities of self-awareness and body consciousness were promoted by the Women's Health Movement as a potential framework for developing knowledge about the female body (Moore, 2008).

The 1980s and early 1990s marked the beginning of greater interest in women's cardiovascular disease by the medical community (Miller & Kollauf, 2002). In 1991, the National Institutes of Health in the U.S. implemented the Women's Health Initiative to examine the leading causes of death and disability in women (including cardiovascular disease), by providing funding for randomized controlled trials, observational studies, and community approaches (U.S. Department of Health and Human Services, n.d.). Periodicals began publishing

articles about female-specific cardiovascular disease risk factors, symptoms and clinical presentations (Miller & Kollauf, 2002). Additionally, sex differences in diagnosis and treatment options were discussed (Miller & Kollauf, 2002). This notion of sex differences is illustrated by article title “Different but deadly (women)” published in *New York Times Magazine* in 1989 (Miller & Kollauf, 2002). Whereas the issue of women’s cardiovascular disease began receiving attention in the medical community and the media, the perception that this was a man’s disease continued to be implicitly constructed. For example, an article published in 1984 within *Reader’s Digest* called “Recipe for a longer, better life” noted that a father or older brother die of a heart attack before 45 years of age was a risk factor for women (Clarke, 1992). The meanings associated with conveying risk of cardiovascular disease in terms of one’s male family members are that women are not at risk for this disease.

The American Heart Association is committed to providing public education about cardiovascular disease and was founded in 1924 (American Heart Association, 2013). Through informational public forums, newsletters and educational materials catalogues, the American Heart Association also contributed to the gendered portrayals of cardiovascular disease, while mirroring the growing body of knowledge about cardiovascular disease by the medical and research communities (Miller & Kollauf, 2002). Between 1959 and 1967, the “Husbands and Hearts” public forums provided information about prevention of cardiovascular disease in husbands and husbands’ recovery from a cardiovascular event (Miller & Kollauf, 2002). These public forums were developed based on the taken for granted assumption that *all* women are heterosexual and married, and draw upon stereotypical social constructions of women such as women’s caretaker roles and responsibilities to their male spouses, and the protection that being female offers women in their disease prevention. Newsletter *Milestones* disseminated by the

American Heart Association in 1970 provided coverage about the first public health campaign regarding early warning signs of cardiovascular disease (Miller & Kollauf, 2002). In 1991, the American Heart Association Educational Materials Catalogue contained female-specific cardiovascular information, including a section dedicated to safeguarding women's heart during pregnancy (Miller & Kollauf, 2002).

Through taking stock of the above meanings and messages concerning heart disease, it is apparent that historically and during the second half of the past century, cardiovascular disease was understood, researched and treated through a gendered lens with the focus shifting from males to females over time. In a further section of the present Chapter ("Media portrayals of cardiovascular disease and risk factors"), the problematic nature of print media's publications about women's cardiovascular disease during and beyond the 1990s is further discussed. The demographic disparities that women experience with regards to cardiovascular disease are described in the following section to further contextualize women's disadvantaged positions and convey the necessity to further explore cardiovascular disease in this population.

Demographic Disparities in Women's Cardiovascular Disease

As noted, women have been historically underrepresented in clinical trials (Freedman et al., 1995). On June 10, 1993, the National Institutes of Health Revitalization Act was implemented and required that women and individuals of minority racial and ethnic groups be appropriately represented in clinical trials that evaluate the effectiveness of interventions, diagnoses and therapies (Freedman et al., 1995). Regrettably, representation of women in clinical trials have been lowest for coronary artery disease (25%), hyperlipidemia (28%), and heart failure (29%) (Melloni et al., 2010). Gender differences exist in terms of risk factor profiles, age of development of cardiovascular disease, symptoms of cardiovascular disease, mortality rates,

and outcomes for individuals who sustain a cardiovascular event (Hughes & Hayman, 2004; Moran & Walsh, 2013; Tan et al., 2009). Women have also received less medical interventions for the prevention and management of cardiovascular disease than men (Chou et al., 2007).

Two cardiovascular disease risk factors unique to women are preeclampsia and menopause (Tan et al., 2009). Although the mechanisms behind the relationship between menopause and hypertension are unknown, systolic blood pressure and diastolic blood pressure were found to be significantly higher in post-menopausal women when compared with pre-menopausal women between the ages of 46-53 years (Zanchetti et al., 2005). A history of preeclampsia has been linked with increased risk for cardiovascular disease later in a woman's life (Bellamy, Casas, Hingorani, & Williams, 2007). Additionally, risk factors such as smoking, hypertriglyceridemia and low high-density lipoprotein cholesterol levels have a greater impact in women versus men, and older women have higher incidences of hypertension, diabetes mellitus, and obesity in comparison with their male counterparts (Tan et al., 2009).

Presentation of cardiovascular disease in women often (though not exclusively) occurs 10 years after their male counterparts, and mortality rates for the first year after sustaining a myocardial infarction is 38% for women and 24% for men (Hughes & Hayman, 2004; Lee & Foody, 2008). Women's physical experiences of acute myocardial infarctions are more likely to include dyspnea, nausea and vomiting, indigestion, fatigue, sweating, and arm and shoulder pain, and less likely to experience chest pain (Hughes & Hayman, 2004). Men are most likely to experience chest pain with dizziness and fainting (Hughes & Hayman, 2004). As a result of medical professionals' underestimation of cardiovascular disease as a threat to women, sex differences occur in terms of the delivery of health care (e.g., fewer angioplasties and cardiac surgeries) (Xhyheri & Bugiardini, 2010). It has been reported that 34% of occurrences of

myocardial infarction in women are undetected or “silent” since these women and their medical professionals were unaware about the differences in women’s symptoms from their male counterparts (McKinlay, 1996). In 2002, it was found that women are thus less likely to receive referrals for angiography and coronary artery bypass surgery, and are in later stages of the disease process upon referral (McCormick & Bunting, 2002). A decade later (and more currently) this trend appears to persist, since Canadian women receive fewer in-hospital angiographies and demonstrate higher incidences of in-hospital mortality (Poon et al., 2012).

A wealth of medical knowledge is available about the gender differences in the experience of cardiovascular disease (e.g., women’s experiences of indigestion, sleep disturbances, and neck pain versus traditional chest pain) (Rodriguez & Foody, 2013). However, new scientific knowledge is beginning to emerge that supports the historical belief about gender indifference in certain presentations of cardiovascular disease. Particularly, a recent landmark study by Kreamsoulas et al. (2013) revealed that the clinical construct of “typical angina” used to describe male symptoms of chest pain, pressure and tightness, and female “atypical angina” symptoms of dry mouth, discomfort and crushing merely reflect differences in gendered and socially constructed language expressions, versus biological sex differences. Nonetheless, angina and coronary artery disease have a greater prevalence and result in a higher proportion of deaths in women than men, respectively (Kreamsoulas et al., 2013).

Evidently, this wealth of information regarding women’s cardiovascular disease such as that discussed above is largely excluded from health discourse when the primary portrayal of women’s heart disease is limited to their responsibilities to care for their ailing husbands as discussed in the previous section. The social construction of women’s cardiovascular disease that lacks reference to women’s identity and own risk for this disease within heart disease discourse

may result in a lack of understanding and awareness about their risk factors, symptoms, preventive strategies and treatment options which is highly problematic given their higher incidence of this disease, and differences in risk factor profiles and experiences of symptoms.

Since the mid-1980s, African American women have experienced a higher cardiovascular mortality rate than White American women (Cooper et al., 2000). Other racial and ethnic groups that are disproportionately affected by cardiovascular disease are Hispanic-Latino Americans, Asian Americans, Native and Alaskan Americans, and Pacific Islanders (Liburd et al., 2005; Robertson, 2001). In Canada, women of South Asian and First Nations backgrounds are at greater risk of cardiovascular disease in comparison to the general female Canadian population (Heart and Stroke Foundation, 2010). Women from low-income socio-economic groups are further disproportionately affected by cardiovascular disease (Moran & Walsh, 2013). Women belonging to sexual minority groups (i.e., identifying with homosexual and bisexual orientations) are more likely to demonstrate certain risk factors (e.g., cigarette smoking and obesity) and greater combined risk for cardiovascular disease, than heterosexual women (Conron, Mimiaga, & Landers, 2010). This finding positions the experiences of women identifying with sexual minority backgrounds within the context of their social determinants of cardiovascular health and socio-economic backgrounds by attributing their health disparities to inequitable health insurance and irregular access to health care providers (Conron et al., 2010). It has also been reported that stigmatization within the healthcare industry by virtue of individuals' sexual orientation minority backgrounds influences health-seeking behaviours (Collins & Rocco, 2014). Therefore, the construction of cardiovascular disease in dominant health discourses as one that primarily affects affluent, White, heterosexual individuals further distances women from lower socio-economic status groups, and those belonging to racial, ethnic and sexual minority groups from being

positioned at the crux of cardiovascular disease narratives. Exclusion of all women and these sub-populations of women, from narratives of cardiovascular health and disease serve to further downplay and/or marginalize women's experiences with this disease, which can negatively impact women's beliefs and their understandings of risk factor management and disease prevention strategies. In the following section, I discuss what is currently known about women's knowledge, awareness and perceptions about their leading cause of death and disability.

Women's Knowledge, Awareness and Perceptions

It is important to report trends in women's knowledge and awareness of cardiovascular disease since appropriate health seeking behaviour and risk factor behavioural modifications are hindered by the discrepancy between the reality of women's heart disease and women's perceptions about their risk factors and symptoms (Miller & Kollauf, 2002). Indeed, according to the Health Belief Model developed in the early 1950s, an individual's engagement in recommended preventive health behaviours in response to a disease threat is positively influenced by perceptions such as personal susceptibility, disease severity and benefits of preventive actions, and negatively influenced by perceived barriers to preventive actions (Janz & Becker, 1984). Perceived threat of a disease is also influenced by "cues to action" such as mass media campaigns, newspaper or magazine articles, or illness of a friend or family member (Janz & Becker, 1984). Perceived benefits and barriers of preventive actions are the strongest predictors of behaviour, particularly when the goal of the recommended behaviour is to prevent a negative health outcome versus treatment for an existing health condition (Carpenter, 2010). An underlying assumption of this model is the effect of demographic, socio-psychological, and structural variables on the individual's perception of the disease, and therefore, health-related behaviours (Janz & Becker, 1984). When the Health Belief Model was adapted to address

women's likelihood to engage in coronary heart disease preventive behaviours, perceived susceptibility and seriousness of coronary heart disease was linked with socio-psychological variables such as health motivation and the availability of social support (Ali, 2002). Socio-psychological variables together with knowledge of risk factors of coronary heart disease interact with cues to action (e.g., family history of coronary heart disease and the prescription of medications of risk factors) to influence engagement in preventive behaviours (Ali, 2002).

Findings of various studies conducted using the Health Belief Model report that women are more likely than men to participate in health behaviours that are consistent with their personal health beliefs and attitudes (Korin et al., 2012). Furthermore, a study conducted by Korin et al. (2012) demonstrated that women's beliefs about the preventable nature of heart disease is related to decreased likelihood of coronary heart disease events. The relationship between awareness and action is also supported by the findings of a study conducted by Mosca et al. in 2006, which demonstrated that women who were aware about their leading cause of death had a 35% increased likelihood of being physically active and were 47% more likely to discuss weight loss when compared with women who were unaware. This relationship is not a simplistic one since awareness about cardiovascular disease must translate into understanding of personal risk in order for optimal lifestyle changes to take place (Kling et al., 2013). Out of the 99% of female participants at a cardiovascular health screening event that self-reported awareness that cardiovascular disease is their leading cause of death, 47% of these women perceived themselves to demonstrate risk factors when in reality, 77% of these women were diagnosed to be "at risk" and "at high risk" for cardiovascular disease (Kling et al., 2013).

It is known that in 2008, cardiovascular disease claimed more lives of women (i.e., 419,730 deaths excluding those caused by diabetes mellitus complications) than all types of

cancers, chronic lower respiratory disease, and motor-vehicle accidents combined (i.e., 387,702 deaths) (Roger et al., 2012). Forty-four percent of the decrease in U.S. deaths attributable to coronary heart disease during 1980-2000 occurred due to lifestyle and environmental changes, and 47% of this mortality decrease occurred due to increased use of evidence-based medical therapies (Roger et al., 2012). Women's health fears appear to be misplaced (Long, 2006). In the late 1990s, the National Council on the Aging reported that 9% of 45-64 year old women believed that cardiovascular disease was the health condition they most feared, compared with the 61% of these individuals who were most fearful of cancer (particularly, breast cancer) (Editorial, 1997). By 1997, the percentage of women aware that cardiovascular disease is their leading cause of death increased to 30% overall, with African Americans and Hispanic Americans demonstrating significantly lower awareness levels (i.e., 15% and 20%, respectively) (Mosca et al., 2013). Although women's knowledge and awareness about cardiovascular disease have been on a gradual rise, these levels of awareness continue to be suboptimal (Flink et al., 2013).

Cardiovascular disease is often communicated within the context of a risk prevention framework with the emphasis on health losses (i.e., disease development) associated with non-compliance with recommended preventive behaviours (O'Keefe & Jensen, 2007). These loss-framed appeals have been problematized as being ineffective in bringing about recommended changes, and gain-framed appeals which focus on positive framing of health gains (e.g., maintenance of health) have been associated with greater engagement in recommended behaviours (O'Keefe & Jensen, 2007). The constructing of women's cardiovascular disease through messages about threats to women's well-being and recommended preventive behaviours, involves the implicit assumption that fear arousal and women's perceived threat will lead to

engagement in these behaviours which may be problematic (Ruiter et al., 2001). Fear arousal is complicated in health promotion messages, as such appeals may lead to maladaptive avoidance coping such as denial of the proposed threat and decreased motivation to cognitively process and inculcate the recommended preventive behaviours into everyday lifestyles (Ruiter et al., 2001). It has been proposed that health messages that focus on communication of risk information leads to fear arousal prior to or during the conscious perception of threat (Ruiter et al., 2001). In essence, employing fear based appeals to communicate women's cardiovascular risk may actually impede women's understanding about their personal risk, and further, their engagement in lifestyle modifications to prevent disease.

Additionally, race and age disparities continue to exist with regards to cardiovascular knowledge and awareness. In 2012, while the overall women's population demonstrated 56% awareness about women's leading cause of death, awareness of African Americans and Hispanic Americans was 36% and 38%, respectively (Mosca et al., 2013). Racially diverse, ethnic minority and younger women are less knowledgeable about their leading cause of death, as well as the symptoms of a heart attack (e.g., spreading of pain to arms and shoulders) (Mochari-Greenberger, Miller, & Mosca, 2012; Munoz et al., 2010). This can be partly attributed to the narrow and social construction of cardiovascular disease as primarily affecting affluent, White individuals. As will be discussed later within this current thesis, racial and ethnic diversity and portrayal of women of different ages is largely lacking in the social construction of this disease. Affluent, White women are also constructed as possessing greater capabilities in preventing their cardiovascular disease. This is illustrated by the finding that African American women perceive and construct heart-healthy dietary choices as those that are affordable and allegedly preferred by affluent, White women (e.g., wine with cheese and olives) (Vardeman-Winter & Tindall, 2010).

It was found that younger age has a greater influence on cardiovascular knowledge than ethnicity (Mosca et al., 2000). It is recommended that awareness among younger women (i.e., below the age of 35 years) should be increased to maximize the benefits of early prevention, since the development of cardiovascular disease from risk factors such as smoking, hypertension and obesity begins during one's youth (i.e., from the age of 15 years) (McMahan, Gidding, & McGill, 2008; Robertson, 2001; Zieske et al., 2005).

It appears that women's risk of cardiovascular disease is underestimated, and thus possibly reproduced, by their health-care providers as well. During medical appointments, the inclusion of women's cardiovascular health and disease by physicians, as part of their discussions of women's overall health occurs infrequently (Mosca, et al., 2013). With this regard, only 6%, 16%, 23%, and 33% of women within the age ranges of 25-34 years, 35-44 years, 45-64 years, and 65+ years, respectively, reported that their cardiovascular health is discussed during medical appointments (Mosca et al., 2013). Self-reported barriers to participating in heart-healthy lifestyles varied across these age groups; specifically, limited time (25-34 years), family obligations and caretaking responsibilities (35-44 years), financial and insurance coverage limitations (45-64 years), and lack of confidence in their abilities to effectively engage in preventive behaviours (65 years and older) are cited as barriers (Mosca et al., 2013). Previously self-reported barriers included confusion in the media (49%), perceived lack of control over health and the belief that one's health is controlled by a "higher power" (44%), and caretaking responsibilities (36%) (Mosca et al., 2006).

Despite the reality that women are disproportionately affected by cardiovascular disease, it is continued to be portrayed as a "man's disease", and women's knowledge and awareness of their "number one killer" is limited. The next section describes the U.S. national campaign that

was developed to create awareness about the growing incidences of women's cardiovascular disease, their symptoms and risk factors, and lifestyle modifications that can maintain cardiovascular health and prevent the development of disease.

***The Heart Truth*[®] Campaign**

The Heart Truth[®] is an American program launched in 2002 to raise national awareness about heart disease and its risk factors in women, and to motivate women to take action to prevent heart disease (U.S. Department of Health and Human Services, 2013). *The Heart Truth* is sponsored by the National Heart, Lung, and Blood Institute which is a part of the National Institutes of Health (U.S. Department of Health and Human Services, 2013). In March 2001, over 70 experts in women's heart health and heart disease, communications and public health program development convened at a Strategy Development Workshop (Long et al., 2008). As a result of this meeting, the unanimous recommendation was put forward for the creation of a national campaign (Long et al., 2008). A contract was awarded to Ogilvy Public Relations Worldwide in October 2001 to assist with planning and executing this campaign (Long et al., 2008).

The Heart Truth campaign was developed through literature reviews, environmental scans, audience segmentation and analysis, generation of creative campaign messages and materials, and ongoing feedback (Wayman et al., 2008). Focus groups comprising diversity in race and ethnicity (i.e., White, African American and Hispanic women) were consulted to examine their attitudes and behaviours about cardiovascular disease and to receive feedback for draft campaign messages and concepts under development (Long et al., 2008). This audience analysis (i.e., all the segments of women that provided feedback) revealed three key findings: women underestimated their risk for heart disease and believed this to be a man's disease,

women had low awareness and knowledge of risk factors and their links to heart disease, and women were unmotivated to adopt recommended behaviour modifications (Wayman et al., 2008). Using this information, the creative team set out to eliminate the misconception that heart disease is a male affliction, and develop strategies that personalize heart disease and personal risk to women with a sense of urgency (Wayman et al., 2008).

The objectives of *The Heart Truth* campaign are to increase women's awareness that heart disease is the "#1 killer" and to encourage all women to communicate with their doctors to determine their risks for this disease and to take action to lower their risks (Long et al., 2008). The campaign contains five message elements which were incorporated into its core messages and call to action, as follows; stating the reality that heart disease is the leading cause of death in women, putting "a face" on heart disease to increase women's personal identification with this reality, conveying the consequences of this disease with a "hard-hitting" approach, giving a sense of hope and empowerment that women can effectively lower their risk, and communicating a call to action with a sense of urgency (Long et al., 2008, pp. 3 –4). These campaign elements were developed from focus group findings in order to convey personal risk and motivate women to take action (Long et al., 2008).

The Heart Truth campaign's core messages are five-fold (Long et al., 2008). These campaign messages are: although many women underestimate their personal risk, heart disease is the leading cause of women's deaths; heart disease can lead to heart attacks and deaths, as well as significant decrease in one's quality of life caused by disability; having a single risk factor increases chances of heart disease development and each additional risk factor dramatically increases these chances; women should talk to their doctors to determine their risk and take action to lower it; and risk can be lowered by up to 82% by living healthy lifestyles (i.e.,

consuming a heart-healthy diet, engaging in regular physical activity, maintaining a healthy body weight, and abstaining from smoking) (Long et al., 2008).

This science-based education campaign is informed by social change and communication theories (i.e., Diffusion of Innovations Theory and Social Network Theory), and health communications and health behaviour theories (i.e., Health Belief Model, Theory of Reasoned Action/Planned Behaviour, and Transtheoretical Model of stages of individual behaviour change) (Long et al., 2008; U.S. Department of Health and Human Services, 2013). These theories outline different frameworks which are briefly discussed in the following paragraphs.

The various models of the Diffusion of Innovations Theory were integrated to include three components (Wejnert, 2002). These three components include: (a) characteristics of the innovation or in this case, *The Heart Truth* campaign's messages (i.e., public versus private consequences, and benefits versus costs); (b) characteristics of innovators or the audience women (i.e., familiarity with the innovation, position in social networks, personal characteristics, etc.); and (c) the specific environmental and cultural contexts through which the messages evolve and enter via diffusion (i.e., societal culture, political conditions, geographical conditions, etc.) (Wejnert, 2002). The models of the Social Network Theory use graphical representations to map relationships between individuals as the edges on a graph, thereby focussing on the individuals themselves (located as nodes on the graph) as well as the relationships between them (Hunter, Goodreau, & Handcock, 2008; Madey, Freeh, & Tynan, 2002). Individuals involved in a direct relationship are mapped as being separated by one link, and the relationship with a "friend of a friend" would be separated by two links (Hunter et al., 2008; Madey et al., 2002).

The Health Belief Model as outlined previously posits that likelihood of engagement in recommended preventive behaviours is influenced by perceived susceptibility and severity of the

disease, perceived benefits and barriers of the preventive behaviours, cues to action and demographic variables (Carpenter, 2010; Janz & Becker, 1984). The Theory of Reasoned Action positions one's intention to perform behaviour as the most significant behaviour determinant (Montano & Kasprzyk, 2008, p.70). Intention to perform behaviour is influenced by attitude (i.e., behavioural beliefs and evaluations of behavioural outcomes) and subjective norm (i.e., normative beliefs and motivation to comply) according to The Theory of Reasoned Action (Montano & Kasprzyk, 2008, p.70). The Theory of Planned Behaviour asserts that intention to perform behaviour is also influenced by perceived behavioural control (i.e., control beliefs and perceived power over one's ability to carry out required behaviours to reduce one's risk) when one's complete volitional control is absent (Montano & Kasprzyk, 2008, p.70). Attitude, subjective norm and perceived control are also influenced by external variables such as one's demographic characteristics and personality traits (Montano & Kasprzyk, 2008, p.70).

Finally, the Transtheoretical Model of stages of individual behaviour was also utilized in the campaign development (Long et al., 2008). According to this model, an individual's behavioural changes and thus subsequent readiness to change, occur through a series of stages; namely, pre-contemplation (i.e., no intention for behaviour change), contemplation about behaviour change, preparation (i.e., making small behaviour changes), action (i.e., meeting the recommended behaviour change), and maintenance (i.e., meeting the recommended behaviour change for a specific time period) (Marshall & Biddle, 2001). Behaviour changes occur through progressive and regressive movements and these individuals move through these five stages in a dynamic, cyclical fashion (Marshall & Biddle, 2001). A "readiness" to change is required to progress to subsequent stages (Marshall & Biddle, 2001).

The creative directives and concepts were designed to eliminate the myth that heart

disease is a male affliction, and inform women with a sense of urgency that heart disease is personally relevant to them (Wayman et al., 2008). The campaign's tagline 'Heart Disease Doesn't Care What You Wear – It's the #1 Killer of Women' was designed to be meaningful to women since focus group findings identified that women were more concerned with outward issues such as caregiving duties and maintaining their physical appearances (Harding, 2010). The campaign's tagline is paired with the centerpiece symbol *The Red Dress*[®] to serve as an "urgent wake-up call" to American women (U.S. Department of Health and Human Services, 2013). The purpose of this symbol is to convey that women must be aware of their personal risk of their gender's leading cause of death and must take action to lower their risk factors for heart disease (Wayman et al., 2008).

The first Red Dress pin designed for *The Heart Truth* campaign in January 2003 was an off-the-shoulder red dress with the left dress length longer than the right, which the team described as a "highly stylized" dress (Wayman et al., 2008). From my observation of the image of this first version of the Red Dress, in-line with the often limited media representations of women's femininity, this image appears to be tailored for a woman with a slim body shape and a very narrow waist, which paints a narrow and specific portrait of the "at risk" woman. Moreover, the fact that a dress has been used as the symbol of the every woman at risk, further conveys a rather narrow and limited construction and view of who this woman is (i.e., stylish, affluent, feminine). On the other hand, the details of this image also suggest that women who appear to be healthy by virtue of lacking any visible external signs of ill health, may also be at risk for cardiovascular disease. It is reported that the campaign team was advised to modify this symbol to a "much more straight-forward image of a red dress" that would be perceived as appealing to a wider audience, following which various versions of this Red Dress were created and

disseminated (Wayman et al., 2008).

Nonetheless, the original design of the Red Dress was featured by *Glamour* magazine in its 15-page cover feature story of the inaugural issue (i.e., October 2003) of its partnership with *The Heart Truth* campaign (Wayman et al., 2008). Although visually appealing, this portrayal of a slim waist and off-shoulder red dress that was designed for an “hourglass” body is problematic due to its portrayal of a narrow, singular embodiment of the “at risk” woman. Employing this initial stylized pin/symbol shares the focus of the cardiovascular health promotion message contents (i.e., heart disease is the leading killer of women, and women should take action to lower their risks) with a fashionable and narrow fairy-tale, ideal version of a woman’s body, which is ultimately connected to corporate interests of the fashion industry and the marketing and selling of products associated with *The Red Dress* symbol. In this way, cardiovascular health may be linked with a limited, and thus problematic, construction of a woman’s body shape which ultimately contributes to a particular view and narrative as to who is at risk for heart disease.

As noted earlier, the primary target audience is women aged 40 to 60 years with an emphasis on African American and Hispanic women, and a secondary audience of younger (18 to 39 years) and older women (61 years and older) (U.S. Department of Health and Human Services, 2013). Heart disease begins to develop during a woman’s younger years (including teenage years) and risk increases for women aged 40 to 60 years (U.S. Department of Health and Human Services, 2013). The *Heart Truth* team recognized that African American and Hispanic women are disproportionately affected by heart disease (Long, Taubenheim, McDonough, Austin, Wayman, & Temple, 2011). In order to further address this health inequity, *The Heart Truth* launched the Women of Color Initiative in 2004 and partnered with various community agencies such as the National Coalition of Pastors Spouses and The Lincs, Incorporated to target African

American women, and the National Latina Health Network to target Hispanic women (Long et al., 2011). In 2010, it was reported that the core audience for *The Heart Truth*'s online communication strategies was expanded to include information relevant for women younger than 40 years (Long et al., 2010).

The three pillars of *The Heart Truth*'s strategic framework to promote the campaign's messages (as mentioned earlier in this section) entail national-level awareness raising activities (e.g., *National Wear Red Day*[®] and annual *Red Dress Collection*SM Fashion Show during New York Fashion Week), community activation (e.g., Community Action and Champions programs to promote the messages at the local level, particularly in African American and Hispanic communities), and partnerships (e.g., media, corporate partners, Government, and non-profit) (U.S. Department of Health and Human Services, 2013). During its fourth instalment in 2010, the First Ladies *Red Dress Collection* which features a year-long exhibition of red gowns and suits worn by First Ladies who promoted *The Heart Truth* messages, also included educational interactive materials about risk factors and preventive lifestyles, as well as risk screenings for diabetes, body mass index, and heart disease due to smoking (George Bush Presidential Library and Museum, 2013; U.S. Department of Health and Human Services, 2013). Print media corporation partnerships and sponsors have assisted with delivering *The Heart Truth*'s messages by disseminating articles, cover stories, columns and advertising coverage (Long et al., 2008). The earliest and most active corporate media partners are two of the country's highest circulating women's magazines; *Glamour* and *Woman's Day* (Long et al., 2008). Currently, there is a lack of understanding about how the content of these print media partners' publications address the key five-fold messages of *The Heart Truth* campaign since their inaugural issues.

The Heart Truth campaign has been successful in raising awareness about women's heart

disease as the leading cause of death. This figure increased from 34% in 2000 to 48% in 2003, and later 68% in 2009 (Long et al., 2010). This gradual increase began from 1997 when awareness was determined to be 30% (Christian, Rosamond, White, & Mosca, 2007). It was reported that 57% and 68% of women were able to recognize *The Red Dress* symbol in 2007 and 2009, respectively, which indicates that this brand is meaningful to these women (Harding, 2010; U.S. Department of Health and Human Services, 2012b). Familiarity with the *Red Dress* symbol has been associated with greater knowledge about heart disease among college women; specifically 64% of college women (a majority of whom were White) who were familiar with the symbol were able to identify that heart disease is the leading cause of women's death (Anderson, Silliman, & Schneider, 2013). Additionally, individuals of lower socioeconomic status groups and lower levels of formal education have high incidences of risk factors such as type 2 diabetes and smoking, and these numbers have increased over the years (Kanjilal, 2006). African American women and Hispanic American women demonstrate less awareness of their risk factors and potential preventive behaviours than their White counterparts (Christian et al., 2007), and this may in part (though it is not yet known) to the limited construction through symbols and messaging within the campaign and various forms of media. Therefore, it appears that awareness about cardiovascular disease, its risk factors and preventive behaviours is limited to women of White and middle-to-upper socio-economic status backgrounds.

A schematic description of the link between women's awareness of the key messages within *The Heart Truth* campaign and *The Red Dress* symbol, and action towards behaviour change was published by Mosca et al. (2006). According to their findings, general awareness of cardiovascular disease risk is promoted by family history and personal history of cardiovascular disease or its risk factors, and being informed about heart disease (Mosca et al., 2006). General

awareness is inhibited by racial/ethnic minority status and lower levels of education (Mosca et al., 2006). Personalization of risk factors is facilitated by knowledge that personal risk factors are in the “unhealthy” range, diagnosis by a medical professional, family members with diagnosis cardiovascular disease or its risk factors, and knowledge of specific advice to lower one’s risk (Mosca et al., 2006). Inhibitors of risk personalization include lack of risk factor screening (Mosca et al., 2006). Further, taking action to lower personal risk is influenced by risk factor personalization and promoted by general awareness of heart disease and being informed about heart disease (Mosca et al., 2006). Potential inhibitors to taking action to lower personal risk are increased age and low self-efficacy (Mosca et al., 2006). The findings of a survey conducted with women revealed that higher awareness about the reality of women’s cardiovascular disease was linked with preventive actions such as increased physical activity and weight loss (Mosca et al., 2006).

Elements of *The Heart Truth* campaign have been studied to determine how incorporation of branding and social marketing strategies improved the effectiveness of the campaign in connecting with women on a personal level and communicating the key messages (Long, 2006). The value of a brand is enhanced by increasing audience recognition and recall by building trust and developing relationships with the audience so that the audience makes associations with the symbols and taglines (Long, 2006). Social marketing requires audience segmentation to identify program goals for attitude and behaviour change, extensive market research about target audience’s attitudes and beliefs, portrayal of benefits and costs of program messages, identification of channels for communication, etc. (Long, 2006). *The Heart Truth* campaign received praise for the extensive formative research and environmental scans that informed development and implementation of the campaign content, and for maintaining

relationships with the target audience and partners (Long, 2006). The campaign developers chose a relatively unique symbol (i.e., *The Red Dress*) which is displayed consistently in all materials (e.g., national public service advertisements, marketing materials and *The Heart Truth* website) (Long, 2006). Senior executives of NHLBI and Ogilvy Public Relations discussed that this consistency in delivering a meaningful “powerful”, “sexy”, “glamorous” red dress symbol is beneficial in recognition and promotion of campaign messages (Long, 2006). These results were obtained from internal documents, campaign materials and interviews with strategic planners and producers of *The Heart Truth* (Long, 2006).

As mentioned previously, *The Red Dress* Fashion Show occurs during New York Fashion Week in February (i.e., American Heart Month) which features popular female figures (e.g., actresses, singers, talk show hosts, reality television stars, etc.) walking the runway in red dresses designed by well-known fashion designers (U.S. Department of Health and Human Services, 2013). The First Ladies *Red Dress Collection* features red suits and gowns worn by former First Ladies with educational seminars and heart health screenings that take place around the exhibits (U.S. Department of Health and Human Services, 2013). The *Red Dress Collection* Fashion Show and First Ladies *Red Dress Collection* connect with women (and as noted, a potentially limited number of women in light of the narrow construction of femininity portrayed) on a personal level by framing their risk of heart disease in a positive manner and through source credibility (Harding, 2010).

It is believed that using spokespersons such as athletes, actresses and former First Ladies that are of interest to women and share similarities with the audience women, liaising with popular female bloggers, partnering with the fashion industry, and projecting characteristics of strong and healthy women versus relying on fear appeal are some of the ways in which these two

events are considered successful campaign elements (Harding, 2010). As discussed previously, fear-based appeal messaging has been problematized due to its negative framing and ability to lead to maladaptive coping responses such as denial of risk and decreased motivation to engage in preventive behaviour (O’Keefe & Jensen, 2007; Ruiter et al., 2001). However, one of the message elements of *The Heart Truth* campaign is to “put a face” to women’s heart disease with which women at risk could identify (Long et al., 2008). By drawing on affluent women who were once in political power, popular female bloggers, and drawing upon partnerships with the fashion industry, the “at risk” woman is constructed as one who is well informed about political matters, participates in social media communities such as online blogs, and has the financial means to follow and identify with the latest fashion trends. In addition to this narrow portrayal of the “at risk” woman, these channels for communication of messages privilege women who engage in these activities (i.e., interests in politics and governance, social media, fashionable attire, etc.), and these high profile events and partnerships exclude women who do not have the inclination, financial affordability, and time to pursue these interests.

While the previously discussed studies by Long (2006) and Harding (2010) describe favourable outcomes and feedback for *The Heart Truth* campaign, some limitations to this campaign and difficulties with message incorporation were identified by interviewing women 18 years and older of diverse races and ethnicities such as African American, Hispanic American and Asian American backgrounds (Tindall & Vardeman-Winter, 2011; Vardeman-Winter & Tindall, 2010). Some of the meanings of heart disease that these women reported were the loss of life, family members and youth when women were asked to recall messages they had seen about heart disease and were presented with several materials from *The Heart Truth* campaign such as brochures for their perusal (Tindall & Vardeman-Winter, 2011). Women felt empowered to take

responsibility for their heart health by seeking appropriate medical help to understand their risk and understanding the health benefits of their native cultural eating habits (Tindall & Varderman-Winter, 2011).

Women have reported barriers to message incorporation into their everyday lives. Some women were unwilling, sceptical, and anxious and overall did not feel confident that their doctors could provide support with overcoming their barriers to heart disease prevention due to complicated cultural and socio-historical relationships (Tindall & Vardeman-Winter, 2011). These complicated relationships are described within cultural and historical contexts (e.g., healthy inequity issues that arise from being “a second-class citizen” with less rights to prescription medication) and past medical experiences (e.g., dismissal of disease symptoms by doctors) (Tindall & Varderman-Winter, 2011). Women further reported that the health promotion materials were ambiguous in defining/describing the symptoms, pathology and prevention of heart disease (e.g., how smoking affects cardiovascular health) (Tindall & Vardeman-Winter, 2011; Vardeman-Winter & Tindall, 2010). From these findings, it can be inferred that incorporation of *The Heart Truth* campaign messages is challenged by not only the narrow depiction of the “at risk” woman, but also by the potential lack of clarity in descriptions of women’s heart disease, perceived power differentials and health inequity issues perpetuated.

Although some women appreciated the multi-racial/cultural approach (e.g., inclusion of women of different races and ethnicities in public service announcement images), campaign images and messages were not well received by all women since they were perceived to reify social and political stigmas (e.g., photographs of light-skinned African American women and portrayal of cultural norms in a negative light) (Vardeman-Winter & Tindall, 2010). Women had difficulties relating to *The Red Dress* symbol and questioned the reasons behind choosing a dress

over trousers, and Asian, East African and Mexican women felt excluded from the Women of Color initiative that focussed on African American and Hispanic American women (Tindall & Vardeman-Winter, 2011). Participants recommended that younger women's risk for heart disease is an issue that should be addressed in *The Heart Truth* materials since they have more cognitive and physical abilities, less family obligations, less time constraints, can enjoy the benefits of early prevention, and can serve as "envoys" to bring these messages into their communities (Vardeman-Winter & Tindall, 2010). In this way, younger women were positioned as the optimal age group to be targeted with cardiovascular health messages, and declining cognitive and physical abilities and family obligations which are associated with middle aged and older women are linked with an inability to attend to and incorporate recommended modifiable lifestyle changes. This is problematic since women experience rise in cardiovascular risk between the ages of 40 years and 60 years (U.S. Department of Health and Human Services, 2013). From these findings, it appears that women's identities and roles are constructed and influenced by an intersection of their gender, age, race, ethnicity and social class (Vardeman-Winter & Tindall, 2010). In the following section, I briefly describe the role of the mass media in contributing to health and illness narratives.

Women's Cardiovascular Health in a Mediated Society

Women's lives are immersed within contexts of various forms of mass media, and their health decision-making occurs within this ubiquitous "mediated world" (Altheide, 2000a; Althiede & Schneider, 2013; Clarke, 2010). The social construction, recognition and interpretation of information received from the mass media influences women's beliefs and social actions, including health-related beliefs and behaviours (Altheide, 2000a; Althiede & Schneider, 2013; Clarke, 2010; Clarke & Binns, 2006). The mass media possesses the ability to

bring health issues to wide audiences, some members of which are disengaged or kept hidden from the health care system (Lefler, 2004; Ratzan, 2002). Communicated health-related behavioural changes in women are more likely to occur when media messages contain explicit recommendations or conclusions, termed “behavioural directives” by Moyer, Vishnu and Sonnad (2001). Women rely on magazines for 45% of their knowledge about cardiovascular disease, whereas information provided by healthcare practitioners account for only 24% of their knowledge (Mosca et al., 2004). Other types of mass media that constitute sources of women’s cardiovascular disease knowledge include television (34%) and newspapers (27%) (Mosca et al., 2004).

Specific research has further shown that women receive information about cardiovascular disease through the circulation of particular media discourses of this disease from an *etic* perspective (i.e., outside, external perspective) (Lefler, 2004). In turn, women’s knowledge and perceptions are influenced when these portrayals within media discourses socially construct certain gender-related personal beliefs, cultural roles and lived experiences of heart disease (Lefler, 2004). The media thus contributes to the development of personal meanings associated with cardiovascular health and disease, and people are not passive recipients of information presented to them through the media (McGannon & Spence, 2012). When women from diverse race, ethnic, educational, class and sexual orientations were interviewed to explore how they make sense of health communications, it was found that women’s personal involvement with health messages was mediated by a consciousness of everyday life and personal health, self-identity, and cognitive analyses of message content (among other influences) (Aldoory, 2001).

Journalists undertake the challenging roles of producing easily understandable, appealing press coverage from complex medical messages, and the accuracy of information presented in

media publications varies, since public health promotion is often not the primary purpose of media communications (Finnegan, Viswanath, & Hertog, 1999; McGannon & Spence, 2012; Schwartz & Woloshin, 2004; Seale, 2003). Numerous perspectives on health issues are presented and emphasized in the media regardless of scientific merit and validity (e.g., personal opinions and views, and political agendas.) (Glenn, McGannon, & Spence, 2013; Ratzan, 2002). The discrepancy between women's perceptions versus the reality of health and illness has been credited to the media's constructions through circulated discourses (Higgins et al., 2006; McGannon & Spence, 2012). Health promotion discourses construct identities for the experts in disease management and prevention and the individuals who have lived experiences with health and illness (e.g., the "at risk" patient, the responsible patient) (Glenn et al., 2013; McGannon & Spence, 2012; Willig, 2000).

Print media such as newspapers and magazines have been known to circulate (re)created problematic identities for women via the use of certain cultural narratives and discourses. For example, women's identities in terms of exercise performance have been (re)created by Midwestern U.S. newspaper articles (McGannon & Spence, 2012). A critical discourse analysis revealed that a discourse of exercise and beautification (i.e., achieving a fit, slim feminine body) and a discourse of consumerism (i.e., purchase and use of products and services) were conveyed in the special interest sections of the *Cedar Rapids Gazette* (McGannon & Spence, 2012). The implications of these discourses were that women were positioned as having unfit bodies which lack personal attributes such as motivation, discipline and self-control, and only affluent, responsible women who receive assistance of exercise products and services can obtain and supposedly maintain their fit bodies (McGannon & Spence, 2012). Female and male weight-loss surgery patients' identities were also shown to be (re)created within media discourses (Glenn et

al., 2013). Identities included the stereotypical fat person, the ideal patient, the medical tourist, and the failed citizen (Glenn et al., 2013). Such identities were socially constructed within a medical discourse that reinforced neoliberal ideals concerning personal agency and individual blame for one's health and appearance and a discourse of a benevolent Government of Canadian province Alberta that takes responsibility for the care of these individuals (Glenn et al., 2013). These findings, which were obtained from analyzing archived news articles at an Edmonton Weight Wise bariatric clinic and newspaper *Edmonton Journal* articles, revealed that stereotypical roles and identities of women are reified through these media discourses (e.g., women taking care of their health as responsible wives, mothers and grandmothers) (Glenn et al., 2013).

Similar to media representations of women's health issues in forms of media above, explorations of the '(re)-presentations' of women's cardiovascular disease in print media have brought to light some of the disease ideologies disseminated in North American magazines and newspapers that cater to men and women. These ideologies are linked to previous discussed historical meanings and representations such as cardiovascular disease as a "man's disease" that only involves the heart, medical professionals and pharmaceutical companies as heroic gatekeepers to women's cardiovascular health, post-menopausal women as ignorant and owners of inherently diseased bodies, the latest scientific inventions (e.g., medications) as solutions (Clarke, 1992; Clarke, 2010; Clarke & Binns, 2006, Clarke & van Amerom, 2008; Clarke et al., 2007; Higgins et al., 2006; Rock, 2005; Savoie et al., 1999). Collectively, these ideologies construct the "at risk" woman as possessing little agency and power and control over the risk factors that may contribute to cardiovascular disease. Yet at the same time, these ideologies perpetuate the notion that to gain further agency and control over their lives, women must – or

should – seek help mainly from the medical community in the forms of pharmaceuticals and surgery (Glenn et al., 2013).

Given that the media socially constructs certain identities, health beliefs and health implications, for the present study, a women's interest magazine (i.e., *Glamour*) was an ideal cultural site for further examining and understanding the social construction of women's cardiovascular disease, the communication of *The Heart Truth* campaign messages, and the potential implications. Women's fashion magazines such as *Glamour* focus on women's issues and have been reported to use women's disadvantaged positions (in this case, higher incidence of misunderstood and undertreated cardiovascular disease) to promote products and services to “cure” women and alleviate their “issues” (Lindner, 2004). Yet to date, no one has systematically studied the media representations and constructions of women heart disease and risk factors within this media form as related to *The Heart Truth* partnership. Current literature findings concerning media portrayals of cardiovascular disease and the implications are discussed next, followed by an identification of the current literature gaps and contentious issues.

Media Portrayals of Cardiovascular Disease and Risk Factors

In this section, I provide a summary of findings from studies that have specifically analyzed North American media portrayals of women's cardiovascular disease and risk factors. Each of these findings will be discussed in the following paragraphs.

A primary focus on medical frame. Descriptions of cardiovascular disease portrayals in highly circulated Canadian and U.S. magazines (e.g., *Maclean's*, *Newsweek*, *Ladies Home Journal*, *Good Housekeeping*, etc.) have focused on the heart itself, which is situated in a precise location in the human body (Clarke, 1992). The heart is described as an organ that is to be marvelled in the absence of disease, yet one that is at the mercy of medicine in the presence of

disease (Clarke, 1992; Clarke & Binns, 2006). The nature of cardiovascular disease is reduced to individual components of this physiological system (e.g., arteries and liver enzymes) with the use of simplistic analogies (Clarke & van Amerom, 2008). The experience of a heart attack is described pictorially and in a mechanical manner which does not affect the whole person, in dramatic/fear-causing language, and takes on the entity of cardiovascular disease itself (Clarke, 1992; Clarke & Binns, 2006; Clarke et al., 2007). As a result, cardiovascular disease is constructed as an issue that is pertinent to the intricate anatomy and physiological workings of the heart alone, as an issue that is to be feared (which is heightened when risk factors and prevention strategies are not discussed), and one that is manifested by the violent and dramatic experience of a heart attack. With the absence of links between risk factors such as type 2 diabetes and preventive lifestyle strategies such as regular physical activity, readers are informed about the fear of being a victim to a disease over which they have limited control.

Medical frames (e.g., technology, surgery, and implants) are used to describe this disease more frequently than lifestyle frames (e.g., healthy diet and exercise) and socio-cultural frames (e.g., socio-economic status, gender, and ethnicity) (Clarke & Binns, 2006; Higgins et al., 2006). A project that aimed to explore the messages conveyed about cholesterol and heart disease in women through magazines that cater to women's interests such as *Vogue*, *Good Housekeeping*, *Ladies' Home Journal*, and *Chatelaine*, revealed that the cardiovascular benefits of lifestyle modifications such as adoption of healthier diets and physical activity are conveyed as being insufficient in comparison to cholesterol-lowering drugs (Savoie et al., 1999). Readers were advised that their "luck" and "genetics" which predisposed them to develop cardiovascular disease, overpowers the capacity of lifestyle choices to lower their risk, a notion which is exemplified by the use of stories of high blood cholesterol in individuals who lead healthful

lifestyles (Savoie et al., 1999). However, engaging in lifestyle behaviours such as moderate-to-vigorous physical activity for 30+ minutes/day, consumption of a healthy diet (e.g., one that is rich in cereal fibre and omega-3 fatty acids, and low in trans-fat and glycemic loads), the absence of current cigarette smoking, maintaining a body-mass index of <25, and limiting alcohol consumption to approximately 5 g/day have actually been shown to decrease coronary heart disease risk by up to 82% (Stampfer et al., 2000). It is evident that these magazines explicitly offer a limited, one-sided and problematic advice to women by constructing the notion of a powerful pharmaceutical industry that holds the agency, power and solutions to protect women from cardiovascular disease by reducing their cholesterol levels, and implicitly convey the message that women otherwise have little control over this risk factor.

Medical interventions are portrayed as highly optimistic options that result solely in positive health outcomes with little mention to potential side-effects, lack of availability, and medical contraindications (Clarke & Binns, 2006; Clarke & van Amerom, 2008). The latest pharmaceutical discoveries, scientific technology and modern surgery techniques receive praise and credit for recovery from cardiovascular disease (Clarke, 1992; Savoie et al., 1999). The portrayed reliance on pharmaceutical and technological advances for protection from cardiovascular disease contributes to feelings of fear (Clarke, 2010). This discourse of medical and pharmaceutical interventions as “heroic” in individuals’ prevention and recovery from cardiovascular disease contributes to the portrayal of the creators (i.e., researchers) and implementers (i.e., physicians, surgeons, pharmacists, and other specialists) of these inventions, technologies and services as ‘the experts’ of knowledge and the gatekeepers to individuals’ cardiovascular health. Furthermore, by glorifying of mainly medical interventions in the treatment of this disease, the underlying message conveyed is that very little can be done to

prevent this disease on one's own, and that these unknown prevention strategies are futile, despite the potential for lifestyle behaviour changes and practices to significantly prevent, or reduce one's risk of, cardiovascular disease as mentioned earlier.

The media message that women's cardiovascular disease must be feared is not conducive to cardiovascular health promotion (Altheide, 2002). Fear appeals in public health campaigns have proven effective only when health threats are linked with preventive responses that are portrayed as easy to follow (Witte & Allen, 2000). Furthermore, women who are able to afford media-prescribed pharmaceutical and scientific interventions may be led to have a false sense of control over the management over their risk factors.

On the other hand, cardiovascular disease may be portrayed in terms of its specific risk factors, the dangers associated with these risk factor profiles, and appropriate knowledge may be conveyed regarding preventive behaviours, symptoms, and treatments. Risks and danger are associated with specific acts or behaviours and convey knowledge of potential harm, whereas fear implies an understanding that harm is unavoidable (Altheide, 2002). Therefore, when media communications emphasise risks and dangers versus fear, and when cardiovascular disease threat is paired with knowledge and behaviours that are easy to understand and engage in, these will be more likely incorporated into women's everyday life perspectives.

Practitioners adopting or creating fear appeal messages have been recommended to include the following aspects in their messages in order to increase their effectiveness in causing behavioural changes; strong self-efficacy perceptions (i.e., perceived capability to perform the behaviour), strong response efficacy perceptions (i.e., perceived ability of the behaviour to avert harm), and identification of barriers that might inhibit the audiences' perceived ability to perform the recommended behaviours (e.g., costs and beliefs) (Peters, Ruiter, & Kok, 2013; Witte &

Allen, 2000). One such model that is useful in predicting intentions to perform recommended health behaviours based on components of fear appeal is the protection motivation theory, which posits that intention to perform these behaviours is mediated by threat appraisal (i.e., perceived vulnerability, perceived severity and fear arousal) and coping appraisal (i.e., beliefs about response efficacy, self-efficacy and response costs) (Milne et al., 2002). When implementation strategies (i.e., specific action plans) were paired with information about severity of coronary heart disease and vulnerability to coronary heart disease, and participants had high coping appraisals, their engagement in physical activity was significantly increased (Milne et al., 2002).

The expertise of medical doctors (especially male doctors), medical journals, and medical institutions is often described, which contributes to power-differentials (Clarke & Binns, 2006). This emphasis on the medical community by the media, potentially places perceived control and management of cardiovascular disease risk outside of women's own agency and reach (Clarke & Binns, 2006). Women's positive experiences with their "heroic" male doctors are described, and titles and affiliations of those in control of women's health are noted (Clarke & van Amerom, 2008). Construction of prevention strategies by emphasizing titles of medical journals, names of institutions, and affiliations of health care professionals is a strategy within the media discourse that further contributes to the notion that disease prevention belongs in the hands of appropriately qualified and trained specialists. As such, the construction of bio-medicine and the bio-medical community as *the* powerful entity that possesses social control over women's bodies and the construction of women as objects of medical investigations and scrutiny are perpetuated (Moore, 2008). An effect of this social control is that women at risk for cardiovascular disease are viewed and portrayed as lacking the necessary knowledge and capacity to prevent disease, and that this information is only present in medical journals readily available for use by gatekeepers of health

information (e.g., prestigious doctors). An effect of this representation may be that readers come to understand that management of their risk factors are out of their control, which is problematic.

Type 2 diabetes is a further risk factor for cardiovascular disease (Mosca et al., 2011). Rock (2005) analyzed two largely circulated U.S. magazines (i.e., *Time* and *Newsweek*) and two Canadian newspapers (i.e., *The Globe and Mail* and *The Toronto Star*) to explore the media's framing of type 2 diabetes and the implications. It was found that type 2 diabetes was portrayed as a medical problem with an emphasis on the undetectable nature of symptoms (e.g., "silent killer"), with glorification of pharmaceutical benefits and endorsement for further medical research (Rock, 2005). The biological causes of type 2 diabetes are most frequently discussed in nineteen top-circulation newspapers in the U.S. as compared with other causes such as overweight or weight gain, behavioural or lifestyle influences, genetics or family history, medical care and socioeconomic factors (Gollust & Lantz, 2009). As with the representations of cardiovascular disease in magazines, messages about risk factor type 2 diabetes in magazines and newspapers also follow a medical discourse which emphasises pharmaceutical benefits of treatment versus modifiable lifestyle benefits. Once again, readers are advised that medical treatment options are the ultimate and most desired solutions in managing a largely undetectable cardiovascular disease risk factor, while neglecting to discuss effective lifestyle behavioural changes that may be within an individual's control.

The ignorant and diseased female body versus the successful male patient. Two narratives are evident in the findings of media analyses of women's bodies with regards to cardiovascular disease. One such dated narrative has described women's bodies as being physically stronger than men since their hormones, low body weight, and low levels of cognitive stress provide protection against cardiovascular disease, as a result of which they live longer

lives (Clarke, 1992). Conversely, the post-menopausal body is often portrayed as being a weak female body linked with subsequent risk of disease unless treated with the medical procedure of hormone replacement therapy (Savoie et al., 1999). In turn, readers may receive messages about women's bodies in relation to cardiovascular disease with post-menopausal women portrayed as being at greater risk, with the embodiment of stereotypical female characteristics (e.g., low body weight and less cognitive stress) ensuring prevention against cardiovascular disease threat.

The implications of the foregoing socio-cultural constructions are that women who do meet these norms (e.g., women who do experience stress in their daily lives, perceive themselves as having high body weight, and are post-menopausal) are portrayed as being "at risk" and out of control with respect to their health and health outcomes. In turn, such narrow portrayals of women take the emphasis away from the established guidelines for determining women's risk (e.g., hypertension, high cholesterol, type 2 diabetes, physical inactivity, poor diet) (Mosca et al., 2011).

Additionally, within the narrative of the diseased female body, the aging female body is portrayed in mainly a negative light whereby the aging body is blamed due to its inherent decline and growing weakness over time due to changes in hormones. By focussing on incidences of cardiovascular disease in post-menopausal women in this manner, the message conveyed is that women need not worry, nor do anything, about their risk prior to menopause, when in fact, women's risk of cardiovascular disease begins to increase as early as 40 years of age (U.S. Department of Health and Human Services, 2013). Furthermore, in 2001, the AHA advised against the use of this type of therapy and stated that hormone replacement therapy was not an established primary or secondary treatment measure (Mosca et al., 2001).

Age has been linked to women's risk for this disease in the findings of another study that

examined eighteen articles from *Good Housekeeping* magazine and reported that both younger women (in 2004 articles) and older women (in 2003 and 2007 articles) have been linked with increased risk for this disease (Edy, 2010). *Good Housekeeping* caters to general adult women with a focus on household advice such as health and nutrition, beauty, entertainment, and home renovation and garden features (Ulrich's Periodical Directory, 2013), thus reproducing particular views and stereotypes of the "every woman" in America. Ultimately, women who are readers of *Good Housekeeping* may be receiving mixed messages about the age at which they could take precautionary action to maintain their cardiovascular health, while being cautioned against the threat posed by their aging bodies.

Causes of women's cardiovascular disease underscore unhealthy lifestyle choices such as not following a low-fat diet, lack of regular exercise, and consuming more than a glass of wine a day (Clarke & Binns, 2006; Clarke et al. 2007). Post-menopausal reproductive systems are positioned as being inherently problematic, and women are portrayed as ignorant about their risks and emotional when faced with the reality of limited social support during recovery in men's and women's magazines (Clarke et al., 2007). While the media acknowledges that limited social support is available, in reality, support from family and friends is recommended as a strategy for women to prevent and overcome risk factors overweight and obesity; specifically, social support is the fifth and tenth most common strategy in magazines targeting African American women (i.e., *Ebony* and *Essence*) and mainstream women (i.e., *Good Housekeeping* and *Ladies' Home Journal*), respectively (Campo & Mastin, 2007). Cardiac events in women are further portrayed as sources of shame and linked with jeopardizing careers (Clarke et al., 2007).

Risk profiles have also historically been communicated in various Canadian and U.S. magazines such as *Maclean's*, *Newsweek*, *Time*, *Ladies' Home Journal*, and *Good*

Housekeeping, that targets audiences of wide age ranges and interests, male and female, by drawing on male family members' experiences (e.g., those of fathers and older brothers) which contributed to the portrayal of men being more likely to experience cardiovascular disease (Clarke, 1992). The implication for women's cardiovascular disease portrayals are that men's cardiovascular disease incidences outnumber those of women and their experiences can be generalized to women as well. Although having a female family history of cardiovascular disease was included as a risk factor in *Good Housekeeping* women's magazine in 2005, an understanding of how this is contextualized and relates to disease prevention and identification is currently unknown (Edy, 2010).

White male celebrities such as former U.S. Vice President Dick Cheney, male cardiologists and male researchers are discussed as examples of individuals who sustained cardiac events and are "healers" of cardiovascular disease (Clarke & Binns, 2006; Clarke & van Amerom, 2008). Male survivors discussed are typically in high political power, and are professionally and financially successful (Clarke et al., 2007). Cardiovascular disease is portrayed as a symbol of successful manhood for whom treatment described is optimistically (e.g., angiogenesis is noted to be highly promising and "miraculous"), with aggressive, mechanical and objective language (e.g., "sizzling" and "blasting" of the heart during surgery) (Clarke et al., 2007). Men's recovery from cardiac events is described as one that occurs with ease, and quick return to high status employment positions is emphasised, sometimes noting the continued physical assistance that these men provide to their wives with their chores (Clarke et al., 2007). Women are encouraged to assist their husbands with maintaining healthy lifestyle choices (Clarke et al., 2007).

By describing women and cardiovascular disease in terms of their necessity to care for

their ailing husbands, women's traditional roles of being caregivers are perpetuated. Various meanings are being socially constructed by portraying women in this manner; cardiovascular disease is portrayed as a man's disease that does not affect women, women's involvement and experience with this disease is limited to ensuring that their husbands remain healthy, and women's incidences and experiences of cardiovascular disease are invisible. The implications of these meanings are that women are not portrayed as being at risk for this disease, and risk factor management and disease prevention strategies are not applicable to them.

Individual responsibility and accountability as solutions to address women's cardiovascular disease. One media narrative about women's control over their risk for cardiovascular disease describes women as proactive, powerful individuals with the ability and obligation to control their symptoms and maintain health (Clarke & van Amerom, 2008). Women are advised to take individual accountability since they are constructed as being responsible for their cardiovascular health by three Canadian magazines (*Chatelaine*, *Canadian Living* and *Homemaker's* which cater to women's interest issues) (Roy, 2008). Readers are also urged by *Modern Maturity*, *Ladies Home Journal* and *Prevention* to make a list of lifestyle changes such as monitoring blood pressure and cholesterol levels, exercising for fifteen minutes, and eating a low fat diet (Clarke & Binns, 2006). These changes are framed as easy to adopt (Clarke & Binns, 2006). However, some of the items on these lists appear to be bio-medicalized (e.g., a cholesterol level below 200 mg/dl to help prevent build-up of fats and cholesterol on artery walls), and adoption of these precise recommendations are positioned as being imperative to prevent personal risk (Clarke & Binns, 2006). The meanings associated with the use of medical jargon are that women can be protected from cardiovascular disease if they have the capacity to understand these values and the ability to compare their health statuses with these

“golden standards”. Additionally, the implications of medical advice being portrayed as the only preventive means against cardiovascular disease places health care professionals and service providers in power. Women are implicitly advised that they must rely on these powerful authorities to maintain optimal cardiovascular health.

Both mainstream women’s magazines (i.e., *Better Homes and Gardens*, *Good Housekeeping* and *Ladies’ Home Journal*) and magazines that cater to African American women’s issues (i.e., *Ebony*, *Essence* and *Jet*) were found to emphasise behavioural lifestyle changes that focussed on individual strategies to prevent and overcome overweight and obesity (Campo & Mastin, 2007). These messages convey the portrayal of a risk factor for women’s cardiovascular disease (i.e., overweight and obesity) as preventable by individual means, and position women as being in control of their health, thereby placing them in a position of power. The positive implications of this messaging might be that women experience a sense of autonomy in maintaining a healthy body weight by incorporating these lifestyle changes (e.g., consuming diets low in calories and engaging in moderate-to-rigorous physical activity). Magazines that cater to both mainstream and African American women discuss healthy diet strategies (e.g., increased protein content, decreased portion sizes, etc.), whereas magazines that targeted African American women also described spiritual strategies such as relying on God or faith with diet modifications which may not necessarily imply a lack of personal agency (Campo & Mastin, 2007).

Another narrative describes women as a marginalized population that needs to fight for recognition. Magazines that cater to men and women and for a variety of interests (e.g., *Harper’s Bazaar*, *Ladies’ Home Journal*, *Men’s Health*, *People Weekly*, *Prevention*, *Reader’s Digest*, *Red Book*, *Time*, *Woman’s Day*) do state that women are undertreated for cardiovascular disease,

their symptoms are misdiagnosed as psychological distress and indigestion, they have been underrepresented in clinical studies, and their experience of this disease is a cause for embarrassment and a source of stigma (Clarke et al., 2007; Savoie et al., 1999). Women are encouraged to insist that their risk of cardiovascular disease is recognized, prevented and treated by healthcare professionals (Savoie et al., 1999). The use of particular vocabulary and language is employed to convey the necessity and urgency of women's voices to seek recognition (e.g., "women need to push the agenda", "they need to fight for consultation with a cardiologist", and "they've got the ammunition and they need to use that ammunition to fight for awareness") (Roy, 2008).

Women's "traditional" caretaker roles within contemporary society may also contribute towards their tendency to neglect their own cardiovascular health and symptoms while showing concern for and are more knowledgeable about their husband's health (Clarke et al., 2007). These findings were noted when various magazines were analyzed, ranging from health-related magazines (e.g., *Prevention* and *Men's Health*), to women's interest magazines (e.g., *Good Housekeeping* and *Ladies' Home Journal*), and news magazines and those catered to individuals aged 50 years and over (e.g. *Time* and *Modern Maturity*) (Clarke et al., 2007; Ulrich's Periodical Directory, 2013).

By examining the foregoing media portrayals of men and women in relation to heart disease, the various meanings associated with cardiovascular disease are complex and constructed as an issue that pertains to both genders in particular ways. Women are portrayed as being prone to health issues due to their inherent nature of selflessly attending to their husbands' needs. The implications of these messages are that women must re-consider their traditional spouse roles in order to understand and attend to their cardiovascular health issues, and women

who are not in heterosexual relationships are excluded from falling into this health trap. Additionally, cardiovascular disease is constructed as a function of one's employment and marital status to women, wherein men's quicker recovery is contextualized by descriptions of their higher status employment positions.

Lack of information about social determinants of cardiovascular health. "Health" is described physically, economically, and socially, with well-being further associated with (in)adequate environmental and social conditions (e.g., housing and employment conditions) (Wallack & Dorfman, 1996; Berkman, 2009). Social inequities in health have increased in recent years, leading to an increase in incidences of cardiovascular disease among disadvantaged groups (Lang, Lepage, Schieber, Lamy, & Kelly-Irving, 2011). These health disparities occur at the population level (e.g., low socio-economic status, race and ethnicity, gender, community characteristics, etc.) and influence these individuals' social experiences, nature and quality of health-care, and ability to inculcate optimal cardiovascular lifestyle changes (Liburd et al., 2005). Media advocacy theorists emphasize the importance of portrayed interventions that are at the community level with the assumption that a community comprises relationships among community members and institutions that are central to the community (Wallack & Dorfman, 1996). Understanding the ways in which disparities related to the social determinants of cardiovascular disease are socially constructed has been called for since these social constructions and related lived experiences influence the cardiovascular health issues of populations by virtue of their potential to reinforce marginalization and perpetuate these disparities (Liburd et al., 2005).

The messages conveyed by various types of media non-"feature" articles (i.e., from rural and urban print and electronic television, radio, and internet Canadian sources) from 1999 to

2003 were analyzed and it was found that social determinants of cardiovascular health was least discussed (i.e., comprised approximately 3.6% of health discourses) in comparison with other topics such as the health care and delivery system (Higgins et al., 2006). Within the context of the social determinants of health, it is noted that health inequities may be reduced when disadvantaged populations are involved with agencies in power such as the Government in order to address social conditions that are not conducive to maintaining cardiovascular health (Higgins et al., 2006). The construction of cardiovascular disease prevention as requiring and being dependent on support from systems in authority reinforces the concept that the possession of knowledge about solutions and successful reduction in cardiovascular disease incidences belongs to figures in political power. The implication of this construction is that the health of socially and economically disadvantaged populations is located in the realm of politics; a realm in which they are likely underrepresented.

Similarly, the 13.6% of selected newspaper coverage (i.e., nineteen top-circulating newspapers in the U.S.) that was found to discuss type 2 diabetes from a social disparities perspective was more likely to mention upstream preventive strategies such as policy, economic, and environmental changes versus downstream strategies such as individual behavioural changes (Gollust & Lantz, 2009). Therefore, it appears that prevention strategies for a risk factor (i.e., type 2 diabetes) of cardiovascular disease are also politicalized with regards to its social determinants.

Articles published in magazines that are in high circulation in Canada and cater to the general adult population (e.g., *Prevention*, *Time*, *Canadian Living*, *Ladies' Home Journal*) that describe cardiovascular disease from a socio-structural perspective focus on the latest research with women (Clarke & Binns, 2006; Ulrich's Periodical Directory, 2013). These research

advances are portrayed in a positive light with limited discussion about differential access to health-care and issues of poverty (Clarke & Binns, 2006). Preventive recommendations such as getting a massage, avoiding stressful situations, limiting wine to a glass per day, and taking annual vacations comprise behaviours that are financially affordable to individuals of higher income brackets and are inherently exclusionary of individuals from lower socio-economic status backgrounds (Clarke & Binns, 2006; Clarke & van Amerom, 2008). This narrative also excludes certain lifestyle modifications such as smoking cessation and regular moderate-to-vigorous physical activity, while constructing cardiovascular disease as a symbol of a stressful, hard-working, and successfully affluent life (Stampfer et al., 2000). These examples and narratives contribute to the portrayal cardiovascular disease as one that is experienced by the middle and upper classes (Clarke & van Amerom, 2008). The insidious nature of type 2 diabetes, which is a risk factor for cardiovascular disease, is also attributed to modern comforts and conveniences (Rock, 2005).

Risk of cardiovascular disease is communicated in terms of family history, but the higher incidence of this disease in certain races and ethnicities was noted to be absent in *Good Housekeeping* magazine articles between 1997 to 2007 (Edy, 2010). On the other hand, analysis of portrayals of cardiovascular disease risk factor type 2 diabetes in U.S. magazines *Time* and *Newsweek* and Canadian newspapers *The Globe and Mail* and *The Toronto Star* revealed that higher incidence of type 2 diabetes among individuals of Aboriginal, African and Latin American descent is emphasized in these print media (Rock, 2005).

When individual risk factors such as overweight and obesity, high cholesterol and smoking are described, magazine articles (e.g., *Modern Maturity*, *Ladies Home Journal*, *Prevention*, etc.) appear to lack discussions about relevant preventive strategies that are

accessible to individuals from various backgrounds (Clarke & van Amerom, 2008). Similarly, articles about overweight and obesity in women's magazines that catered to mainstream and African American audience members did not address environmental factors such as urban and regional planning (e.g., side-walks and bike trails) (Campo & Mastin, 2007). Magazine narratives often portray cardiovascular disease and risk factors from individual accountability perspectives and medical perspectives, and information at the level of social determinants is scarce. This dual emphasis on individual accountability is problematic when information about social determinants of health is largely excluded in cardiovascular disease prevention constructions by magazines, since the underlying assumption is that health inequity issues no longer exist. When paired with the politicalized context of these constructions the message conveyed is that although individuals must take accountability to address their risk factors, these efforts will likely be futile if they do not have the approval and support from the 'experts' (i.e., healthcare professionals, pharmaceutical companies, and the Government).

Vague, inaccurate and contradictory presentations of women's cardiovascular disease. The term "heart attack" is often used anecdotally to describe incidences of various types of cardiovascular disease, including cerebrovascular disease and coronary artery occlusions (Clarke, 1992; Clarke & Binns, 2006). However, when providing the list of symptoms that immediately precede an acute myocardial infarction, chest pain radiating outwards, irregularities in heart muscle contractions, and feelings of indigestion are described (Clarke & Binns, 2006). Management of high cholesterol levels is described as being outside of women's control when "luck" and "genetics" are portrayed as the major causes of this risk factor, with little emphasis placed on the benefits of modifiable lifestyle choices such as diet and exercise (Savoie et al., 1999).

An investigation on the cardiovascular health advice offered about weight management, physical activity, smoking and nutrition in U.S. magazines *Cosmopolitan*, *Glamour*, *Vogue* and *Shape* was found to be inconsistent with the guidelines from the American Heart Association (Turner et al., 2008). For example, when describing healthy diets, none of the articles discussed limiting cholesterol intake to <300 mg/day, and 6% of the articles noted that saturated fats should be limited to <10% of one's daily caloric intake (Turner et al., 2008). Additionally, none of the articles noted the recommended weight circumference of <35 inches (Turner et al., 2008). When dietary recommendations are presented in women's magazines such as *Good Housekeeping* and *Red Book*, these entail vague descriptions of potentially inaccurate information (e.g., lowering of cholesterol levels with soy alone) (Savoie et al., 1999).

Another study that examined *Good Housekeeping* alone reported that risk factors such as smoking were discussed without addressing appropriate remedies or strategies for smoking cessation (Edy, 2010). The incomplete nature of portrayals of this disease is evident when articles feature women who are at low risk for developing this disease and mention generic recommendations such as "take action" (Edy, 2010). The implications of inaccurate and insufficient prescriptive information in women's magazines are that readers are made aware about the threat posed by their risk factors (e.g., overweight and cholesterol levels), but are left in the dark about how they can effectively manage these factors and prevent cardiovascular disease. In this way, cardiovascular disease prevention is constructed as an elusive process, yet a significant disease to fight.

The treatment of women's cardiovascular disease is described with uncertainty (Clarke et al., 2007). Particularly, contradictory evidence is presented regarding the advocacy of hormone replacement therapy and cholesterol lowering drugs as preventive actions (Clarke et al., 2007).

Women are encouraged to seek medical advice to determine if hormone replacement therapy is appropriate for them due to the negative impact this therapy has on other illnesses such as osteoporosis and breast cancer (Clarke et al., 2007). The meaning conveyed by this portrayed dilemma posed by treatment with hormone replacement therapy is such that women must choose between protecting themselves from cardiovascular disease, osteoporosis or breast cancer. Women's aging bodies are once again blamed for placing women at risk for these diseases as a result of hormonal changes, contributing to creation of fear associated with aging.

Literature Gaps

From a review of the relevant literature as outlined above, it is clear that there are gaps and contentious issues regarding print media portrayals of cardiovascular disease which are as follows:

- 1) The current understanding about the "at risk" woman paints a picture of a late middle-aged, heterosexual, married, affluent woman who plays an active role in assisting her husband maintain his cardiovascular health. These findings do not include constructions of younger, unmarried women or women who do not partake in the traditional caregiver role but yet are at risk for this disease. Magazines have also paired the post-menopausal body with increased risk of cardiovascular disease, but little is known about how magazines construct cardiovascular risk in younger women's bodies (i.e., other than the protection offered by hormones) and their lifestyles (e.g., sedentary lifestyles, unhealthy diets, etc.). Further investigations into how women's magazines incorporate the diversity in women's life spheres (e.g., employment, housing, recreation, etc.) and their different demographics (as mentioned above) with regards to their cardiovascular disease risk factors and prevention is warranted to gain a better understanding about how women's

cardiovascular disease is socially constructed in magazines. It is important to fill this gap with an understanding of how diversity in women's identities and roles are incorporated into and contextualize the messages that are conveyed through women's magazines. This understanding will help explain how female readers of various magazines conceptualize women's cardiovascular disease, and shed light on some of their beliefs regarding their personal risk and prevention of this disease.

- 2) According to the literature reviewed within the present thesis on these media portrayals, women's cardiovascular disease prevention is constructed from a medical perspective versus social determinants of health perspective. As such, limited information is currently known about how women's cardiovascular disease is constructed within the context of social determinants of health, and what is known (e.g., focus on upstream political changes and urban planning changes) appears to be derived from explicit coverage. As previously mentioned, understanding the portrayal of this disease from the social determinants of health perspective is important since women from lower socio-economic and certain racio-ethnic backgrounds demonstrate higher incidences and their identities have been historically excluded from media narratives. A future direction for research in this field may more critically examine the ways in which the social determinants of cardiovascular disease risk factor management and prevention are implicitly constructed in magazine articles. More importantly, both these narratives (i.e., medical and social determinants) locate responsibility for women's cardiovascular health to authoritative figures present in broader structures (i.e., medical professionals and Government leaders, respectively). The limited knowledge within the literature to date regarding the portrayal of women's agency and autonomy in engaging in lifestyle behavioural changes that shifts

control back to women, as would be expected from a bottom-up/grassroots disease prevention narrative requires investigation. Further investigation is required to uncover the ways in which circulated media narratives frame and position women's performance of risk reduction behaviours as being within their control and capabilities, and the identities for women that are constructed by such messages. By investigating this issue as portrayed in a popular women's magazine, the role of media narratives that construct women's heart health and bodies in various ways, may begin to be understood. The resulting implications of learning more about such media narratives and their role in identity construction is that space is opened up to understand what may be problematic and/or advantageous about such portrayals from a health promotion standpoint.

- 3) Current literature findings have identified the "masculinization" of cardiovascular disease by magazines that cater to both men and women (e.g., male doctors and celebrities as heroes in recovery, incidence of cardiovascular disease in fathers, brothers and husbands, and men's quick recovery to return to a high status employment position). These literature findings reveal that magazines and newspapers narrowly portray women's cardiovascular disease as a shameful experience which can hinder one's career aspirations. There is a lack of knowledge about how women's magazines employ female celebrities and role models, the content of these images, and the implications of such portrayals for the social construction of heart disease meanings in relation to women's mediated and socially constructed identities. Further, there is a lack of knowledge concerning how such portrayals and their content are socially constructed and drawn upon to positively or negatively frame particular forms of "feminization" of cardiovascular disease and the potential implications (e.g., identity construction,

associated health meanings). Exploring the particular version(s) of femininity in terms of women's identities and experiences constructed within one form of media, will contribute to our understanding of how the particular meanings are given to women's cardiovascular disease risk factors and prevention. These gaps can begin to be addressed by a careful and critical exploration of a magazine that focuses on women's interests.

- 4) Finally, the foregoing literature review allows me to reveal that the pathology of cardiovascular disease, risk factors and prevention/treatment strategies have been described in vague, inaccurate and contradictory ways. Such ambiguity in representations calls for further investigation into the portrayals of these aspects of cardiovascular disease in a corporate partner magazine in partnership with *The Heart Truth*[®] campaign, to determine how appropriate descriptions of symptoms, risk factors and preventive strategies are employed, framed, and conveyed. Currently, there is a lack of understanding about the content of *The Heart Truth* campaign messages and associated images used in the portrayal of cardiovascular disease and women's risk factors in corporate partner magazines (in this case, *Glamour*). As previous research clearly indicates, such messages and images as conveyed by the media have implications for women's identity construction, health beliefs, and potential health behaviours. Thus, this gap in literature needs to be filled in order to further learn the contextualization of messages and the meanings conveyed, particularly in terms of the forms of femininity drawn upon.

The purpose of this present study was to explore the constructions of women's cardiovascular disease, its risk factors and preventive strategies in a women's interest magazine that is a corporate partner of *The Heart Truth* campaign in order to begin to fill some of the

literature gaps (i.e., to address points 1, 3 and 4) and seek clarification into contentious issues (i.e., point 2). The following research questions guided the study:

1. How are women's cardiovascular disease and risk factors in relation to various life spheres (e.g., workplace settings, recreational preferences) portrayed/constructed in *Glamour*?
2. What are the implications (e.g., psychological, behavioural) of these cardiovascular disease messages/constructions for women's identities and health?

CHAPTER III

Methodology

Interpretive Framework

In order to answer the research questions of interest, the methodology used in the present study was ethnographic content analysis. Central to this project and methodology are the ways in which an individual's identity is conceptualized as socially and culturally constructed (Altheide, 2000a). According to David L. Altheide (2000a), a person's identity is a social production rather than a property of that individual solely within his or her mind, and one's identity emerges from, and is located within, social interactions and culture (Altheide, 2000a). Research within exercise psychology concerning women's identities and the media also supports the notion that self-identity is socially and culturally constructed (see McGannon & Spence, 2012). Within the context of ethnographic content analysis, social situations have been described as processes during which a person explores possibilities for behaviours thereby leading to the development of attitudes when certain conditions pose limitations to these behavioural possibilities (Altheide, 2000a). The behaviours that a person engages in are informed by meanings linked with objects and other individuals in one's environment, and these meanings thus develop from social interaction (Schwandt, 2007, p. 283). Social order occurs in everyday life when external perspectives (i.e., perspectives of other people, including a generalized "other" such as the media) influence our symbolic definitions of life situations (Altheide, 1987). Symbolic communication, and therefore our definitions of life situations, refers to the creation of significant symbols through the use of language and words (Schwandt, 2007). These languages and words convey patterned themes and frames of information which can be tracked to identify discourses (Altheide, 2000b).

In this vein, Altheide (1996) discussed key points that theoretically inform ethnographic content analysis. First, a person's social life is constructed in and through organizational, cultural and historical contexts and through the process of interpretation and communication about the definitions of social situations (Altheide, 1996). Next, this process of communication and interpretation combines both internal and external influences which ultimately contribute towards our life experiences (Altheide, 1996). Finally, our identities, values and beliefs are continually evolving as result of, and through, this process of historical, organization, cultural and social interchange (Altheide, 1996). Together, these points contribute toward the symbolic interactionist perspective, whereby individuals' identities are (re)produced and contextualized within symbolic environments such as the media, which are shared with ourselves and others (Altheide, 2002a). Symbolic interactionism focuses on meanings of social activities that are acquired and modified interpretively, the situations in which meanings emerge, and acknowledges the significant role played by social interaction in the process of communication (Altheide, 1996; Schwandt, 2007, p. 284). In essence, with regards to symbolic interactionism, Altheide contends that an individual's definitions of situations are influenced by messages that are obtained and revised based on social interactions and communications (Altheide, 2000b). These meanings then guide self-related experiences, actions and behaviours (Schwandt, 2007, p. 284).

Altheide has also advocated for the social constructionist approach and reported that the mass media often problematically constructs complex social issues with particular associated meanings and implications, such as victimization, crime, and violence through simplistic and decontextualized narratives (Altheide, 2009). According to social constructionism, knowledge and realities are subjective concepts, models and schemes that are frequently revised to make

sense of novel experiences (Schwandt, 2007, p. 38). These realities are (re)created in and through the contexts of social interactions, as well as the underlying shared understandings and practices informed by historical and cultural norms (Creswell, 2013, p. 25; Schwandt, 2007, p. 39). Women's cardiovascular health and illness may be socially constructed at three levels; the micro-level involving the individual alone (e.g., interpersonal communication and individual action), the local meso-level comprising the agents and groups with which the individual interact (e.g., healthcare professional education and hospital practices), and the larger macro-level at the regional or national scale (e.g., national health policies and healthcare system economy) (Brown, 1995; Chaix, 2009).

Given the foregoing underlying theories, within ethnographic content analysis, the mass media thus constitutes an important aspect of individuals' symbolic environment (Altheide, 2000b). Examining the role of media in constructing individuals' identities, in this case women's identities with regards to cardiovascular disease, is necessary since the media contextualizes and (re)produces symbolic meaning and tracks the creation and influence of these symbolic meanings on social definitions (Altheide, 1996). The main goal of qualitative document analysis within the context of ethnographic content analysis is to discover and describe underlying patterns, processes and meanings conveyed in the document(s), through the process of "emergent coding" (Altheide, 1996). Relevant to document analysis with symbolic interactionist and social constructivist underpinnings are the context or the social situations of the document (e.g., news in newspapers and television broadcasts are organization products), the process of development of the document (e.g., the creation of news reports are laborious tasks which must occur within strict deadlines), and the emergence of meanings by constant comparison of selected documents over time (Altheide, 1996). Ethnographic content analysis has been used in sport and exercise

psychology research to explore media portrayals in the construction of self-identities and the psychological, behavioural and health implications (McGannon, Cunningham, & Schinke, 2013; McGannon, Hoffmann, Metz, & Schinke, 2012). In the following section, I describe the specific methods for ethnographic content analysis within the context of this study, after a brief self-reflexive discussion.

Methods

Reflexivity. Self-reflexivity is an important area in qualitative research methodology, and its use in studies of sports psychology practice and research have been advocated for (Bott, 2010; McGannon & Johnson, 2009; Schinke, McGannon, Parham, & Lane, 2012). Researcher reflexivity is the process of frequently locating and relocating, or situating, oneself during project planning, data collection and analysis with emphasis on the researcher's backgrounds (e.g., race, ethnicity, personal experiences, beliefs, and values), standpoints (political and ideological stances, preferences), and emerging ideologies and power relationships (Bott, 2010). For example, in terms of the media portrayal of women and cardiovascular disease, a graduate student such as myself would frame data analysis from a viewpoint that may be understood as someone in power by virtue of his/her education. A researcher's position influences his/her worldview and constructions of realities, use of language, the lens that filters and makes meaning of data, and the study findings and conclusions (Berger, 2013). Engagement in self-reflexive practices is advantageous since acknowledging the implications of one's own identities as a researcher and how these may relate to the project undertaken, opens avenues for new interpretations of data (McGannon & Johnson, 2009). Furthermore, the epistemological belief of social constructionism associated with this project is further tied to the current project via reflexivity's focus on the co-construction of reality that is shaped by both the researcher and that

which is researched (Creswell, 2013). The following paragraph contains a condensed summary of my personal and professional background and experiences.

Cardiovascular disease has personal meaning for me since my ethnic community (i.e., South Asian) with which I identify has a high incidence of this disease and literature has attributed this association to genetic predisposition and lifestyle norms. Family members have passed on as a result of this disease, while many continue to manage their risk factors with medications and lifestyle changes. Due to my educational background and the literature review I conducted on this topic, I was able to comprehend and interpret the media material about cardiovascular disease from a unique educational and cultural viewpoint. Additionally, I had the opportunities to assist with providing clinical support and conducting research with men and women enrolled in cardiac rehabilitation programs in a metropolitan setting. I contributed to parts of their lived experiences with this disease and shared in their progress. Many interactions with these individuals entailed discussions of the ways in which cardiovascular disease impacted their lives. Prior to collecting data, and during data collection and analysis, I noted and modified my thoughts about my own personal ideological standpoints and how these may have influenced data collection and analysis, and my evolving understanding about the media's portrayal of women's cardiovascular disease as my familiarization with the collected data increased. With my own background now briefly outlined, I will describe the data source, and methods for data collection and data analysis within the context of ethnographic content analysis.

Source of data. Data was collected from *Glamour's* print October 2003 issue, a magazine which specializes in women's beauty, health, fashion, and travel (Ulrich's Periodical Directory, 2013). Magazine articles were selected as the source of data since this type of media has great impact on audience members (Finlay & Faulkner, 2005). The frames and constructions

used to (re)present information in magazine articles is more ‘permanent’ (i.e., magazines are often read over multiple occasions), which leads to greater audience exposure to the messages conveyed (Campo & Mastin, 2007; Clarke & Binns, 2006; Finlay & Faulkner, 2005). Greater message exposure increases the perceived credibility of the information, and enhances diffusion of the message through social networks (Hornik & Kelly, 2007). Magazines have the ability to target specific audiences, are relatively inexpensive for community members to purchase, are available in medical waiting rooms, and are widely circulated (Campo & Mastin, 2007; Clarke & Binns, 2006). Additionally, women have been noted to rely on magazines for health information, with 45% of women reporting that magazines were a major source of their knowledge about cardiovascular health and disease (Mosca et al., 2004; Moyer et al., 2001).

As noted previously, magazines and newspapers have been shown to shape women’s identities in problematic ways with respect to exercise (e.g., McGannon & Spence, 2012) and weight-loss surgery (Glenn et al., 2013). These media narratives construct narrow and problematic identities for women with regards to physical activity and health promotions; e.g., by supporting the notion of reliance on expensive products and services, and perpetuating the taken for granted, gendered female role of being a better wife (Glenn et al., 2013; McGannon & Spence, 2012). From what is currently known about the construction of women’s cardiovascular disease, it is evident that certain messages appear to be motivated by covert agendas (e.g., promotion of pharmaceutical companies). Fashion magazines provide information about the latest fashion trends and styles by focussing on women’s appearance (Rothstein, 2006). From the early twentieth century, fashion magazines have constructed and perpetuated women’s identities as being tied to their body shape and age; particularly, younger and slender women’s bodies are constructed as the feminine ideals (Rothstein, 2006). These fashion marketers continue to portray

thin bodies versus fit bodies, the latter of which has the potential to embody the benefits of exercise and a healthy diet which are preventive behaviours against cardiovascular disease (Lewis, Medvedev, & Seponski, 2011). Magazines have been conceptualized as cultural products (by drawing on women's idealized selves through stories and narratives) and commodities (by linking advertisers with readers) (Moeran, 2006). Ultimately, it can be inferred that fashion magazines objectify women and propagate the message that ideal femininity entails possessing a thin body over which trendy attire can be draped, and these ideals can be attained through consumerism of brands and products that are advertised. The messages conveyed are that aging, unhealthy bodies must be cured for the purposes of outward appearance versus maintenance of cardiovascular health and wellness, which is a concept that *The Heart Truth* campaign set out to address by bringing the focus of women's wellbeing to the inner workings of their bodies.

Glamour magazine boasts diversity of its readers and large circulation rates. The demographic profile of *Glamour* magazine's print audience includes high school, general adult and academic readers between 18 – 49 years of age (Condé Nast, 2013; Ulrich's Periodical Directory, 2013). The total print audience is 11,404,000 individuals, of which 96% are female (Condé Nast, 2013). *Glamour* is the second most popular magazine amongst U.S.A. women aged 18 years to 34 years, which includes the sub-population of women that consistently demonstrate least awareness and knowledge of cardiovascular disease (Mochari-Greenberger et al., 2012; Turner et al., 2008). *Glamour* magazine's print audience demonstrates diversity in areas such as level of education, employment status, relationship status and involvement with children; specifically, 68% of the readers attend/attended post-secondary education programs, 67% are employed of which 27% hold professional/managerial positions, 43% are married and 57% are single, and 49% have children in their households (Condé Nast, 2013). According to Mega

Media Marketing (2008), the median household income of *Glamour*'s readers was \$56,227 in 2008. To compare this figure with the "average" household income at the time of publication of the investigated *Glamour* issue; in 2003, the median household income was reported to be \$43,318 in the United States, and \$59,900 in Canada (DeNavas-Walt, Proctor, & Mills, 2004; Statistics Canada, 2006).

It has been reported that *Glamour* was committed to disseminating information about women's cardiovascular disease from October 2003 till October 2004 and every February from 2005 onwards (Gold & Tranell, 2003; U.S. Department of Health and Human Services, 2013). In its inaugural issue, *Glamour* published a 15-page article featuring an interview with former First Lady Laura Bush about her goal to convey *The Heart Truth* messages and a centerfold of 24 celebrities in red dresses (U.S. Department of Health and Human Services, 2013). The October 2003 publication will be used for data collection and analysis using the stages and steps outlined by Altheide and Schneider (2013). All information related to cardiovascular disease including its risk factors and preventions (e.g., healthy eating, exercise, medication, screenings) were gathered in order to obtain a greater depth and understanding of these constructions and contextualize them.

Data collection and analysis. The October 2003 print issue of *Glamour* was purchased for data collection and analysis. Within this issue, women's cardiovascular disease was the primary focus or included among other foci, and risk factors and preventive behaviours were discussed with regards to other diseases and health conditions, within a total of 22 data items. In order to answer the research questions that guided this study with appropriate depth and clarity, data for collection and analysis was delimited to only include those items which explicitly discussed incidences, symptoms, risk factors, preventive behaviours, and treatment of women's

cardiovascular disease. These items included the magazine cover (1 page), 6 articles (27 pages in total), 1 editor's letter (1 page), 1 editorial (1 page), 1 centre-fold (4 pages in total), and 7 advertisements (7 pages in total). Seventy three images were located within the pages of these collected data items, which were also analyzed since they contextualized the messages and meanings conveyed through text narratives (Altheide & Schneider, 2013). Image information was collected and analyzed based on the identities for women and their health that were constructed, the association between these image portrayals and narratives identified within the text, and the link to current research scholarship about (re)presentations of women's health that were gleaned from these *Glamour* images (Altheide & Schneider, 2013).

The data was analyzed using ethnographic media content analysis techniques as put forth by Altheide and Schneider (2013) for studying media documents to understand the meanings, emphasis and themes of messages and the organization and process of their presentations. The contents of documents represent social meanings and institutional relations that are shared by community members to construct their social realities (Altheide & Schneider, 2013). The process of ethnographic content analysis involved initial guidance using categories, with the expectation that other themes will emerge from the data (Altheide & Schneider, 2013). Central to ethnographic content analysis is the significance of constant discovery and constant comparison of meanings, settings, images and nuances (Altheide & Schneider, 2013).

There are five stages of ethnographic content analysis (a) identifying the problem and unit of analysis from documents, (b) protocol data collection, (c) coding themes and frames, (d) data analysis, and (e) report writing (Altheide & Schneider, 2013). Twelve specific steps were used to accomplish these five stages (Altheide & Schneider, 2013). The first stage of ethnographic research (i.e., identification of the problem and unit of analysis) entailed three steps

– pursuit of a specific problem for investigation, familiarization with the process and context of the information source, and familiarization with several examples of documents to select a unit of analysis (Altheide & Scheider, 2013). Identification of the problem and unit of analysis was initiated by recognizing the gaps in current literature and developing the research questions, and by exploring the articles pertaining to *The Heart Truth* and women’s cardiovascular disease in the inaugural partnership issue of *Glamour* (i.e., October 2003), as well as February 2005, February 2006 and February 2013 issues. This gave me the opportunities to familiarize myself with the contexts and formats of this particular data source.

The second stage of the research process is the construction of a data collection protocol (Altheide & Schneider, 2013). Altheide and Schneider (2013) recommend that ethnographers list several items or categories that will guide data collection and draft the protocol data collection sheet, test this protocol by collecting data from several documents, and edit the protocol for further refinement by reviewing additional documents. By answering Research Question 1, I sought to address the following: How are cardiovascular disease and women’s heart disease risk factors in relation to various life spheres (e.g., workplace settings, recreational preferences, etc.) portrayed/constructed in *Glamour*? Data collected to address Question 1 was coded according to information provided about the various types of cardiovascular diseases, physiological descriptions of interruptions or deviances from typical cardiovascular functioning, symptoms mentioned regarding myocardial infarction, symptoms mentioned regarding cerebrovascular events, sedentary workplace settings, physically inactive recreational preferences, and meal planning. These messages were contextualized by collecting data about all cardiovascular disease information in the October 2003 issue.

To answer Research Question 2, I explored the implications of the heart disease messages/constructions for women's identities and their health. Examples of codes for this question included reported prevention strategies, reported health benefits of these strategies, portrayal of women as able to effectively lower their risk factors, and portrayal of the medical community as responsible for women's health. The primary goal of data collection for Research Question 2 was to gather information that pertained to strategies/techniques discussed for risk factor management and treatment of cardiovascular disease and how these relate to constructing women's identities in relation to heart disease. However, the focus of data collection and analysis was to examine the contexts and frames within which these messages were discussed and the resulting implications by situating the findings within current research scholarship. Data was coded according to the three broad themes put forth by Clarke and Binns (2006) for media analysis of cardiovascular disease; namely, medical information (e.g., medical and pharmaceutical treatments), lifestyle information (modifiable changes such as diet and physical activity), and socio-structural information (e.g., urban and regional planning issues, access to health-care, health insurance plans and coverage, and workplace wellness). In turn, these codes were contrasted and compared in order to allow new themes and meanings to emerge in relation to the meaning(s) generated of cardiovascular disease and the "picture" or persona of women and their health in relation to these meanings.

The third stage entailed coding of recurring themes and frames (parameters and boundaries of communicated messages), and included the step of choosing a sampling rationale and strategy (Altheide & Schneider, 2013). During progressive theoretical sampling, the researcher selects materials based on emerging understanding to include the widest possible range of relevant messages (Altheide & Schneider, 2013). Materials were included that are

similar and different in regards to particular dimensions (for example, relationship between beauty and cardiovascular health) (Altheide & Schneider, 2013). Data was collected using predetermined categories as well as looking for descriptive examples (Altheide & Schneider, 2013). Finally, collected data was analyzed and reported in 3 steps. First, coded data was conceptually refined by repeatedly and thoroughly reading selected data (Altheide & Schneider, 2013). Second, brief summaries of categories or themes were noted with examples of typical and extreme cases (Altheide & Schneider, 2013). Third, findings were integrated with my interpretations and key concepts were discussed in relation to the relevant literature in order to further facilitate the interpretation of themes and the implications (Altheide & Schneider, 2013; McGannon et al., 2013; McGannon et al., 2012).

Chapter IV

Results and Discussion

Within this Chapter, I present the findings of the ethnographic content analysis that was used to examine the portrayal of women's cardiovascular disease and their identities in the October 2003 issue of *Glamour* magazine. This issue uses the term *cardiovascular disease* to refer to all types of cardiovascular disease as stated within an article, and terms *heart health* and *cardiovascular health* are used interchangeably. In order to ensure comprehension and continuity, I will be using the term cardiovascular disease when referring to and discussing pathology of the cardiovascular system such as atherosclerosis, myocardial infarction and cerebrovascular incidence, and the term cardiovascular health will refer to the optimal functioning of the cardiovascular system, respectively. The results and discussion of this study are listed and described under one overarching theme titled *culture of consumerism* and two sub-themes titled *the oblivious, unknowledgeable, dependent woman at risk*, and *attaining a particular version of a healthy, feminine woman*. Each of these themes are outlined and discussed in relation to the implications for women's identities, particular meanings associated with cardiovascular disease, and the potential implications regarding women's health.

Culture of Consumerism

Through the use of the aforementioned magazine cover, 6 articles, editor's letter, editorial, centre-fold, 7 advertisements, and 73 images located within each of these data items, *Glamour's* October 2003 issue constructed women's cardiovascular disease within the theme of a culture of consumerism. A consumerist culture with regards to the media's construction of women's health entails the promotions and marketing of products and services for purchase and use, which ultimately position women's identities within gendered roles that perpetuate

heteronormative social order (McGannon & Spence, 2012). Within this present study, the culture of consumerism theme refers to *Glamour's* positioning of women's cardiovascular disease as a platform for marketing merchandise of *The Heart Truth* campaign and partner companies, promotion of the latest fashion and entertainment industry endeavours, and contribution towards women's dependence on the medical community. The messages conveyed in the titles and content (i.e., certain words, phrases, and images) of articles for which women's cardiovascular disease was the focus were constructed within a frame of consumerism, which in turn (re-)produced a particular view of women's identities and health as linked to the purchasing and buying of certain products in order to attain health and a certain view of femininity (McGannon & Spence, 2012). In what follows, a description of the various ways that certain concepts, images, and frames used within *Glamour* fed into the culture of consumerism as it emerged in relation to the construction of women's cardiovascular disease prevention, and the implications for women's identities and health are discussed.

One way that *Glamour* framed the culture of consumerism theme was by repeatedly drawing on the fashion, music, and entertainment industries when discussing disease prevention. A specific example of the foregoing can be found in the consistent promotion of *The Heart Truth* campaign's Red Dress symbol merchandise and its link with women's cardiovascular disease prevention with opportunities to achieve the 'feminine' ideal of being a consumer of the fashion and entertainment industries. The Red Dress was constructed as a fashion item for raising funds for the American Heart Association and NHLBI, increasing revenue for numerous fashion designers and companies, and increasing sales of music albums, movies, and television shows. The most frequently promoted form of the Red Dress fashion item was the Red Dress pin for which there were two versions; *Glamour's* limited-edition Little Red Dress Swarovski crystal pin

(on sale for \$50 for which a \$10 donation was made to the American Heart Association), and the NHLBI's Red Dress Pin (on sale for \$2.50). It was noted that *Glamour's* Little Red Dress pin was designed by Swarovski to symbolize women and cardiovascular disease. This pin embodied the previously described exaggerated hour-glass shape which emphasized a large top half with an unnaturally narrow waist in comparison, with two shoulder straps. The NHLBI's Red Dress Pin comprised a one-shoulder dress and displayed a more realistic, proportional body shape. As discussed within *Glamour*, this NHLBI pin was designed to raise awareness of the leading cause of women's mortality.

These Red Dress pins were explicitly marketed in numerous ways. Examples of these marketing strategies included placement of images and descriptions of this merchandise in the pages that introduced this issue's contents, the title of Editor-in-Chief Cynthia Leive's letter about women's cardiovascular disease (i.e., "Every woman needs a little red dress"), and imagery in the opening paragraph within a descriptive cardiovascular disease article entitled "It's time to save your life". This image titled "*Glamour's* Little Red Dress pin by Swarovski—wear it and help. See page 22." is paired with the visual presentation of Swarovski's crystal Red Dress pin, and was adjacent to a page-length image of a slender model wearing a low-cut, revealing red dress with Swarovski crystals arranged in a heart shape on her left breast. Through these explicit and strategic advertising techniques, attention was quickly drawn to these Red Dress pins and women's cardiovascular disease prevention was reduced to the status of a problematically sexualized fashion accessory. This construction of the Red Dress pin as a fashionable accessory for sexualizing women's identities and cardiovascular health fed into the circulated discourses of a consumerist culture by reinforcing the implication that women's identities and roles are tied to sexual appeal which can be achieved by purchasing products (McGannon & Spence, 2012).

Additionally, the “at risk” woman’s socially constructed identity through these various words and images within the magazine emerged as limited to financially privileged, slim built individuals who were inclined to follow fashion trends and donate generously to medical institutions. In this way, women’s cardiovascular disease incidence and prevention was positioned within the contexts of their financial background, clothing, and dependence on larger institutions, as noted and problematized by current research scholarship since lifestyle modifications and diversity in identities are excluded from this narrative (Clarke, 2010; Clarke et al., 2007; Clarke & van Amerom, 2008; McGannon & Spence, 2012; Roy, 2008).

In addition to explicit advertisements for the sale of these products, the NHLBI Red Dress pin was consistently displayed in two articles that conveyed personal messages from two women in political and mass media power (i.e., Editor-in-Chief Leive and First Lady Laura Bush). These two pieces entitled “Every woman needs a little red dress” and “Take care of yourself!”, respectively, added further depth to the significance of the Red Dress pin through narrations of personal stories and images. After gaining awareness of women’s leading cause of death, these women’s initial lack of knowledge transformed into their passionate decisions to educate readers about the near-epidemic nature of women’s cardiovascular disease. Cynthia Leive and Laura Bush both reported their dedication to promoting women’s cardiovascular disease prevention. Within the article titled “Take care of yourself!”, an accompanying image titled “Laura Bush, in the Vermeil Room, wearing the Red Dress pin for heart-disease awareness” depicted Laura Bush situated in a well-decorated room with a painting, a chandelier behind her, and a vase of pink roses to her right. Within this picture and the imagery used, it was evident that this cardiovascular health spokeswoman (i.e., Bush), lived in surroundings that contained physical manifestations of opulence, further linking culture of consumerism (i.e.,

purchase of Red Dress pins) with financial wealth. This portrayal may be interpreted as contributing to the misconception that cardiovascular disease is the “disease of affluence” experienced by individuals of high socio-economic status backgrounds (Lockyer & Bury, 2002, p. 433). Readers were also informed that the original Red Dress pin was conceptualized by Beth Ruoff, the Creative Director at Ogilvy Public Relations Worldwide, to serve as a “powerfully feminine symbol” to dispel the myth that cardiovascular disease is limited to middle-aged overweight men and encourage women to appropriately identify their own personal risk (Leive, 2003a, p. 50). It has been noted that fashion magazines serve as the liaison between advertisers and readers, and function to construct and perpetuate women’s idealized identities through the sale of commodities (Lewis et al., 2011; Moeran, 2006).

As mentioned previously, the linkage of women’s cardiovascular disease with the sales of these pins conveyed two meanings with respect to women’s cardiovascular disease. First, cardiovascular disease awareness and prevention was constructed as a fashion status symbol catered to a particular narrow view of femininity, which could be most successfully prevented by women with the financial means and flexibility to purchase these pins. Second, cardiovascular disease prevention may occur by seeking the expertise and advice of women in societal power (who were once unknowledgeable themselves) such as *Glamour’s* Editor-in-Chief and former First Lady Laura Bush, the American Heart Association and the NHLBI. One potential problematic implication of these meanings entailed counter-productivity to *The Heart Truth* campaign’s goal to draw women’s attention away from their outward appearances and towards their cardiovascular functioning (Harding, 2010). Promoting awareness of cardiovascular disease prevention through the sales of the Red Dress pins and merchandise was a far cry from the campaign tagline ‘Heart Disease Doesn’t Care What Your Wear – It’s the #1 Killer of Women’

which was designed to remind women that they should be more concerned about their cardiovascular health versus the clothes they wear (Harding, 2010). Moreover, by branding this particular symbol (i.e., a Red Dress) as encompassing and representing all women within the context of the culture of consumerism, in-line with previous research concerning the campaign, certain women outside of the feminine ideal being perpetuated may have been excluded (e.g., women of lower socio-economic status backgrounds) (Tindall & Vardeman-Winter, 2011; Vardeman-Winter & Tindall, 2010). In essence, through the promotion of sales of the Red Dress pins, readers were informed that women may have achieved optimal cardiovascular health by being faithful consumers of the Red Dress pins circulated by *Glamour* (with donations to the American Heart Association) and the NHLBI to display their financial commitment to these companies/organizations. As mentioned previously, this message raised awareness of a disease that affects fashion-conscious, slim women and excludes women who are at risk and do not identify with these “feminine” consumerism characteristics. In this regard, the construction of women’s cardiovascular health and identities perpetuated the taken-for-granted notion circulated by dominant health and fitness media discourses that women’s identities are limited to maintaining heteronormative social roles such as obtaining particular body types and attire (McGannon & Spence, 2012; Saguy & Riley, 2005). Further, the portrayal of women and cardiovascular disease through the positioning of medical institutions as the gatekeepers to risk reduction, in this case through *Glamour*’s promotions of the works of the American Heart Association and NHLBI, have also been noted in past studies that explored men’s and women’s newspapers and magazines (Clarke, 1992; Clarke, 2010; Clarke & Binns, 2006; Clarke & van Amerom, 2008; Clarke et al., 2007; Higgins et al., 2006; Savoie et al., 1999). When attaining a certain appearance and dependence on the medical community were centralized in this narrative,

the implications of this notion of feminine consumerism were that the positioning of risk reduction as behaviour modifications that may be achieved through lifestyle changes were pushed to the periphery. This was unfavourable and contradictory to *The Heart Truth* campaign core elements such as increasing women's personal identification with their reality of disease risk by conveying a sense of hope and empowerment and constructing "a face" for all women at risk (Long et al., 2008, pp. 3 – 4).

Uncovering the meanings and implications of messages conveyed on a magazine's cover is another useful avenue to illustrate the culture of consumerism theme. Magazine cover portrayals have a greater social impact since they capture the attention of potential 'buyers' by providing a powerful and appealing representation of the enclosed contents, thereby leading to greater viewership of covers than that of the content of pages within magazines (Grandy, 2013; Sypeck, Gray, & Ahrens, 2004). The cover of this magazine issue contained a page-length image of then 38 year old, Canadian born and raised country music singer, Shania Twain. Twain was styled in a red blouse and skirt designed by Alberta Ferretti. Twain's shoulders, chest, and torso was the primary focus which emphasized this particular image/view of femininity (i.e., thin, toned), since there was no text over these parts of her body. The unblocked view of Twain's torso was enhanced by strategic placement of the "tassel" of her blouse to the right and away from the front. These body parts were further accentuated by Twain's stance; her hands were placed on the back of her hips and she appeared to be facing forward slightly. In combination, Twain's attire and stance made for a provocative pose and image, which have been shown in previous media research to indicate women's portrayed identities as having lower social power, to ultimately promote advertised products and services as a means of gaining social superiority (Lindner, 2004). Women's cardiovascular disease was linked with this image and portrayal of Twain since

Twain's joint involvement with this women's health movement was also mentioned, as demonstrated by the quote on the magazine cover titled "Shania Twain...Joins 24 other celebs in a fight for women's health" (Leive, 2003b, p. Cover).

The magazine cover further portrayed a culture of consumerism by positioning women's cardiovascular disease overtly next to fashion. Specific examples of how this positioning was achieved included the song title "Ka-Ching!" from Shania Twain's music album "Up!", which was listed on the cover as the title for an article about affordable clothing (i.e., under \$100). In this way, the red attire worn by Shania Twain which was a modified symbol of *The Heart Truth* campaign, was used as a platform to simultaneously promote her latest music album and fashion for women to purchase. The other contents of the magazine cover that shared the focus due to their larger font, stronger colour contrasts, and strategic placement on the page were two other article titles with brief descriptions. This particular information mentioned female mortality rates, *Glamour's* involvement with disease prevention, and advice about sexual performance as provided by males, which are listed as follows: "Special issue. Save your health and your life. The ultimate guide to losing weight, protecting your body—and beating the disease that kills 1,400 women a day", and "Men talk, talk, talk: 25 bedroom dos and don'ts according to guys" (Leive, 2003b, p. Cover).

The above messages on the cover page further focused on a primarily heterosexual female audience as evidenced by the construction of women's cardiovascular disease prevention and identities within the context of men's sexual advice (as listed above) as well as marriage. Thereby, the stage was set for a magazine issue with strong hetero-normative underpinnings, similar to media constructions of women's roles as limited to caregiving wives (Clarke et al., 2007; Glenn et al., 2013; Willis & Knobloch-Westerwick, 2014). On this magazine cover, words

and imagery were employed to convey that heterosexuality was further related to a consumerist culture, portraying a dependency on men, and stating the disease-related contents of this issue of *Glamour* in order to educate women on how they may achieve this appealing, healthy body and identity. In turn, the implications were that diversity of women's identities in fulfilling other social roles were excluded from this narrative, and this disease was constructed as one that is exclusive to women seeking or partaking in submissive, yet committed relationships (Clarke et al., 2007; Lindner, 2004). In other words, from this cover itself, the incidence of women's cardiovascular disease was constructed as something that is restricted to individuals belonging to wealthier groups that afford consumerist lifestyles and those that identify with the heterosexual norm, which is aligned with media's health discourses regarding women's exercise and weight loss (Glenn et al., 2013; McGannon & Spence, 2012). Alternatively, the implications of these narrow meanings constructed on the cover perpetuated the misconception that the greatest threats to women's health entail diseases of their reproductive systems (Clarke, 2010). It may be interpreted that the focus was on women's reproductive health to construct their femininity in a limited manner (i.e., as childbearing), and in turn, their bodies were positioned as pathologized and thus inferior within the gender order, which has a long history within women's health narratives (Jette, 2011; Ussher, 2006; Vertinsky, 1998). Within the context of disease awareness and prevention for women, it is also worth noting that one of the misconceptions held by women regarding their health was their belief that breast cancer was their leading cause of death (Long et al., 2011). Taken together, *Glamour's* perpetuation of a limited view of femininity and women's health excluded some women who do not identify with such ideals, and also positioned women's bodies and various parts of them (e.g., breasts, uterus and/or reproductive systems, hearts) as something to be feared (Jette, 2011; Ussher, 2006; Vertinsky, 1998). Such representations have

been shown to be problematic because women may not seek out additional information regarding their health (McGannon & Spence, 2012) and/or women may have agency and choice regarding their bodies and health reduced or compromised (Jette, 2011; King, 2010; Ussher, 2006).

Additionally, when constructed within a culture of consumerism, cardiovascular disease prevention as portrayed within *Glamour* is reduced to fashion and beauty status symbols that can best be achieved by female readers who enjoy dressing provocatively, listening to country music, and wearing red lipstick (i.e., women who buy into and/or align their identities with this view of femininity). These messages were contradictory to *The Heart Truth* campaign's goal of encouraging women who are at risk to consider their cardiovascular health (Long et al., 2008). In turn, the implication is that disease prevention messages were somewhat lost and/or 'watered down' via the provision of an inflexible, non-inclusive "face" of women at risk (Long et al., 2008). These findings ultimately revealed that women's success in disease prevention is linked with outward appearances and narrow version of femininity that is used to perpetuate consumerism. Given the readership demographic of *Glamour*, such perpetuation was not surprising, and media narratives which perpetuate a narrow and limited view of women's identities in relation to their bodies and health have been identified in previous research (Jette, 2006; McGannon, Curtin, Schinke, & Schweinbenz, 2012). Moreover, when interpreted within the context of other research that has explored the commodification of disease (e.g., breast cancer), such constructions not only reinforced a limited view of femininity, but also perpetuated a simplistic and sanitized view of what it means to have disease in one's everyday life (King, 2004, 2010; Sulik, 2012).

Further feeding into the culture of consumerism theme, the NHLBI's website was also put forward within the media narrative as a primary means by which consumers could find

further information about *The Heart Truth* campaign and request to seek further clarification from this online resource. Compared to the other collected data from this issue of *Glamour* regarding women's cardiovascular disease and *The Heart Truth* campaign (e.g., the editorial, editor's letter, and articles which also subscribe to the consumerist culture), the disconnection between women's cardiovascular disease and article content was most evident through advertisements due to the blatant marketing of certain products. Linking a diary to keep track of risk reducing behaviours and *The Heart Truth* campaign with the sales of cosmetics, pregnancy tests, anti-wrinkle creams, and bottled water limits the sub-set of the female population that would engage in said disease prevention behaviours to women who have the financial means and inclination to purchase these products (McGannon & Spence, 2012). This advertisement also fed into a construction of women's identities as limited; as such identities emerge as tied to youthful outward appearances and the assumption that all readers have equal access to the internet and certain literacy level. In reality, women who belong to middle-to-lower socio-economic status backgrounds are at greater risk for cardiovascular disease (Moran & Walsh, 2013), yet these identities were excluded within *Glamour*. Moreover, previous research concerning a narrow portrayal of femininity in relation to cardiovascular health has shown that narratives circulated by the media contextualize risk reduction with backgrounds of affluence even further by positioning the latest surgical and pharmaceutical treatments as the only effective strategies (Clarke, 2010; Clarke & Binns, 2006; Clarke & van Amerom, 2008; Savoie et al., 1999). The implications of such consumerist portrayals within this issue of *Glamour* that reinforced the dominance of affluent identities for women are such that women's portrayed dependence on institutions and companies that profit from these advertisements were reified and perpetuated (Clarke, 2010; Clarke et al., 2007; Clarke & van Amerom, 2008; Roy, 2008).

Within the context of the consumer culture theme, women's cardiovascular disease was further portrayed through the lens of the fashion and entertainment industries within the centerfold of this issue of *Glamour*. Within the centerfold, twenty-four female celebrities ranging in age from 16 years to 53 years (average age was approximately 36 years), which spoke to a diverse group of women in terms of age, were pictured. These celebrities were pictured wearing red dresses and gowns designed by upscale, well-known fashion designers such as Vera Wang and Oscar de la Renta. The readers were provided with information about the women's names, ages, their latest industry endeavours, and the fashion designer whose dresses and gowns they were modelling. Out of these 24 women, only 10 women provided personal messages regarding cardiovascular disease. One of these messages described women's lack of awareness about the high mortality rates, and attributed cardiovascular disease and lifestyle changes that these celebrities incorporated which were positioned within an affluent existence as enjoyed from the perspectives of successful entertainers. The following quote described one celebrity's performance of physical activity from this perspective: "Julianna Margulies, 37. Starred in the off-Broadway play *Intrigue with Faye*. 'I make exercise a part of my day. Every night I walk 30 blocks from my apartment to the theater.'" (Naugle & Chen, 2003, p. 204)

In the above instance, women's roles as employees were drawn upon to cater to a narrow sub-population of the "at risk" woman; a woman who works in the entertainment industry playing a starring role and resides in an apartment relatively close to the entertainment district of her community. The meaning attached to this portrayal of an employed woman reducing her disease risk within the context of her high-status position, is that risk is associated with societal power and prestige, similar to the media's construction of the popular male politician whose societal power is symbolized by sustaining an acute cardiac event (Clarke et al., 2007). With this

regard, it can be implied from *Glamour's* descriptions, that the “at risk” woman received an education in the performing arts, is socially linked with prominent members within the entertainment industry, and lives in an expensive neighbourhood. Discussions of women’s identities within the media which exclude factors that influence women’s social determinants of health such as their neighbourhood, have been reported and problematized by current literature (Clarke & Binns, 2006; Clarke & van Amerom, 2008; Higgins et al., 2006; Rock, 2005). Moreover, constructing a particular view of who is at risk as linked to this narrow version of femininity, further distances female readers who do not identify with these demographics from inculcating behaviour modification such as regular exercise into their daily lives, since this narrative excludes consideration for women’s social determinants of health (Campo & Mastin, 2007; Edy, 2010).

Although there appeared to be some diversity in terms of race (e.g., Black, East Asian, Hispanic) within *Glamour*, the majority of these female celebrities were White and possessed a slim body and particular version of the fit female body which is thin and toned (McGannon & Spence, 2010, 2012). Such media portrayals in terms of exercise and dietary practices have been shown to be problematic because they contribute towards discourses that glorify thin/lean bodies while shaming larger bodies and can inhibit participation in regular exercise when women internalize these discourses to construct unhealthy personal body images (Scott-Dixon, 2008). The only female celebrity who did not have her body largely exposed, and did not meet the cultural norm of the so-called fit, female body (McGannon & Spence, 2012), was the only spokesperson in this centerfold who personalized her risk by noting her family history with cardiovascular disease. Fikkan and Rothblum (2012) have noted that more focus is given to body size and weight issues versus other aspects of their lives, when female celebrities who do not

possess thin bodies receive coverage by the mass media. Such media constructions feed into and perpetuate a limited and narrow view of what constitutes a fit, female and healthy body (McGannon & Spence, 2012). It appeared that the opposite type of portrayal as seen in *Glamour* (i.e., decreased visual coverage of this model with respect to others in the centre-fold), together with the focus on slender celebrities, further demonstrated weight bias (Glenn et al., 2013) while contributing to a problematic construction of the “at risk” woman.

Another way that a culture of consumerism was perpetuated within *Glamour* was through the explicit discussion of products and services offered by medical professionals and/or fitness facilities. The medical and research community’s gatekeeper status was a tool that was also used within the media narratives to once again link with the fashion and entertainment industry with this disease, whereby celebrities in the entertainment industry were positioned as the liaison between the medical/research community and the unknowledgeable and impressionable “at risk” women. In turn, a culture of consumerism was perpetuated to encourage the reader demographic to literally “buy into” such ideals, and such ideals were legitimized through the use of high status medical professionals, research information, statistics, and medical narratives. Research by Glenn et al. (2013) and McGannon and Spence (2012) have further problematized the use of experts and medical and/or research statistics in media narratives, because the implications for health behaviour and women’s identities are such that optimal health and lean bodies may be achieved through complete dependence on the medical and research communities and institutions to cure women’s flawed identities. Interpreted within the context of research conducted on the media’s constructions of women’s cardiovascular disease, the foregoing use of the expert and the gatekeeper by *Glamour*, constructed women’s agency in reducing their risk with ambivalence and fear, which have been further linked with denial of disease threat and

decreased likelihood to engage in lifestyle modifications (Clarke, 2010; Clarke & Binns, 2006; Clarke & van Amerom, 2008; O’Keefe & Jensen, 2007; Ruiter et al., 2011).

The following quote was located within an article entitled “It’s time to save your life”, which conveyed the necessity for these women to seek medical assistance in preventing cardiovascular disease, as described by Paula Johnson, M.D., who worked in cardiology and women’s health at Boston’s Brigham and Women’s Hospital:

The dozen top cardiologists *Glamour* spoke to were unanimous about this fact: You can’t wait to start protecting your heart. “It’s critical to take action when you’re young. You have to start asking questions of your primary care doctor and start acting on her advice,” says Dr. Johnson. “By the time women get to me—a cardiologist—it can be too late.” (Naugle & Chen, 2003, p. 271)

Within the above example we see that this quotation from *Glamour* demonstrated the construction of dependence on medical professionals such as primary care doctors and cardiologists, which strips women of agency and autonomy in portraying their risk reducing capacities and identities, a notion which has been problematized (Clarke, 2010; Clarke & Binns, 2006; Clarke & van Amerom, 2008). While promoting health screening to educate women about the statuses of their personal risk factors has been identified as one of the objectives of *The Heart Truth* campaign (Long et al., 2008), within *Glamour*, communications with medical professionals were positioned in a negative and unpleasant manner (e.g., unapproachable, uncaring, unsympathetic). In turn, such portrayals can potentially decrease women’s likelihood to request said health screens since these interactions were conveyed with fearful underpinnings, in this case dependent women seeking help from uncooperative experts (O’Keefe & Jensen, 2007; Ruiter et al., 2011). Furthermore, when the advice from uncaring medical professionals

was positioned as the *most appropriate* means to obtain information about cardiovascular disease symptoms and prevention, women's engagement in other disease prevention behaviours might be inhibited and their agency and choice with respect to their own health may be comprised (Jette, 2011; Ussher, 2006). The following quote was taken from an article about women's health concerns which remained unaddressed by their medical professionals, entitled "The 20 most important health questions women don't ask their doctors", which demonstrates this socially constructed identity for medical professionals:

"So, do you have any other worries?" Of course you do—but why must your doctor always ask you this with one foot out the door? *Glamour* polled hundreds of women under 40 to determine the top questions going unasked; then we buttonholed some of the nation's premier physicians for answers. Read on and relax—we've got all the time in the world. (Costello, 2003a, p. 97)

The power differential between doctors and women at risk for cardiovascular disease was further highlighted within *Glamour* via portraying doctors' tendencies to generalize outcomes for certain popularized disease prevention strategies. Such medical advice provided by Dr. Teresa Caulin-Glaser, M.D., a director of preventive cardiology was shown within the article titled "It's time to save your life":

"When someone says to me, 'I'm on Atkins,' or 'I'm doing this insane cycling class,' I'm not interested," says Dr. Caulin-Glaser. "If you can't tell me you'll be doing that same exercise class and following that same diet for five years from now, then it's not a healthy choice." (Naugle & Chen, 2003, p. 270)

Another way that the role of the medical community was used to construct a culture of consumerism within women's cardiovascular disease was through consistent citing and listing of

statistical results from the Harvard Nurses' Health Study. The Harvard Nurses' Health Study is an ongoing series of research investigations that focus on the effects of lifestyle factors on women's health issues including cardiovascular disease (The Nurses' Health Study, n.d.). The population of female registered nurses, licensed practical nurses, and nursing students that constituted the participants in these research projects were positioned as the archetype of the "at risk" woman in *Glamour* (The Nurses' Health Study, n.d.). In this way, readers were not only encouraged to seek the expert advice from uncaring medical professionals, but the personalization of their own disease risk factors and prevention was based on findings identified from nurse participants which feeds into the notion of glorification of the medical community as identified by current literature (Clarke & van Amerom, 2008; Clarke et al., 2007; Higgins et al., 2006). Additionally, by drawing on this "feminine" archetype of a nurse, women's identities were constructed as caregivers who are meaningfully employed in healthcare institutions, and more knowledgeable about their cardiovascular disease than women who are not employed in the healthcare industry based on the construction of health care professionals as gatekeepers (Clarke & van Amerom, 2008; Clarke et al., 2007; Higgins et al., 2006). This construction of the "at risk" woman as simultaneously a caregiver and an expert through employment in the healthcare field bridges past media constructions of caregiving identities previously associated with wife roles with powerful medical identities previously reserved for men (Clarke et al., 2007). In turn, a particular version of an "at risk" woman was constructed who was portrayed as having the inclination and financial means to change her diet to one that predominantly contains fresh, perishable food items as described below and reinforced in Shania Twain's interview article titled "Please listen!". These problematic implications were demonstrated by the following quote, which again also illustrates the use of doctors/experts and research information to

reinforce particular ideals concerning women's bodies as fragile and at risk (Ussher, 2006; Vertinsky, 1998):

“We know that 80 percent of heart disease is preventable if you do just five things,” says JoAnn E. Manson, M.D., a lead researcher on the Harvard Nurses' Health Study.... In the Harvard Nurses' Health Study, “we [*sic*] found that about 30 percent of heart attacks in women are attributable to being overweight or obese,” says Dr. Manson.... “Try to cook a meal without a nutrition label,” says Dr. Collins. That means more fresh ingredients that don't come with a 12-month shelf life. And if you can do nothing else, try eating just one more piece of fruit or helping of vegetables a day—doing so can cut your risk by nearly 5 percent, according to the Harvard Nurses' Health Study. (Naugle & Chen, 2003, pp. 209–270)

As mentioned previously, the culture of consumerism also included the promotion and dependence on fitness facilities and equipment for one's health and disease risk reduction, as shown in previous research concerning the promotion of women's exercise (McGannon & Spence, 2012). Such research has problematized this culture of consumerism in relation to women's exercise since women's identities are constructed as being in need of services and products in order to meet the portrayed feminine ideal of being lean for the ultimate goal of attaining a ‘beautiful’, appealing appearance (McGannon & Spence, 2012; Scott-Dixon, 2008). With regards to the performance of exercise and heart-healthy diets, a culture of consumerism was evident by *Glamour's* promotion of facilities (i.e., gymnasiums), merchandise (i.e., treadmills, bikes, gym attire), and certain diets (i.e., fish oil supplements, wine). The following quote from the article titled “The 20 most important health questions women don't ask their doctors” discussed the importance of exercise, again implicitly reinforcing a particular version of

a fit, healthy woman as shown in previous media portrayals (McGannon & Spence, 2012):

Q: Is it worthless for me to go to the gym just once or twice a week? “Nope, it has health benefits. Aim for 45-minute sessions and split them into 30 minutes of aerobic exercise for your heart and 15 to 20 minutes of strength training, which builds muscle mass, increasing your resting metabolic rate and helping to prevent weight gain. But you don’t need a gym – add 10-, 15-, even 30-minute fitness segments to your day. Buy a bike. Walk to your neighbor’s [*sic*]. Not sitting as much does make a difference.” – Joann E. Manson, M.D., Chief of the division of preventive medicine at Boston’s Brigham and Women’s Hospital, and *Glamour* contributing editor (Costello, 2003a, p. 98)

In the above quote, although gyms are portrayed as one means for performing exercise and women are encouraged to be less sedentary through any means possible, this article and its alignment with consumerism and the selling of products for those that can afford health benefits, was further contextualized by an advertisement for Bally Total Fitness Clubs. The advertisement for this fitness facility was located within this article titled “The 20 most important health questions women don’t ask their doctors”. As per the advertisement titled “Make over your health month”, *Glamour*’s health booklet was available at certain listed Bally Total Fitness Club locations. Furthermore, those readers who participated in specific fitness classes at these locations were eligible to receive a gymnasium makeup bag from *Glamour*. Another advertisement titled “Free Health Help Daily!” located immediately following this article listed the merchandise that *Glamour* was giving away to callers at their health advice hot line, such as a pair of Nike sneakers, a gym bag, and a Life Fitness treadmill (among others). Therefore, despite the advice that readers may choose between being consumers of expensive services/products or simply living a less sedentary lifestyle for cardiovascular disease prevention, these

advertisements supported the belief that cardiovascular health could be best achieved by purchasing gym memberships and using exercise equipment. The positioning of fitness facilities, equipment, and gym attire as the sole means with which women may engage in regular physical activity within the media has been problematized by research surrounding exercise and fitness (McGannon & Spence, 2012). The media's promotion of the consumerism in women's lives via the use of these products and services functions to perpetuate the gendered ideals of the slim and toned female body which only a small percentage of the general population can attain and/or have time and access to attain (McGannon & Spence, 2012).

The oblivious, unknowledgeable, dependent woman at risk. Many of the narratives within *Glamour* that described women's knowledge and beliefs about cardiovascular disease portrayed women to be oblivious and unknowledgeable about their risk, and in order to manage their risk and become more aware, dependency on gatekeepers in the medical community was encouraged. This narrative portrayal and use of gatekeepers to reinforce women's identities as oblivious and/or ignorant concerning their own health, is again in-line with previous media research concerning the portrayal of women and exercise (McGannon & Spence, 2012), women with obesity who undergo bariatric surgery (Glenn et al., 2013), and women at risk for cardiovascular disease (Clarke & Binns, 2006; Clarke et al., 2007; Clarke & van Amerom, 2008). Women's lack of knowledge about their risks and health was constructed within *Glamour* through the use of personal messages and/or stories from women of various employment and socio-economic status backgrounds (i.e., female leaders in entertainment industries and medical fields, and women employed in non-executive positions). In previous research exploring media narratives, post-menopausal bodies were blamed as being at greatest risk for cardiovascular disease (thus undermining the influential roles of unhealthy lifestyle behaviours), and women

who were ignorant about their risk were limited to those who were caregiving wives (Clarke, 1992; Clarke et al., 2007; Edy, 2010). Such research further aligns with historical findings regarding women's bodies and lives being constructed within biomedicine in a limited manner to perpetuate certain narrow gender roles for women (e.g., wife, mother) in order to maintain men's positions as superior within the gender order (Ussher, 2006; Vertinsky, 1998). Identities of younger women and women in power were used to construct who is unknowledgeable, independent of their romantic relationship status. Women in leadership roles in the media industry were used in stories to inform readers about their own deeply rooted misconceptions which, up until the launch of *The Heart Truth* campaign, created a mental disconnection from their reality of personal risk of this disease. For example, in the case of Editor-in-Chief Cynthia Leive, her misconceptions were characterized by age, gender/sex, body shape, and lifestyle traits. Leive was portrayed as constructing her identity as being unreasonably oblivious to the existence of women's cardiovascular disease by linking her misconceptions, with her family history and personal involvement with *Glamour's* campaign to educate women about their leading cause of mortality. The foregoing is reflected below as shown by a quote taken from the editor's letter entitled "Every woman needs a little red dress":

Think "heart disease" and what image pops up? A middle-aged guy with a beer gut? An elderly gent with a stress problem? Or a woman just like you, trying her best to be healthy but—oops!—just as susceptible as the rest of us to cigarettes and supernacho platters and long days spent immobile in front of the computer? Me, I always pictured the guy: even though my grandmother died of heart problems; even though I've edited a kajillion stories citing heart disease as the number-one killer of women (young women, too); even though I ought to know better. (Leive, 2003a, p. 50)

In the above example, what we see is that a leader in the mass media industry was portrayed as putting forth her personal story of denial of cardiovascular disease factors. Cynthia Leive's narrative was contextualized via the discussion of denial and disconnection of risk of cardiovascular disease by drawing on her privileged, management employment position. Leive was also portrayed as reporting her unreasonable lack of knowledge given the innumerable magazine articles she edited regarding women's cardiovascular disease. This construction of women who are unknowledgeable about their risk of cardiovascular disease is aligned with research studies which have reported a general lack of awareness among women (Flink et al., 2013; Mosca et al., 2013). Increasing women's awareness about their risk and disease prevention were two of the primary goals that *The Heart Truth* campaign set out to address (Long et al., 2008; U.S. Department of Health and Human Services, 2013). A similar oblivious and unknowledgeable identity for women was constructed by the use of personal messages from female leaders of medical institutions, as demonstrated by the following quote from the article titled "It's time to save your life":

Nancy Loving, executive director of WomenHeart: the National Coalition for Women with Heart Disease, could have used a forest ranger. A workaholic and single mom with two teenagers, she woke up one morning feeling nauseous and light-headed. Fifteen minutes after she went to the emergency room, a doctor told her she was having a heart attack. She was 48. "My father and three uncles had died of heart attacks at a young age, I had been smoking on and off for 35 years, and my cholesterol had been unchecked for 10 years. Still, I didn't know that I was at incredible risk for heart disease," Loving says. (Naugle & Chen, 2003, p. 209–210)

The above quote further illustrates the construction of the identity of the "at risk" woman

as being unaware of her risk while continuing to engage in unhealthy lifestyle behaviours (e.g., smoking, poor dietary choices), despite having a family history of this disease. Within *Glamour*, women were further positioned as powerless in relation to their risk reducing health choices and bodies, due to their challenge in translating knowledge into action. This media narrative is aligned with the findings by Kling et al. (2013), according to which a general awareness about women's leading cause of death and disability must translate into an understanding or personalization of one's risk factor profile in order to effect lifestyle behavioural changes. This construction of the unknowledgeable and oblivious woman at risk by *Glamour* also draws upon women roles as employed within the healthcare field, in addition to the foregoing discussion of women's roles and identities within the entertainment and mass media industries. The following quote from the article entitled "It's time to save your life" provides further evidence towards the construction of oblivious at risk women employed in the healthcare field:

Wanda Tswago had no idea her arteries were 97 percent blocked until she had her first heart attack at age 31, two weeks after giving birth to her daughter. Doctors weren't surprised when she had a second heart attack a week later: "I'm now stable, but my heart is working at 25 percent, and I'm permanently disabled. I can't lift my daughter; I can't push the vacuum cleaner," says the Camden, New Jersey, mother. "One of my sisters died of a heart attack in front on me on New Year's Eve at age 45. I didn't realize that her heart attack meant I was at risk for heart disease. I was a technician in a medical lab, and I still didn't make that connection!" (Naugle & Chen, 2003, p. 208)

In this example, Wanda Tswago's risk (similar to Nancy Loving's risk in the previous illustration) was discussed in relation to her family history with this disease. In turn, cardiovascular disease was constructed as an insidious disease which can result in crippling

effects on the lives of naïve, oblivious women who partake of gendered activities such as responsibility for cleaning one's home. Women's childlike oblivious identities with regards to cardiovascular disease were further reinforced in *Glamour* by reports of young women's limited conceptualizations of the "at risk" women which excludes women with a history of acute cardiac events, even though these events were experienced by themselves. This portrayal is similar to the reported reality that women under the age of 35 years constitute one sub-population of women who are least aware of their risk (Mosca et al., 2013). These women were positioned as incapable of making the connection between their own risk factors of cardiovascular disease and disease progression, which further limits their potential to engage in preventive behaviours (Kling et al., 2013; Mosca et al., 2006). In this way, women's cardiovascular disease was portrayed as being insidious or 'silent' in progression within those at risk until the explicit manifestation of an acute cardiac event occurred. As mentioned, this portrayal was put forth for women who have a family history of this disease or personally experienced acute events themselves, which are two socio-psychological variables which have been linked with increased performance of preventive behaviours (Ali, 2002). It is known that risk factor type 2 diabetes has been positioned in a similar insidious manner and attributed to modern conveniences and lack of detection by the mass media (Rock, 2005).

A consequence of this particular construction of a woman at risk who is lacking knowledge and is in need of help was that dependency on medical professionals to share their knowledge about cardiovascular disease was ultimately positioned as the optimal source of answers for women's health concerns, thereby further situating this disease within the frame of over-medicalization (Clarke & Binns, 2006; Clarke et al., 2007; Clarke & van Amerom, 2008; Higgins et al., 2006). The foregoing narratives were supported despite *Glamour's* construction of

doctors as unapproachable and uncaring (as described in the overarching culture of consumerism theme). Following through with the story of Wanda Tswago, a cardiology expert described her position of power in clarifying her patients' health concerns, implying that women's lack of knowledge needed to be addressed by the medical community within an appropriate time frame in order to prevent disease progression. In this way, the medical community was again constructed as the powerful and all-knowing saviours of women's health (Ussher, 2006), without whose assistance the "at risk" woman is likely to receive a startling revelation of disease progression when she sustains an acute cardiac event.

The ultimate message conveyed through this overall narrative of the oblivious, unknowledgeable and dependent "at risk" woman was that women must learn from the experiences of leaders in the entertainment and mass media industries to swiftly take notice of their heart health. As a result, a culture of consumerism is not only again perpetuated, but women are again stripped of their own personal agency and choice when it comes to their bodies and health (Ussher, 2006; Vertinsky, 1998). Upon being made aware of their "number one killer", women within *Glamour* were portrayed as then again needing to seek the help of medical experts to determine their personalized risk factors before they suffered the same life-altering consequences as experienced by other women (e.g., Wanda Tswago in a previous story).

Attaining a particular version of a healthy, feminine woman. The second sub- theme that emerged through the ethnographic content analysis of articles of *Glamour's* October 2003 issue was the construction of a healthy, feminine woman. Within the context of the representations and stories, in contrast to the first sub-theme of women as lacking in knowledge and dependence, this woman was constructed as powerful and in control of her cardiovascular disease risk. Such a woman further emerged as belonging to a younger age group (i.e., 18 years

and older) whose risk was feminized through the lens of hetero-normativity and romance. When interpreted within the context of the overarching theme of consumer culture, there appeared to be complex and contradictory relationships between cardiovascular health, beauty and fashion. In particular, *Glamour* constructed women's cardiovascular health and risk reduction through the lens of consumerism of fashion items, and supported the performance of risk behaviours for the ultimate goal of obtaining an appealing body shape and appearance. *Glamour* simultaneously problematized women's constructed identities as tied to subscribing to these beauty norms by positioning them as hindrances and inhibitors to successful cardiovascular disease risk reduction. Additionally, the authors and editors of stories continued to construct a particular version of what constitutes the "face" of women's cardiovascular disease with certain idealized characteristics constructed for all women at risk. As discussed earlier in the previous theme, the face of the every woman is constructed by drawing comparisons with reproductive and sexual health issues, which again ties in with a limited and narrow view of women's femininity (e.g., as tied to reproduction and having children, being heterosexual, and attractive to men) (Ussher, 2006; Vertinsky, 1998).

One way the foregoing was achieved within *Glamour* was through the portrayal and/or showing of examples of women who were successful in maintaining their cardiovascular health and reducing their risk for cardiovascular disease, and who were described as being powerful and in control of their health. This construction was further achieved through the use of war and crime terminology. These women, the process of cardiovascular disease risk reduction, and education of the larger North American female population were positioned as warriors, battles that needed to be fought, and crusades, respectively. The use of such terminology and in particular, the use of war metaphors (e.g., battling disease, fighting for one's health) to achieve a

particular view of an empowered, yet still narrowly feminine woman, has been found in the research pertaining to breast cancer and the use of the pink ribbon (see King, 2004, 2011). The ultimate powerhouse of knowledge remained within the hands of the medical experts as further shown in previous research concerning women's health (Jette, 2011; Ussher, 2006; Vertinsky, 1998). The successful women in power were portrayed in this empowered manner due to their capacity to facilitate large-scale changes by carrying these cardiovascular disease prevention messages into their local communities through educating less-knowledgeable women. In this way, the hierarchy of power in effecting change was established, but moreover such narratives are linked to consumer culture, as found in research concerning media narratives, pink ribbons, and breast cancer discourse linking grass-roots breast cancer activism to ultimately raising money for corporations (King, 2004; Sulik, 2012). Within *Glamour*, power began with the expert medical doctors and researchers, and then proceeded to the female celebrity spokeswomen and role models, then to the privileged readers of *Glamour's* magazines, and finally to the larger "at risk" female population who would "activate" and carry out prevention through personal health-related practices. The implication of this construction of the warrior-woman fighting the battle of her own risk reduction while pursuing the crusade of educating her fellow North American women about their leading cause of death, is that women must identify with this alter ego since they otherwise lack the ability to bring about changes within their current capacities (Sulik, 2012).

The following quote demonstrates the war and crime terminology that emphasised Shania Twain's power within the article entitled "Please listen!", and the duty that readers are now accountable to perform: "Shania Twain, this month's cover model, explains why she's joined the battle against heart disease and why you should too." (Herzig, 2003, p. 209). Subsequently,

Twain's position as a serious "crusader" contextualized the necessity and urgency to prevent this disease by contrasting this with (and promoting) her music, further framing women's cardiovascular disease within a culture of consumerism (Herzing, 2003, p. 249). The following quote taken from the article "It's time to save your life" provides additional illustration regarding women's agency in raising awareness among their peers:

Now that you know how critical heart health is for women, there's just one more thing we want you to do: Tell someone else about it. "Without that grassroots approach, I'm not sure how many lives we can save," says Dr. Caulin-Glaser. (Naugle & Chen, 2003, p. 271)

Readers were provided with information regarding the pathology, prevention and detection of cardiovascular disease using physiological and medical terms for which explanations did not follow. In turn, disease prevention was constructed as dependence on the medical and research communities whose members were knowledgeable about the meanings and definitions of these terms, and whose assistance was necessary for women to engage in disease prevention which was otherwise as out of their direct control (Clarke, 1992; Clarke, 2010; Clarke & Binns, 2006; Clarke & van Amerom, 2008; Clarke, et al., 2007; Higgins, et al., 2006; Savoie, et al., 1999). Some examples of these terms located in this issue of *Glamour* included "saturated fat", "plaque", "atrophied", and "electrocardiograms" (Naugle & Chen, 2003, pp. 208–270). On the other hand, this portrayal also fed into the notion that these powerful women's profiles comprised their assumed familiarity with scientific terminology by virtue of their vantage points from high socio-economic status backgrounds (Clarke & Binns, 2006; Clarke & van Amerom, 2008; Higgins et al., 2006). The implication of this portrayal is that women who are unknowledgeable about the meanings of these terms and do not have access to resources from

which they may seek explanations (e.g., access to the internet or health-care consultants) are excluded from understanding cardiovascular disease due to the impact of the social determinants of their health (Clarke & Binns, 2006; Higgins et al., 2006). As seen in the quote below, women were encouraged to take dietary supplements that contained certain ingredients reported to enhance one's health. This piece of advice lacked clarity in defining and describing these abbreviated ingredients: "Take a daily gram of a fish oil supplement that contains either EPAs or DHAs—both have heart-helping benefits." (Costello, 2003a, p. 102)

When women were portrayed as knowledgeable and in control of their cardiovascular disease risk, as noted earlier, they were also constructed by *Glamour* as being affluent, by drawing on their engagement in activities that require high financial resources. It should be noted that although this construction of the powerful, affluent woman was very similar to that described in the overarching culture of consumerism theme, they were also different; specifically, this construction of an affluent woman did not always involve the marketing of products or services to increase sales or "buyers". In this case, for these knowledgeable and feminine women, demanding an appropriate-level of medical attention from uncaring doctors was likened to the unpleasant experiences associated with interactions with car dealership salespeople. As a result of their hectic and stressful lives, these women were then portrayed as being at an increased risk for cardiovascular disease on the one hand. However, the consumerism theme remained implicit because it is women of affluence and of a particular femininity that would ultimately buy/purchase particular products (e.g., red dresses, Red Dress pins) and services (e.g., gym memberships, fitness clothing), to manage their stress and risk (McGannon & Spence, 2012). In a sense, by portraying women's identities as dedicated individuals employed in demanding roles, women were positioned on the same high status pedestal that was reserved for

men who experienced cardiovascular disease in a previous study that examined media portrayals (Clarke et al., 2007). Other studies have attributed greater risk to hard-working lifestyles of both men and women, and have suggested financially expensive solutions such as taking vacations (Clarke & Binns, 2006; Clarke & van Amerom, 2008). At the same time this narrative and the identity of a particular version of a healthy and feminine woman – in this case, a working woman who may be affluent, yet also stressed – continued to (re)produce limited and narrow feminine ideals identified within other forms of media concerning women's health. In this case however, the woman that emerged was a superwoman who performed numerous social roles through work and having children and/or a family, yet maintaining a certain social and gender order (Jette, 2006; McGannon et al., 2012).

In relation to the above notions, within *Glamour*, the construction of what it meant to be a healthy and feminine woman who cares about her health was further organized along the dimension of age, with younger women positioned within stories, advertisements and images, as the prime candidates for cardiovascular disease while simultaneously the most likely to experience success in reducing their risk. Youthful identities were also the focus of pictorial contextualization of material presented in text format since a majority of the models were younger in age. Again, given the ever-present theme of consumer culture within *Glamour* and the demographic of the readership, this point was not surprising and is in-line with research exploring pink ribbon discourse within breast cancer media and consumer culture (King, 2005; Sulik, 2012). Further, the version of femininity defined by youthful and slender bodies has been popularized with regards to women's fashion and health since 1910 (Rothstein, 2006; Sulik, 2012). In Rothstein's (2006) study, this narrow version of femininity linked to youth and beauty was further associated with women's cardiovascular disease risks to construct a version of who

should be the focus/target of health concerns, thus leaving out older women who are at risk. Nonetheless, it has been reported that women below the age of 35 years tend to demonstrate less awareness about their risk and symptoms of this disease in comparison to the general female population, and disease progression begins as early as in a woman's teenage years (Mosca et al., 2013; U.S. Department of Health and Human Services, 2013). The following quote from the article titled "It's time to save your life" exemplifies the foregoing through the recognition that women must reduce their risk for cardiovascular disease when they are young, within the story:

It's been the top killer of women for nearly 100 years, it kills 65,000 more women than men each year, and increasingly, it's a young woman's disease, killing more women under 45 than any other single disease, according to the Centers for Disease Control and Prevention (CDC)...The greatest tragedy behind all of these statistics is the indisputable evidence that most heart disease in younger women is completely preventable.... It's critical to take action when you're young. (Naugle & Chen, 2003, p. 208–271)

As noted, a complex and contradictory relationship existed between women's cardiovascular health and the maintenance of a youthful outward appearance in this issue of *Glamour*. Prevention of cardiovascular disease was described as a means to obtain a younger and appealing outer appearance, thus perpetuating a narrow view of femininity and serving consumer and corporate interests (McGannon & Spence, 2012). At the same time, as noted, it is still important to raise young women's awareness of heart risks, given their beliefs are often skewed toward thinking they are more at risk for breast cancer (Clarke, 2010; Sulik, 2012). On the other hand, *Glamour's* female readers were also advised within the narratives and through imagery of women and celebrities, that being healthy is a form of beauty in itself, irrespective of one's body shape and skin blemishes. In this latter narrative, constructing women's identities based on their

outward appearance was portrayed to be detrimental to cardiovascular disease prevention. This issue of *Glamour* credited young women's so-called unhealthy obsessions with obtaining particular body shapes as reasons for which they develop cardiovascular disease due to the strategies undertaken to obtain slim physiques (e.g., smoking cigarettes). Narratives which promote engagement in such unhealthy activities and lifestyles with the objective of achieving this narrow version of femininity have also been problematized by current literature (Scott-Dixon, 2008). Rather than focussing their concerns on their external beauty, women were encouraged to embrace the notion that their identities and sense of femininity need not be defined by their 'imperfect' appearances, but rather on their health and wellbeing.

Similar to the assumptions of heteronormativity and narrow femininity that were employed to enhance revenue from merchandise sales, women's identities within *Glamour* were also constructed with regards to heteronormative romance and love within the context of educating women about cardiovascular disease. Women's likelihood to rush their husbands and boyfriends in seeking timely treatment for symptoms of acute cardiac events was positioned within *Glamour* as the gold standard behaviour with which women must address their own symptoms. Such depictions again have the effect of keeping women's identities contained within a particular version of femininity to maintain the gender order with society and health (Ussher, 2006). Additionally, this issue of *Glamour* consistently drew on the construction of the heart as the instrument with which women experience love and romance, and linked this conceptualization of the heart with cardiovascular disease. Healthy women were reported to appreciate and protect their hearts in their romantic relationships, and extend this concern for their hearts by reducing their risk for cardiovascular disease. As mentioned previously, this fairy-tale version of femininity based on women's identities within the context of romantic

relationships, has been used to describe women's "true calling" by media's portrayals of successful weight loss surgery patients as well (Glenn et al., 2013, pp. 636–637). Another way in which *Glamour's* cardiovascular disease messages catered to women who were currently or seeking to be involved in romantic relationships was by defining women's bodies as their intimate, loyal life partners. The following quotes demonstrate the meaning attached to women's hearts by drawing on their romantic identities, as reported by actress Jennifer Love Hewitt: "We think a lot about our hearts when it comes to love, but women need to realize that we need to take care of our hearts all the time." (Naugle & Chen, 2003, p. 208). Another quote which illustrates *Glamour's* heteronormative constructions of healthy, feminine women that support taken for granted social roles for women as reported by Glenn et al., (2013), is located below and taken from the article "What if you treated a friend the way you treat your body?":

Here's a question to think about as you thumb through *Glamour's* health issue: How well are you treating your body? It is, after all, your most intimate partner, your loyal companion for life. Who else would you ask to make a baby or run a marathon? (Costello, 2003b, p. 188)

Women who successfully obtained the appropriate level of medical recognition of which they were worthy, and took actions to reduce their risk of cardiovascular disease, were positioned to be avid participants in women's reproductive health issues and campaigns. To this effect, the feminization of women's cardiovascular disease occurred through constant comparisons with conditions that impact the female reproductive system and secondary sex characteristics such as cervical cancers and breast cancers, respectively (Ussher, 2006). Women were encouraged to rise up to advocate for greater recognition from the medical and research communities to "find a cure" for female incidences of cardiovascular disease (Naugle & Chen, 2003, p. 271). This

advice further glorified the power differential between the “experts” and the women at risk, and minimized the benefits of disease prevention in favour of seeking medical solutions once disease progression is underway. Moreover, as identified in research concerning pink ribbons and breast cancer, such activism guarantees that broader corporate interests will benefit, rather than the women themselves (King, 2004, 2010; Sulik, 2012).

CHAPTER V

Conclusion

The purpose of this project was to explore how women's cardiovascular disease was constructed by the fashion, health, and beauty magazine *Glamour's* October 2003 issue. The two research questions that were used to guide data collection and analysis were (a) how are cardiovascular disease and women's heart disease risk factors in relation to various life spheres (e.g., workplace settings, recreational preferences, etc.) portrayed/constructed in *Glamour*, and (b) what are the potential implications of these heart disease messages/constructions for women's identities and health. This magazine and issue were chosen to allow for greater meanings to be uncovered from the inaugural issue of *Glamour's* partnership with *The Heart Truth* campaign, and to determine how messages are communicated to a demographic of women conceptualize their health within the context of fashion and beauty. Explorations of the media's constructions of women's cardiovascular disease, identities and health through *The Heart Truth* campaign and its centerpiece *The Red Dress*, in light of the demographic and socio-economic disparities that exist among women's varied backgrounds and identities, has been called for (Clarke, 2010). This study is novel in this regard by understanding these (re)presentations within one media context and adds to the current literature by unpacking the meanings and implications of these circulated media narratives. The methodology used to guide data collection and analysis was ethnographic content analysis (Altheide, 1996). The analysis of the collected data revealed that the following themes were present: an overarching *culture of consumerism*; the first sub-theme *the oblivious, unknowledgeable, dependent woman at risk*; and, the second sub-theme *attaining a particular version of a healthy, feminine woman*.

Within the overarching culture of consumerism theme, *Glamour* positioned and framed

women's cardiovascular disease (in particular, women's heart disease) as a platform to promote and market three main enterprises: the fashion, music and entertainment industries; medical professionals and fitness facilities/equipment; and, *Glamour's* website. The sale of Red Dress pins (with donations to the American Heart Association and profits to the NHLBI), and red dresses designed by fashion designers and modeled by actresses and musicians, constructed a limited version of the typical "at risk" woman. This construction of the "at risk" woman was problematically built on certain ideals/characteristics; specifically, a slim body shape, heterosexuality, a lifestyle of affluence and consumerism, and dependence on medical and fitness industries. The portrayal of women's cardiovascular disease as one that only affects heterosexual and affluent women who are dependent on medical experts has been noted by previous research articles (Clarke, 2010; Clarke et al., 2007; Clarke & van Amerom, 2008; Roy, 2008). When *Glamour* used this disease as a tool for showcasing fashion designers' red dresses, and marketing cosmetics such as Neutrogena Healthy Skin[®] Anti-Wrinkle Cream and the Shania Red BeneFit Cosmetics lipstick, the message conveyed to readers is that cardiovascular disease prevention may be reduced to a fashion and beauty status symbol, demonstrating counter-productivity to the campaign goals (Harding, 2010; Long et al., 2008). Moreover, as previous research on breast cancer has shown, such media narratives ultimately serve certain consumer and corporate interests, whose goal is to make money and use the name of the disease as a for-profit mechanism (King, 2004; Sulik, 2012). An important implication of this finding, when applied to the present study, is that other women's identities who are at risk for cardiovascular disease, or who are living with the realities of the disease, are either erased and/or silenced (King, 2004, 2010; Sulik, 2012). Such silencing of women by way of making a disease "pretty", fashionable and at times, even sexy, is problematic and may alienate women from their bodies and

experiences (King, 2004, 2010; Sulik, 2012).

In addition to donations to two of the founding institutions of *The Heart Truth* campaign, women's immediate dependence on and interaction with the medical community to learn about their personal risk, was characterized with unpleasant connotations within *Glamour*. Doctors (both general practitioners and specialists) were positioned as uncaring, powerful entities who have limited time for patient consultations and who do not value each woman's unique circumstances. Further, members of the female nursing community were portrayed as the archetype of the typical woman who is at risk for this disease, which supports the notion that traditional caregivers constitute the main demographics of women who are susceptible to cardiovascular disease (Clarke, 1992; Clarke et al., 2007; Edy, 2010). Simultaneously, the foregoing constructed women and cardiovascular disease within the frame of over-medicalization in which medical professionals and pharmaceutical corporations are positioned as the experts and gatekeepers to women's health, and in this case victims of this disease as well (Clarke et al., 2007; Clarke & van Amerom, 2008; Higgins et al., 2006). The implications of this construction are that women's identities are flawed and in need of expert intervention thus promoting a consumerist culture, and the notion that women's identities are tied to their traditional caregiver roles is perpetuated which supports gendered social order (Glenn et al., 2013, McGannon & Spence, 2012; Ussher, 2006; Vertinsky, 1998). Women's constructed identities within a lifestyle of affluence was further contextualized by *Glamour's* promotions of memberships with fitness facilities, exercise equipment, and gym attire, of which media's portrayals have perpetuated gendered ideals of a slim and toned female body (McGannon & Spence, 2012).

The first sub-theme which was identified within the overarching culture of consumerism

was the description and portrayal of the oblivious, unknowledgeable, and dependent woman at risk. With regards to women's knowledge and beliefs about their risk for cardiovascular disease, women of various employment and socio-economic status backgrounds, leadership roles, and ages were described as being oblivious and unknowledgeable. A few studies have revealed that this child-like naivety used to be limited to descriptions of post-menopausal, caregiving women who closely identified with their wife-related roles, as a result of which their own health was neglected (Clarke, 1992; Clarke et al., 2007; Edy, 2010). In contrast, women in high ranking positions such as *Glamour's* Editor-in-Chief Cynthia Leive were portrayed as reporting deep rooted misconceptions of this disease despite having leadership status in this issue of *Glamour*. Women at risk emerged as being disconnected from their personal reality of risk and their bodies, after having sustained prior acute cardiac events such as heart attacks, having a family history of this disease, and being aware of the leading cause of death for women. As a result of their oblivion regarding their personal risk, acute events were then experienced as unexpected, startling revelations, similar to the depiction of type 2 diabetes as an insidious disease, by the mass media (Rock, 2005). Likelihood of performance of risk reducing behaviours have been reported to increase with women's general awareness and personalization of risk factors, and having a family history or personal experiences of risk and disease progression (Ali, 2002; Kling et al., 2013; Mosca et al., 2006). *Glamour's* portrayals of oblivious and unknowledgeable identities for women were problematic since women were positioned as incapable of understanding and reducing their disease risk within the context of these facilitator socio-psychological variables (Ali, 2002; Kling et al., 2013; Mosca et al., 2006).

The second sub-theme which constructed a particular view of a healthy, feminine woman, described the identities of women who maintain their cardiovascular health. These women were

positioned as being knowledgeable, powerful, in control, and young. They were also described as warriors who battled their risk of cardiovascular disease and were dedicated to the crusade of informing and empowering other women. Women's busy, stressful, and also indulgent lifestyles were credited as the causes of this disease, as has been reported by past studies that examined both men's and women's cardiovascular disease (Clarke & Binns, 2006; Clarke et al., 2007; Clarke & van Amerom, 2008). *Glamour's* writers and editors constructed a complex and contradictory relationship between cardiovascular health and beauty in the sense that the possession of an appealing, lean body was positioned as the ultimate goal of maintaining health and reducing risk, as well as a hindrance and inhibitor of risk reduction. Disease prevention behaviours were positioned as an appropriate means by which women could obtain younger and more appealing appearances (such as firmer skin), whereas disease prevention was also meaningfully promoted independently of beauty. Women's hearts took on new meaning when their disease prevention was described in terms of caring for their hearts as they would in the context of romantic relationships. The construction of women's health by focusing on obtaining desirable outward appearances and fulfilling women's identities as potential wives has been reported by past studies which examined media (re)presentations (Glenn et al., 2013; Willis & Knobloch-Westerwick, 2014). The foregoing is problematic because this narrative benefits larger corporate interests when viewed within *Glamour's* consumerist frame, and constructs women's identities through heteronormative, submissive roles which are tied to their outward appearances (King, 2004, 2010; Sulik, 2012; Scott-Dixon, 2008; Willis & Knobloch-Westerwick, 2014).

Future Research Directions

The findings of this current study supported the construction of an affluent, mainly White, heterosexual, fashion and beauty conscious woman who is at risk for cardiovascular

disease. These findings were obtained by collecting and analyzing data from the October 2003 issue of *Glamour*, a magazine which specializes in beauty, health, fashion, and travel and caters to women between the ages of 18 to 49 years (Condé Nast, 2013; Ulrich's Periodical Directory, 2013). One area of further research investigation entails examining other corporate partner magazines of *The Heart Truth* campaign that cater to specific demographics of women (e.g., *Essence* magazine which caters to interests of African American female populations), to determine how these magazines construct and contextualize women's cardiovascular health and disease, and women's identities (U.S. Department of Health and Human Services, 2014). Discourses presented in two or more different partner magazines, including *Glamour*, may be identified and tracked since the implementation of the campaign to determine how meanings and implications of messages have evolved over the past decade. Editors of the departments within a magazine who worked together to publish articles may be consulted to understand how these public health messages are constructed prior to dissemination. (De)constructing the "behind-the-scenes" decision-making is important in order to fully understand the complexity of balancing health promotions materials with other factors which affect magazine sales, since the published articles ultimately contribute towards women's knowledge, beliefs, and lived experiences with this disease (Clarke, 2010; Clarke & Binns, 2006; Lefler, 2004; Mosca, et al., 2004). Additionally, knowledge gleaned from this research area can be taken into consideration while creating future articles and advertisements.

Current research scholarship has revealed that health promotion materials from *The Heart Truth* campaign were perceived as ambiguous in clarity and exclusionary in terms of race and ethnicity, as well as empowering and motivating in their calls to action (Tindall & Vardeman-Winter, 2011; Vardeman-Winter & Tindall, 2010). However, there is a lack of understanding

about how “at risk” women give meaning to their symptoms, risk, and disease prevention from these messages published by corporate partner magazines. Hence, a second avenue for further research investigations includes consulting “at risk” women who are diverse with regards to age, socio-economic status, race and ethnicity, and sexual orientations, to explore how they perceive and interpret these messages.

Finally, the “feminization” of cardiovascular disease by agencies of the mass media not affiliated with *The Heart Truth* campaign, may be further explored by analyzing particular cases of women whose experiences with this disease have been popularized through media coverage (e.g., former U.S. Senator, U.S. Secretary of State, and First Lady of the U.S., Hillary Clinton). It has been noted that the focus of former Vice President of the U.S., Dick Cheney’s experiences with cardiovascular disease was his return to his high status employment duties, and his success with a pacemaker-defibrillator and other treatments received by medical professionals in high ranking positions (Clarke & Binns, 2006). Little is known about how individual cases of women who are at risk or have experienced this disease are sensationalized by the mass media, despite the potential for such portrayals to influence women’s knowledge and beliefs due to increased exposure and familiarity (Harding, 2010). With the potential future research directions outlined, I will now discuss the ways in which the findings of this project, in conjunction with current scholarship, may guide practice.

Significance of Findings

Through the following points, I highlight the significance of the key findings of this project:

- Within the context of the inaugural issue of a fashion, health and beauty magazine (i.e., *Glamour*), women’s cardiovascular disease and its risk factors were reduced to the status

of tidy and glitzy Red Dress pins. This construction for the “face” of this disease is problematic for numerous reasons, one of which is the masquerading of risk reduction behaviours by replacing physical activity, smoking cessation, and healthy diets with a sexualized fashion accessory and philanthropic activism similar to the reduction of breast cancer to pink ribbons and financial donations (King, 2010; Long et al., 2008). Despite the narratives within this magazine which addressed the devastating impacts of this disease on women, indications of lived experiences and disease prevention were missing from the construction of the Red Dress pins.

- The demographic profile constructed for all women at risk for cardiovascular disease entailed mainly young, White, affluent, heterosexual, married mothers who were able to reduce their risk through purchasing products such as Nike shoes and gym bags. This constructed profile excluded those women’s identities which did not align with the portrayed profile such as women from middle-to-lower socioeconomic backgrounds who are at higher risk (Moran & Walsh, 2013). In this way, this issue of *Glamour* perpetuated the constructed misconception of the “disease of affluence” that has been circulated from the last century and thus inhibited timely prevention (Lockyer & Bury, 2002, p. 433).
- Women’s agency and capacity to engage in risk reduction behaviours were further portrayed as best achieved by complete dependence on the medical and fitness industries for their services and expertise. Such constructions contribute to larger narratives which employ fear based appeals and loss of control over one’s health that result in problematic coping strategies such as denial of disease threat (O’Keefe & Jensen, 2007; Ruiter et al., 2001), and serve the marketing and sales interests of corporations (Jette, 2006).
- The findings of this study highlight the problematic constructions of women’s

cardiovascular disease and risk factors within this particular context (i.e., the inaugural issue of *Glamour's* partnership with *The Heart Truth* campaign). In order to further delve into portrayals of disease prevention and symptoms, and implications for women's health and identities, a larger scale ethnographic content analysis of magazines that cater to specific sub-populations of women across the time span of this campaign, is called for. Furthermore, the meanings attached to lived experiences and women's interpretations of corporate partners' constructions can be achieved through employing qualitative methods such as interviews and focus groups.

Implications for Practice

Given the findings of this current project, a few considerations and suggestions for future women's cardiovascular health promotions have been identified. I suggest that partners of *The Heart Truth* national health campaign consider communicating all future recommendations for disease prevention through positive and consistent framing. This type of positively framed communication would entail conveying a sense of capacity to effectively lower risk without the over-medicalization and consumerism associated with this disease, the construction of "alter-egos" for women's identities, or drawing on fear-based appeals (Glenn et al., 2013; Milne et al., 2012; O'Keefe & Jensen, 2007; Ruiter et al., 2011). For example, audience members may be provided with testimonials of their peers who successfully lowered their risk or recovered from an acute event through healthy lifestyles (e.g., regular physical activity, healthy eating, and avoiding cigarettes), in addition to monitoring their blood profiles and undergoing other health screens. These testimonials may be contextualized with stories of how these women incorporated these changes into their daily lives, providing potential strategies for audience members to maintain their cardiovascular health while maintaining their unique identities. Aids, tools and

resources disseminated as part of this campaign may be made available to all interested women who wish to use these items; for example, at local community centres.

Women's cardiovascular disease prevention may be consistently framed as an issue that pertains to lifestyle choices in order to increase engagement in risk reducing behaviours, versus simultaneously constructing this disease within the frame of sexual appeal and romantic relationships as has been problematized with regards to women's health (Glenn et al., 2013). It is important that women are appropriately informed about the gendered differences in experiences of acute cardiac events such as heart attacks, since this is an area which received little attention in *Glamour's* 2003 issue and has reportedly been presented ambiguously in other campaign materials as well (Tindall & Vardeman-Winter, 2011; Vardeman-Winter & Tindall, 2010).

Finally, based on the present study and past research findings, I suggest that the process of the development, design and marketing of future health campaign symbols includes the careful consideration of the possible implications that are carried with the chosen symbol in light of the demographics at greatest risk. For example, the design and sale of the Swarovski Red Dress pin can be interpreted as having limited appeal to the women who are at greater risk for cardiovascular disease, such as women who are overweight and obese, and have limited available financial resources. A more appropriate symbol would be one that is conceptualized and designed by a diverse group of "at risk" women themselves through focus group discussions and participatory action research methods since this symbol would have the potential to be more reflective of the meanings and values that they place on cardiovascular health and disease.

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