SELF-DETERMINATION THEORY AND HEALTHY AGING CAMPAIGNS

By

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ABSTRACT

This paper explores the research question, *How has motivation and self-determination theory been used to develop healthy aging campaigns for older seniors focusing on modifiable risk factors?*

The conclusions are based on secondary qualitative and quantitative data collection and empirical analysis. The use of self-determination theory and intrinsic and extrinsic motivation to influence behavior is examined based on its use in healthy aging campaigns targeted at older seniors, including self-determined extrinsic motivation and internalization achieved through introjected regulation, identified regulation and integrated regulation.

An interdisciplinary approach is used to produce a more comprehensive understanding of the research question from a psychology and health perspective; as well integrates with medical, physiological, social and communication studies.
Introduction

It is widely recognized that health promotion and disease prevention are necessary interventions for improving and maintaining population health (World Health Organization, 2007). They are particularly important for seniors, as 90 percent of Canadians aged 65 and over live with at least one chronic disease or condition, such as cardiovascular disease, cancer, respiratory conditions, diabetes, dementia, arthritis or obesity (Government of Canada, 2012).

People are living longer and it is necessary for the Canadian government to invest in healthy aging campaigns and strategies, because not to do so would have “far-reaching social, economic and political impacts” (Statistics Canada, 2005). The numbers of seniors aged 65 and over in Ontario is projected to more than double from 1.8 million, or 13.7 per cent of population in 2009, to 4.1 million, or 23.2 per cent, by 2036 (Ontario Ministry of Health, 2013). In addition to the demographic and political imperatives of an aging population, a paper prepared for the Healthy Aging and Wellness Group of the Federal/Provincial/Territorial Committee of Officials – Seniors (2006), describes the many other reasons to invest in healthy aging, including:

- Seniors make a significant contribution to the richness of Canadian life through their knowledge, experience and love, and to the economy through paid work, volunteering and contributions to their families and community;
- Health promotion can delay and minimize the severity of chronic diseases and disabilities in later life, thus saving health care costs and reducing long-term care needs;
Evidence demonstrates that there are effective models and strategies in use that may be built on, and innovation should be supported; and

- There is moral value in enabling seniors to remain healthy and independent.

However, the Canadian government implemented significant budget cuts between 2012 and 2015 to the Public Health Agency of Canada ($68 million, a budget reduction of almost 11%) and other federally funded agencies, including the Canadian Institutes of Health Research (decrease of $45 million). Many of these cuts targeted health promotion and prevention programs (Canadian Public Health Association, 2015).

With the aging demographic and funding cuts, it even more imperative for health promotion and disease prevention campaigns for older seniors be developed in a manner that achieves their desired outcomes – healthy aging. Health promotion programs often lack a theoretical foundation, which may explain why some health promotion campaigns are not as effective at meeting the intended objectives (Raingruber, 2012).

This essay will explore the use of self-determination theory in the development of healthy aging campaigns for older seniors. Secondary data collection and analysis of qualitative and quantitative data from existing academic research on aging, health promotion, motivation and self-determination theory will be used to explore how these concepts have been integrated into healthy aging campaigns which focus on modifiable risk behaviors.

An interdisciplinary approach is used to produce a more comprehensive understanding of not only the research question from a psychology and health
perspective but also the integration with medical, physiological, social and communication studies.

Within the conclusion of this paper, the limitation associated with doing this research and opportunities for further research are identified.

**Research Question**

*How has motivation and self-determination theory been used to develop healthy aging campaigns for older seniors focusing on modifiable risk factors?*

**Definitions**

- Healthy aging – improving and preserving health and physical, social, and mental wellness; independence; quality of life; and enhancing successful life-course transitions (Peel, McClure & Barlett, 2005).

- Campaign – publically funded health promotion education, including public service announcements through mass media; and public health promotion education sessions. Excludes private advertising campaigns designed to sell products and/or medication.

- Modifiable risk factors - level of physical activity, body mass index, diet, alcohol use, smoking status and stress levels (Peel, McClure & Barlett, 2005).


**An Interdisciplinary Approach**

Aging well and personal motivation is a complex issue. Through utilizing an interdisciplinary approach, drawing on perspectives from a variety
of disciplines, a deeper understanding of the topic was achieved within this essay and this approach assisted in avoiding disciplinary bias associated with a narrow focus.

An interdisciplinary approach requires a degree of familiarity and adequacy in the relevant disciplines (Repko, 2012). Insights and perspectives from adult education (techniques and approaches for education of older seniors), health studies (disease risk factors that are modifiable through behavior), medicine (physical effects of aging on the human body) and sociology (culture and community influences on behavior and perception of health) have been utilized.

Self-determination Theory (SDT) is a theory of human motivation. It addresses issues including personality development, self-regulation, universal psychological needs, life goals and aspirations, energy and vitality, non-conscious processes, the relations of culture to motivation, and the impact of social environments on motivation, affect, behavior, natural or intrinsic tendencies to behave in healthy ways and well-being. The theory focuses on the types of motivation, including autonomous motivation, controlled motivation and motivation as predictors of performance, relational and well-being outcomes. Autonomous motivation “comprises both intrinsic motivation and the types of extrinsic motivation in which people have identified with an activity and ideally will have integrated it into their sense of self” (Deci & Ryan, 2008, p. 182). Controlled motivation consists of both external regulation, in which one’s behavior is a function of external contingencies of reward or punishment” and
“the regulation of action has partially been internalized and is energized by factors such as approval motive, avoidance of share, contingent self-esteem, and ego-involvement” (Deci & Ryan, 2008, p. 182).

Self-determination theory has been applied to a variety of areas within health care and education, however there does not appear to be any research applying and measuring the outcomes of the use of self-determination theory to health aging campaigns.

Many theories of motivation include the concepts of intentional and unintentional behavior, however self-determination theory also explains motivation and behavior as self-determined / chosen vs. controlled through compliance or defiance. When designing a healthy aging campaign, these regulatory processes should be considered due to the influence they can have on the person’s perception of whether their behavior is internally or externally motivated (Deci, Vallerand, Pelletier, Ryan, 1991). This perception can impact motivation and longer term behavior change. Higher health knowledge levels attained through media sources has been found to positively impact the performance of more healthy behaviors (Moorman & Matulich, 1993).

Self-determination theory believes that motivation is maximized when basic psychological needs of competence, relatedness and autonomy are met. These self-determined behaviors can be based on intrinsic or extrinsic motivation (Deci, Vallerand, Pelletier, Ryan, 1991). Intrinsic motivators that support healthy aging for some older seniors includes a love of nature resulting in regular physical activity, reduced stress levels and healthy body mass index.
through walks outdoors; and/or enjoyment of reading and puzzles which supports older seniors to stay cognitively healthy. Healthy aging campaigns would not be necessary, if all of the modifiable risk factors associated with aging had intrinsic motivators, for all people. However, as over 90 percent of Canadians 65 years of age or older have 1 or more chronic diseases (Government of Canada, 2012) extrinsic motivation through public health education is deemed a social responsibility.

Some health campaigns use extrinsic motivation of control to support motivation of behavior – through punishment and/or reward. For example, reward lotteries have been found to be effective in some studies. A study on a smoking cessation lottery found that of the “1,167 people who entered, 29.2% self-reported being smoke-free at 4 months” (Chapman et al, 1993, p. 423). However, other studies have found that the numbers of actual “smokers” is much less. One study found that 34% of those who entered the contest were never or ex-smokers (Cahill & Perea, 2005, p. 1).

Learning and behavior change motivated by control tend to be “rote, short-lived, and poorly integrated” into values and skills (Williams, Siazow, Ryan, 1999, p. 993). Weight loss, substance abuse treatment, smoking cessation, prescription adherence, glucose control for patients with diabetes studies have shown that patients with greater autonomy showed higher adherence to treatment plans and improved health outcomes compared to those who responded due to controlled motivation (Williams, Siazow, Ryan, 1999).
In contrast to intrinsic motivation, extrinsic motivation within self-determination theory focuses on the concept of internalization. Internalization is achieved through introjected regulation, identified regulation and integrated regulation. Introjected regulation is when the “regulation of action has been partially internalized and is energized by factors such as approval motive, avoidance of shame, contingent self-esteem, and ego-involvement” (Deci, Vallerand, Pelletier, Ryan, 1991, p. 182). It is based on control and is not truly internalized. The motivation for integrating the behavior into practice is due to control coercion or seduction. Whereas, identified regulation is the conscious valuing of a behavioral goal or regulation, such that the action is accepted or owned as personally important” (Deci & Ryan, 2000, p. 72). The most autonomous for of extrinsic motivation is integrated regulation. “Integration occurs when identified regulations are fully assimilated to the self, which means they have been evaluated and brought into congruence with one’s other values and needs”, “they are done to attain separate outcomes rather than for their inherent enjoyment” (Deci & Ryan, 2000, p. 73).

Many healthy aging campaigns use extrinsic motivation. For example, Healthy Heart campaigns which show 2 seniors laughing and dancing, with the intent of the health promotion advertisement promoting healthy eating and physical activity. The desire for a happy and active life for people of all ages, including older seniors is seductive.

Identified regulation, results when the person truly sees the value and is willing to choose to do the behavior for her / himself. Whereas, integrated
regulation is the most advanced form of self-determined motivation, where the person behaves in a particular manner as they value the outcome which is achieved (Deci, Vallerand, Pelletier, Ryan, 1991). For example, a senior may value the outcomes associated with maintaining a healthy weight but he/she may also love to eat. This could result in an internal conflict, however if the older senior is able to integrate their values - that the love of eating is related to the taste of good food and not eating in excess, the two values can be integrated into one’s actions.

As quality of health is influenced by many modifiable factors, self-determination and autonomy to determine one’s own way to achieve this balance and exercise some control over one’s health is key (Bandura, 2004). Self-determination concepts align with research associated with self-efficacy. Studies have found that health communications fosters the adoption of healthy behaviors when they raise beliefs in personal efficacy (Bandura, 2004). Perceived self-efficacy influences whether people seek out health information when they perceived a risk and whether they utilize health knowledge and adopt the health behaviors (Bandura, 2004) e.g. healthy eating and regular exercise.

In addition, the success of a healthy aging campaign for older seniors will be influenced by factors beyond motivation, including the target audience’s socio-economic status, education, culture, gender, and access to informal and formal supports. In addition to billboards and public service announcements, many health campaigns have identified the need for an
interdisciplinary approach to address the social determinants of health. For example, the “Lighten Up Iowa” campaign included government and social services involvement to address the accompanying economic, educational, environmental, and social conditions identified as contributing barriers to health and wellness (Litchfield et al, 2005).

The field of health communication is defined as the “art and technique of informing, influencing and motivating individual, institutional and public audiences about important health issues” (Parrott, 2004, p. 572). The internalization of these values through knowledge attained through healthy aging campaigns also can have indirect benefits on the health of older adults through influencing the understanding and values of the general public. Children of older seniors can be strong advocates, encouraging and empowering their parents, as well as advocating to the government for programs to support healthy aging e.g. seniors exercise and recreation classes. Advocacy based on public awareness and due to the passion and encouragement of health practitioners can influence policy decisions and change legislation e.g. smoking legislation.

In addition to the psychological considerations when developing a healthy aging campaign for older seniors, there are the physical changes (including brain functioning) that occur through the aging process which could have a practical impact which needs to be considered and addressed when crafting the messaging for the healthy aging campaigns. With age there tends to be a loss of some cognitive flexibility, and a reduction in frontal brain functions
associated with planning, abstract thinking, and cognitive processing. As well, there is often a shift in memory functioning, e.g. memory of details lessens but the memory of the overall idea or message may be unaffected (Southwell, 2010).

**Conclusion**

To answer the research question, this paper used secondary data collection and analysis and explored ways in which healthy aging campaigns targeted at older seniors have used intrinsic and extrinsic motivation to influence behavior.

The use of an interdisciplinary approach provided a more comprehensive understanding of not only the research question from a psychology and health perspective but also the integration with medical, physiological, social and communication studies.

While scholarly articles were used, the qualitative and quantitative data and the theoretical perspectives associated with self-determination theory and the subsequent analysis was primarily based on academic papers written by Deci and Ryan (Self-determination theory: A macrotheory of human motivation, development, and health (Deci & Ryan, 2008), Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being (Deci & Ryan, 2000), and Facilitating health behaviour change and its maintenance: Interventions based on self-determination theory (Deci, Patrick, Ryan & Williams, 2008). Most of the scholarly articles on self-determination theory are written by Deci and Ryan.
A potential gap in this paper is that this research question, as well as the discussion papers related to health promotion and aging funded by the World Health Organization and the Canadian government are written under the assumption that health promotion is a critical function of the government to ensure the success of society. As such, the choice of research question does produce a level of research bias, which may have unconsciously influenced the inclusion or exclusion of information.

To further the interdisciplinary nature of this paper, inclusion of an economic perspective would add to the transferability of self-determination theory based healthy aging campaigns into practice. As public stewards of tax payer dollars public organizations are often required to demonstrate the cost effectiveness of their program/strategy as part of their evaluation.

Another area for exploration for future research could be the relationship of other theories and models on the research question, including communication theory, theory of planned behavior, social cognitive theory and health belief model. While there are similarities in all of these theories, the uniqueness of each theory may broaden the opportunities to motivate older seniors to limit their modifiable risk factors to support healthy aging.
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