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Moving Canadian governmental policies beyond a focus on individual lifestyle: some insights from complexity and critical theories

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SUMMARY

This paper explores why Canadian government policies, particularly those related to obesity, are 'stuck' at promoting individual lifestyle change. Key concepts within complexity and critical theories are considered a basis for understanding the continued emphasis on lifestyle factors in spite of strong evidence indicating that a change in the environment and conditions of poverty isare needed to tackle obesity. Opportunities to get 'unstuck' from individual-level lifestyle interventions are also suggested by critical concepts found within these two theories, although getting 'unstuck' will also require cross-sectoral collective action. Our discussion focuses on the Canadian context but will undoubtedly be relevant to other countries, where health promoters and others engage in similar struggles for fundamental government policy change.

Key words: complexity theory; critical theory; health policy; health promotion

INTRODUCTION

Over the past two decades, health promotion programmes and policies have had what some call a 'lopsided' emphasis on individual lifestyles, with limited attention given to addressing the broader social, economic and political factors that create and produce health inequities (Stokols, 1992, 1996; Swinburn *et al*., 1999; Lang and Rayner, 2007; Potvin and McQueen, 2007; Raphael, 2008; Sacks *et al*., 2008, 2009). Individual-level interventions have had some success, but those who benefit most are generally from the advantaged demographic—they have economic resources, and are well-situated socially and economically to gain from the interventions (Link and Phelan, 2005).

Within Canada, the focus on individual lifestyle is evident in many government policies aimed at preventing obesity as most policies

'rely on the individual as the source of action' (Potvin and McQueen, 2007). There is an overwhelming failure on the part of government policies to address the underlying forces (socio-economic and political) that have shaped numerous health issues including the obesity epidemic (Fogelholm and Lhit-Koski, 2002; Coburn *et al*., 2003; Link and Phelan, 2005; McQueen and Kickbusch, 2007; Raphael, 2008; Drewnowski, 2009; for a review see Sacks *et al*., 2008). 'Obesogenic environments' prevail; or, in other words, environments which *promote* obesity in individuals and populations because the 'surroundings, opportunities, and conditions of life' all encourage the overconsumption of high-caloric foods, and a sedentary, non-physically active lifestyle (Swinburn *et al*., 1999). Individuals are continuously blamed for unsuccessful modifications to their lifestyle (Hunter *et al*., 2009), even though living in an obesogenic environment (which includes living in conditions of poverty) makes achieving a healthy lifestyle close to impossible. These obesogenic environments are part of structural injustices which are 'social structures, practices and norms that lead to disproportionate social suffering for particular categories of people or communities' [(Sandler, 2007), p. 277]. Indeed, obesity clearly highlights how structural injustices can quickly translate into an epidemic (Potvin and McQueen, 2007; MacLean *et al*., 2009; Raphael, 2008, 2009). Challenging and altering these structures require, at least in part, a shift in government policies so that the underlying forces shaping obesity are addressed (Eakin *et al*., 1996; Stokols, 2006; McQueen and Kickbusch, 2007; Potvin and McQueen, 2007; Raphael, 2008).

There are Canadian government public health policy documents which acknowledge the links between poverty and poor health outcomes, including obesity, and that recognize the need to change the 'environment' [(e.g. Cismaru, 2008; Seeman, 2008; Raphael, 2009)]. Some have also argued for the development and implementation of governmental policies to tackle the socio-economic conditions underlying many health conditions (Eakin *et al*., 1996; Stokols, 2006; McQueen and Kickbusch, 2007; Potvin and McQueen, 2007; Raphael, 2008). However, progress in attempting to address such issues has been limited. For example, within one Canadian province (British Columbia), there is an initiative (ActNow BC) designed to create healthy communities by having schools, employers and local governments develop and promote programmes aimed at enhancing individuals' ability to make healthy choices related to food, activity and tobacco. A diversity of programmes exists within this initiative from changing the school environment, so that 'junk food' is not available there, to providing tape measures so that individuals can measure their waist sizes (House of Commons, 2007). Although the initiative clearly demonstrates that 'environments' (such as schools and workplaces) do affect healthy choices, it is still limited in that it fails to comprehensively address key economic issues underlying obesity, and much of the emphasis remains on encouraging individual behavioural change.

In this paper, we debate about why Canadian government policies are, for the most part, 'stuck' at promoting individual lifestyle change. We discuss key concepts within complexity and critical theories that we believe help to explain the continued emphasis on the individual and lifestyle factors. We also point to key concepts within these theories that suggest opportunities to become 'unstuck' from the individual-level lifestyle interventions and move more meaningfully towards addressing the underlying causes of the obesity epidemic.

We have chosen to utilize complexity theory as it allows us to conceptualize governments as 'systems' with a history that shapes the current decisions and actions. Complexity theory also points to sub-parts or sub-components of systems as interactive and constantly evolving, thus providing a means of understanding the relationships between government departments at various levels. It further points to possibilities for change within a system. However, within complexity theory, systems are devoid of power differences across and within the sub-systems, and for this reason we have turned to critical theory to provide a lens through which we might examine power dynamics related to policy development and implementation. Critical theory draws our attention to power struggles within the policy implementation process, and to the role of dominant interests and ideologies in maintaining particular policies, as well as the possibilities for change through internal contradictions in the 'system'.

In order to ground our discussion of complexity and critical theories in the context of the

obesity epidemic, we provide illustrative policy examples. These examples are not intended to be a comprehensive list of policies, but were selected to highlight key concepts that explain the perpetuation of the emphasis on lifestyle policy initiatives. The specific policy examples are from the Canadian context, but our discussion will undoubtedly be of value and applicable to other countries, where health promoters and others engage in similar struggles to move beyond individual-level lifestyle-focused government policies and address the underlying forces that shape and reinforce the obesity epidemic. It is important to note that our commentary does not present a complete explanation of the ongoing hold on individual behavioural change strategies, but rather offers a modest contribution to the ongoing discussion about the nature of the barriers, and how we might move towards the development, integration and implementation of government policies aimed at addressing the structural conditions that shape health inequities and specifically the obesity epidemic.

WHY GOVERNMENT POLICIES ARE 'STUCK' AT INDIVIDUAL BEHAVIOUR AND LIFESTYLE CHANGE

Complexity theory

Complexity theories are based on the notion that systems are complex, and these systems change and evolve as a function of the interaction of their various components (Manson, 2001). There are many variations of complexity theory, but in general they seek to understand complex adaptive systems, and to explain how the systems remain static over time, or conversely how they evolve into new systems. Through the lens of complexity theory, we conceptualize the Canadian government as a 'system' with various departments or agencies (e.g. Department of Health, Department of Industry, Trade and Commerce etc.) functioning as separate but nevertheless connected sub-components within the larger system. Complexity theory offers a compelling explanation of how systems can constrain decision-making or, alternatively, result in a change in directions. Two specific concepts within complexity theory assist in understanding why the Canadian government continues to emphasize individual behaviour change strategies with respect to the obesity epidemic: (i) history and (ii) feedback loops.

Complexity theory component 1: history. Within complexity theory, history is defined as critical past decisions that shape the path of a system and may constrain future actions (Manson, 2001). At least one key historical Canadian event appears to be shaping the emphasis of the Canadian government system on policies related to individual lifestyle issues and obesity. This 'historical event' was a social marketing and communication campaign called 'ParticipACTION' which was launched across Canada over 30 years ago in order to encourage physical activity in all age groups. This programme is recognized as one of the 'longest-running communication campaigns to promote physical activity *in the world*' [(Edwards, 2004), p. S6; our emphasis], and coincided historically with the rise of a neo-liberal agenda that originated in the politics of the UK's Prime Minister Margaret Thatcher and the US President Ronald Reagan (Navarro, 2009). The implications of the new politics for the health sector included 'the need to reduce public responsibility for the health of populations, individuals' personal responsibility for health improvements [and] an understanding of health promotion as behavioral change' [(Navarro, 2009), p. 425].

Interest in ParticipACTION waned, but Canadian government policy makers are now looking back at this initiative with renewed interest as a strategy to address the current *obesity epidemic*. The original advertisements have reappeared on Canadian television (Tremblay, 2007), and Canada's current federal government led by Conservative Prime Minister Stephen Harper committed $5 million to assist in the reestablishment of the non-profit organization as well as other federal initiatives, including research to measure the extent of physical inactivity among children, a tax credit for parents enrolling their children in fitness activities and clinical practice guidelines on the management and prevention of obesity in adults and children. All are heavily focused on the individual behavioural change. There is a discussion about strengthening the framework for regulating advertising to children, suggesting that there is an interest in altering the 'environment'. However, the main focus remains on

motivating individuals to change their behaviours, with no mention of addressing the economic insecurity that influences people's food choices. Attention is heavily centred on having individuals change their physical activity practices through incentives and encouragement (Koplan and Dietz, 2008), thus failing to adequately address the other side of the 'energy-balance equation', dietary intake (Kirk *et al*., 2010). The history of ParticipACTION appears to have played a significant role in this limited focus.

Complexity theory component 2: feedback loops. Complexity theory also suggests that systems function with 'feedback loops' that can drive change (i.e. positive feedback) or 'lock in' system behaviour and stifle change (i.e. negative feedback). To illustrate how a feedback loop can 'lock in' a policy initiative thus stifling the structural change needed to address the obesity epidemic, we consider the 'Health Promoting Schools' initiative in Nova Scotia, one of Canada's Eastern provinces. This initiative consists of policies and programmes that support physical education and nutrition classes in schools, the removal of junk food from school settingsand the availability of healthy lunches within the school setting (Veugelers and Fitzgerald, 2005). The programme has been deemed 'successful' in improving children's diets and weight (Veugelers and Fitzgerald, 2005), and this 'positive feedback' has led to the programme's expansion from an initial 8 schools to 40 (House of Commons, 2007). Yet, the 'Health Promoting Schools' initiative does not fully address the underlying conditions that promote childhood obesity. In fact, it has 'locked in' policies to focus on the school environment, with an assumption that fundamental change is happening, when it is actually limited in scope. Research indicates that school nutrition programmes often fail to reach the less advantaged (Raine *et al*., 2003), and even when they do provide access to nutritious foods, the programmes do not address the obesogenic environment outside of the school context. This non-school environment continues to result in obesity, particularly within poor communities, where economic conditions ensure that individuals' 'lifestyle' remains centred on the consumption of low-cost, high-caloric foods. Research in Nova Scotia demonstrates that a family of four living on income assistance is currently unable to afford a nutritious diet (Williams *et al*., 2007), and without a change in government policies to ensure much higher social assistance levels and minimum wages that provide families with an income that can support healthy living, the obesity epidemic will prevail. This means that healthy school policies are of little value outside the school context (Ransley *et al*., 2007), but the perceived 'positive feedback' on their effectiveness locks the system into supporting these limited initiatives, while ignoring the broader obesogenic environment.

POSSIBILITIES FOR GOVERNMENT POLICIES TO BECOME 'UNSTUCK': OPPORTUNITIES FOR SYSTEMS CHANGE

Although complexity theory suggests that 'history' and 'feedback loops' may lock systems into current lifestyle-oriented practices thus failing to consider a fundamental shift to a new way of thinking, systems can and do change.

Complexity theory component 3: critical point. A third component of complexity theory suggests that systems reach a 'critical point' when they are 'at the edge of chaos'. The critical point is defined as a transition phase wherein a seemingly ordered system is on the verge of (or coexists with) disorder. It is at this juncture that there is the possibility for substantive system change. We believe that the Canadian government 'system' may have reached a critical point with respect to the obesity epidemic. Given the magnitude of the epidemic and associated economic costs, the system may be in a state of readiness for change. The total direct costs attributable to obesity in Canada are estimated at $6.0 billion (2006 data), a figure which corresponds to 4.1% of total health expenditures (Anis *et al*., 2009). Not surprisingly, the indirect costs of obesity are estimated to be much higher (Walker and Colman, 2004). Future projections are also grim. Medical systems worldwide, including Canada, are 'swamped' by an epidemic of non-insulin-dependent diabetes and coronary heart disease [(Popkin and Doak, 1998), p. 112], which will be exacerbated if current trends related to obesity continue.

Complexity theory component 4: adjacent possibles. The current and projected economic and health-care costs, together with needed changes in infrastructure in the public sectors outside of health (e.g. the need for larger seats in classrooms to accommodate larger students), may provide an 'opening' for government policies to begin to move beyond a focus on the individual in order to address obesity. However, according to complexity theory, the shift from the critical point or edge of chaos to substantive change may need support through a fourth component of complexity theory—'adjacent possibles'. 'Adjacent possibles' are proximal initiatives that are one step removed from the existing system but that indicate that substantive change is possible, and reveal directions for system change. Given the global nature of the obesity epidemic (Popkin and Doak, 1998), 'adjacent possibles' for the Canadian government system may represent the policy directions in other countries with lower obesity rates. The ease of communication across borders enables policy-makers to access information from other countries about 'what works' (and, conversely, 'what does not work') to maintain the optimum health of populations and prevent obesity.

Sweden is a potential 'adjacent possible' because it ranks 22nd out of 30 countries in obesity rates (among individuals 15 years of age and older), in contrast to Canada which ranks 11th (Sassi *et al*., 2009). Sweden's government policies seek to ensure healthy living conditions for all, and reduce social and economic inequities. Within the Swedish public health arena, the focus is on addressing determinants of health and disease at the *societal level* (Wall, 2001, our emphasis), whereas the Canadian government remains focused on encouraging lifestyle changes through individual behavioural change models. Canada's welfare system is based on a hands-off approach to the market economy, with relatively little 'interference' by the State. State intervention serves as a means of 'last resort' for the poor or the destitute, and welfare benefits are kept to a minimum to avoid 'dependence on the State' (Bryant, 2009). In contrast, Sweden embraces a social democratic welfare state and values of universalism. Economic resources are distributed to achieve equality and the elimination of poverty (Bryant, 2009).

The Swedish example represents an 'adjacent possible', offers hope for the Canadian system to see change as possible and illustrates how government policies can address obesity. We are not suggesting that Sweden is the only 'adjacent possible', but it is a widely recognized example of a country which has (largely through its government policies) helped to ensure low obesity rates, and therefore is illustrative of 'what might be'. Nevertheless, even with the knowledge of 'adjacent possibles', complexity theory suggests that change within a system is largely unpredictable. For this reason, and because within complexity theory, the system is largely devoid of power struggles, we turn to critical theory to further help us understand both the continued focus on individual behavioural change within Canadian government policies as well as 'openings' for change.

POWER AND THE OPPORTUNITY TO BECOME 'UNSTUCK'—OR NOT

The value of critical theory is that it recognizes the role of power dynamics and human agency in social change (Davidson *et al*., 2006). Key concepts within critical theory not only help further illuminate why policies have remained focused on lifestyle issues (despite a rising obesity epidemic and evidence that this focus is inappropriate), but also how internal contradictions within the system might be taken advantage of in order to move us towards getting 'unstuck' from these policies. The key concepts that we believe are of value within critical theory are: power, oppression and domination and contradictions.

Critical theory

Critical theory component 1: power. A key contribution of 'critical theory' to the understanding of how government systems operate, and the possibility of change, is the notion of power relations, and power inequities between and among different parts of the system. Applying the notions of power and power inequities to 'government systems', we suggest that some government departments have greater power than others to create change or conversely to tie the 'system' to a particular path. Neo-liberal welfare states, such as Canada, are committed to the dominance of the free market,

which means that government departments that are directly or indirectly linked to ensuring that businesses operate 'freely' dominate within the overall government bureaucracy or system. Departments of Finance, Industry, Trade and Economic Development have greater power than Departments or Ministries of Health (Lavis *et al.*, 2001) as represented by larger budgets, a greater number of staff and more prestige than Departments of Health. The 'power' of certain government departments also prevails because of the dominance of a neo-liberal ideology that justifies and legitimates giving more or less free reign to the market.

It is well known that policies within departments outside of the Health Departments can influence a population's health (Havala Hobbs *et al.*, 2004; Havala Hobbs, 2008), yet non-health departments are not concerned with the health of populations. As Lavis *et al.* (Lavis *et al.*, 2001) note, the 'health' value of a Department or Ministry of Health is different from the economic development and profit-oriented values of the Department of Industry, Trade and Commerce. This holds true even when the products sold by businesses are contributing significantly to the poor health of the population, as the operation and proliferation of fast food restaurants demonstrate. The responsibility for the health of the population remains within a silo in relatively powerless health departments. Moreover, even within health departments, health promotion and the primary prevention of health problems remain what a previous Minister of National Health and Welfare of Canada refers to as a 'poor cousin' (in terms of budget and resources) to medical care (Begin, 2007). The focus even within Health Departments is on responding to, and treating the complications and diseases associated with obesity, rather than implementing policies that would play a major role in preventing obesity such as a proper standard of living for all, adequate green spaces and supports for day-to-day physical activity, a ban on cheap high-caloric foods etc.

Critical theory component 2: oppression and domination. Linked to power of certain government departments are the notions of oppression and domination. Within critical theory, certain interests dominate over others because of their power and the underlying ideology which supports their power position. These interests 'oppress' the relatively powerless as a means of maintaining their dominance. A further contribution of critical theory to our understanding of why policies remain tied to individual-level change, therefore, lies in the concepts of oppression and domination. We suggest that within the Canadian government system, one can identify the 'oppressed policy makers' who are relatively powerless to affect change because of the domination of the wider system that is organized around a neo-liberal agenda (Davidson *et al.*, 2006). Policy makers within Departments or Ministries of Health who want to develop policies to make changes in the obesogenic environment are relatively powerless to do so because the wider system is dominated by larger and more powerful departments, and by notions of individual responsibility for one's life including one's health. Indeed, the Public Health Agency of Canada has indicated an interest in tackling the 'social and physical environments' that promote poor health, particularly within poor communities, but such a mission has been given little attention within Canada's neo-liberal agenda. As Raphael (Raphael, 2008) notes, there is a 'strong bias towards understanding health problems as individual problems rather than societal ones' (p. 226).

Given the dominance of the neo-liberal interests, policy makers committed to changing the obesogenic environment may actually feel obligated or pressured to support individual-level change because this is the dominant discourse, and because it creates at least some rapid, clear adjustment—even if only among a few groups already well positioned to benefit such as well-resourced individuals and communities. This oppression and relative powerlessness is ultimately detrimental to the well-being of the population, particularly poorer communities (Davidson *et al.*, 2006; Lang and Rayner, 2007), but for those working in the 'system', it may appear that doing something is better than doing nothing.

POTENTIAL TO OVERCOME BARRIERS TO POLICY CHANGE: HOW TO GET 'UNSTUCK'—CONTRADICTIONS AND SOCIAL CHANGE

Critical theory component 3: 'contradictions'. We have painted a somewhat bleak picture for the future of policies that will adequately address obesity in Canada. However, all is not lost—there is hope for the future. Contradictions

within the system are key to substantive social change, according to the perspective of critical theory. Within a system, opposites interact to help create movement towards substantial change, and we believe that a key contradiction is brewing within the Canadian public system in terms of the obesity epidemic. On the one hand, government policies and programmes are supporting and/or not interfering with businesses, which are reaping great profits from the sale of unhealthy foods (e.g. high-fat foods, sugary drinks). On the other hand, the public health, social and infrastructure costs related to the obesity epidemic are mounting dramatically, and there is a growing public awareness of these costs. Public pressure is mounting on governments and industry to alter current practices, and there has recently been some movement towards beginning to alter the obeseogenic environment as is evidenced in a legislated ban on transfats in restaurants in one province in Canada (British Columbia) (Point, 2008; National Conference of State Legislatures, 2009). At the same time, there is some movement of the market towards providing consumers with healthy foods (Ludwig and Nestle, 2008), as large corporations, such as McDonald's fast food corporation, are beginning to offer 'healthier choices' alongside the traditional unhealthy options. However, further substantive policy change is needed. Governments need to take a more active role in creating this change. The food industry needs universally to provide nutritious low-cost food, and there is a need for restrictions on the number of fast food stores in general, but specifically within poor neighbourhoods. Policies to support a living wage (welfare, employment insurance, minimum wage etc.) and affordable housing to enable families with the means to purchase a healthy diet are advocated by researchers and community groups [e.g. (Williams *et al*., 2007; Hunter *et al*., 2009)] but need to be implemented and integrated into policies across government departments.

CONCLUSIONS: WHERE DO WE GO FROM HERE?

It has been our argument in this commentary that key concepts from complexity theory and critical theory help us understand the Canadian government as a 'system', and how it has become 'locked' into a focus on individual-level behavioural change strategies with respect to the obesity epidemic. At the same time, the notions of 'edge of chaos' (complexity theory) and 'internal contradictions' (critical theory) point to opportunities for change. However, even though both theories shed light on opportunities for change, we believe that they fail to deliver in terms of how we might actually and substantially move government policies in the direction of fundamentally altering the obesogenic environment. Although the 'time' might be right for change, we believe that what is needed to actually create the change that is required is collective action. Indeed, to fully exploit the current opportunities for change within the system, we must organize collectively. And, it is our contention that such collective action must be developed by health promoters and others inside and outside the health field working together as catalysts for the change in all government and political sectors.

Significant changes will be needed in multiple sectors of the policy arena, including departments far beyond health. As Aasrud (Aasrud, 2009), Deputy Ministry of Health and Care Services in Norway, notes, Ministries of Health need to influence other Ministries. In the case of Canada, Ministries of Health have, to date, been relatively powerless, and we believe that the cross-sectoral policy change requires aligning with other social movements also wanting governments to implement policy changes in the socio-economic and natural environment. There is a need to join forces, for example, with the environmental movement interested in the development of green spaces, and anti-poverty groups wanting to improve the living conditions of the poor and working poor. By combining with other movements, as well as government policy makers who are committed to making substantial changes, it might be possible to more effectively encourage, facilitate and produce the needed policy actions (Swinburn, 2008). This will require us to get out of our silo as health promoters, and become 'activists for change' with others as a way of creating a shift in power dynamics. The neo-liberal thinking which has in Canada for years 'privileged the ideology of free markets, competition and profits' [(Baum, 2009), p. 76] will have to be challenged and replaced with a discourse that

places the health of the people at the forefront. But this shift can only occur with voices united in change, and voices powerful enough to make a difference within government circles.

As part of this collective action movement, critical debate is urgently required in Canada on the health implications of social and economic policies that render the health of populations of secondary importance to the economic system (Hunter *et al.*, 2009). Similarly, critical debate is needed about how to promote the active, sustained and collective involvement of multiple sectors and groups to address obesity. There needs to be 'recognition of the legitimacy of involvement in social and economic policies' as a means to impact the health of all [(Lessard and Raynault, 2009), p. 248] because the consequences of ignoring the real factors at play in the obesity epidemic, and remaining focused on 'reactive' solutions rather than the promotion of health and prevention of obesity will be dire, indeed (Brownell and Warner, 2009).

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