

Chapter #9

SENSITIZATION SESSIONS FOR HEALTHY ENVIRONMENTS

Stakeholders' point of view

Marie-Claude Rivard¹⁻², Maude Boulanger²⁻³, Sacha Stoloff¹⁻²,
François Trudeau¹⁻², & Sylvie Ngopya Djiki¹⁻²

¹Department of Human Kinetics, Université du Québec à Trois-Rivières, Canada

²Groupe interdisciplinaire de recherche appliquée en santé, Canada

³Department of Psychology, Université du Québec à Trois-Rivières, Canada

ABSTRACT

Healthy food choices and regular physical activity are two key behaviours that help prevent the premature development of chronic diseases, obesity and their complications. To raise awareness on the issue, numerous sensitization sessions were held across Quebec to sensitize stakeholders on ways of facilitating healthy environments (physical, economic, sociocultural and political) that promote healthy food choices and active lifestyle. The objectives were to 1) explore the knowledge and skills acquired during the sessions and 2) examine the transfer from sessions toward concrete actions for fostering environments conducive to healthy lifestyles. Individual interviews were conducted with 52 stakeholders (F=41; M=11). The results reveal, first, that most of the stakeholders consolidated or even improved their knowledge and skills and were better able to recognize the four types of environments in their respective workplaces. They also developed a common vocabulary and a better understanding of the influence of environments on lifestyles. Second, the transfer into action, although possible, was more problematic because the concerted actions needed to facilitate healthy environments are complex. These results will be discussed in light of Kirkpatrick and Kirkpatrick's four-level pyramid model. Sensitization sessions can be viewed as a societal project encouraging influential stakeholders to develop environments conducive to healthy lifestyles.

Keywords: healthy environments, sensitization sessions, stakeholders, impacts.

1. INTRODUCTION

The World Health Organization (WHO) has emphasized the widespread problem of chronic diseases and obesity (WHO, 2014). WHO predicts that rates of obesity and overweight will continue to rise from now to 2030 (WHO, 2014). Although chronic diseases are a multifaceted health problem, the literature leaves no doubt that two important reasons for the epidemic are overeating and a sedentary lifestyle (WHO, 2004, 2013). Many experts argue that environments - physical, economic, sociocultural and political - play a greater role than biological factors in this increase (Booth, Pinkston, & Poston, 2005; de Souto Barreto, Cesari, Andrieu, Vellas, & Rolland, 2017; Hill, Wyatt, Reed, & Peters, 2003). The rising prevalence of preventable chronic disease and obesity has led to an ongoing search for effective preventive interventions along with strategies to promote health. Numerous interventions promoting healthy environments have been implemented worldwide to induce influential stakeholders to facilitate environments more conducive to healthy lifestyles (Booth et al., 2005; WHO, 2014).

2. BACKGROUND

Numerous measures and action plans have been implemented in countries throughout the world to fight obesity and promote healthy lifestyles. Examples include *Healthy People* a United States initiative (Office of Disease Prevention and Health Promotion, 2014), *Health Program* in Europe (Commission européenne, 2014) and the *Integrated Pan-Canadian Healthy Living Strategy* in Canada (Public Health Agency of Canada, 2010). While these broad governmental policies target a wide audience and inspire diverse initiatives in a variety of industries, they remain distant to users. To date, the literature contains nothing comparable when it comes to sensitizing thousands of actors in the field to sessions on healthy lifestyles. Of these various initiatives, many interventions promoting healthy environments have been implemented to induce influential stakeholders to facilitate environments more conducive to healthy lifestyles (Cohen, Scribner, & Farley, 2000), among other projects and programs in Canada (Gadai, Boulanger, Trudeau, & Rivard, 2018). A systematic Canadian review by Gadai and his colleagues confirms the popularity of interventions regarding healthy lifestyles; a sharp increase in the number of studies on this subject was observed between 2010 and 2015. Two major lifestyle components - physical activity and nutrition - and two environmental aspects - neighbourhood and built environment - were the elements most frequently examined - echoing the physical environment. The authors underscore the relevance of documenting all types of intervention on favourable environments previously neglected by researchers, namely, the spheres of political and sociocultural action.

Regardless of sector of activity, an evaluation and monitoring process is required to appreciate the changes effected based on initial intention and anticipated degree of change (Handicap International, 2012). Evaluative research is essential for studying not only the impacts, but also the process of implementing population and large-scale approaches (Schultz et al., 2011). To reach a maximum number of individuals, a population sensitization intervention is the first stage of the behaviour change process (Prochaska & DiClemente, 1985). Such an approach has been shown to be an effective and powerful strategy (Gordon, McDermott, Stead, & Angus, 2016).

2.1. Context

In Quebec, the 2006-2012 governmental action plan to promote healthy lifestyles and prevent weight-related problems, entitled *Investigating for the Future* (Ministry of Health and Social Services, 2006), emphasizes the promotion of healthy lifestyles based on physical activity and healthy eating. This plan served as a lever for multiple networks of stakeholders focused on effective or promising actions to promote healthy lifestyles, including an approach aimed at facilitating the four healthy environments (physical, economic, sociocultural and political). How do these four types of environments can influence healthy eating and physical activity? Examples include: a neighbourhood with good walkways, sidewalks and bike paths or the proximity of healthy food markets (physical environment); the costs associated with food and physical activity practice (economic environment); a community's beliefs and values in terms of gender, ethnicity, religion and tradition in addition to elements relating to the structures and modes of operation of individuals or groups of individuals (sociocultural environment); and the regulations, laws, policies and institutional or governmental rules for the food and physical activity sectors (political environment).

With a joint initiative by *Québec en Forme* and the *Comité québécois de formation sur les saines habitudes de vie*, an intervention was deployed across Quebec to sensitize stakeholders in various sectors (school, municipal, community, health and government/political organizations) to the need for environments that encourage routine physical activity and healthy food choices and therefore help prevent the development of obesity and other chronic diseases.

The main goal of this province-wide effort was to implement a social innovation by: 1) dispensing information regarding all four healthy environments needed to prevent problems of obesity and other chronic diseases, 2) highlighting the effects of these environments on lifestyles, and 3) identifying the means of action needed to build environments conducive to healthy lifestyles. The intervention was unique in that it comprised 1) a sensitization session for stakeholders, 2) the promising combination of four favourable environments, 3) the power of influence by sensitized stakeholders and, especially 4) a vast population approach. This large-scale intervention was piloted by some thirty trainers who had previously received training to conduct “sensitization sessions”. Approximately 15,000 stakeholders from the school, municipal, community, health and government/political sectors were sensitized during a little over 1,000 sessions (~ 3 hrs. and ~ 15 stakeholders / session) conducted between September 2012 and December 2015. Considering the importance of this massive intervention, a process was put in place to evaluate these sessions (Schultz et al., 2011). Although the study is part of a larger evaluation process, only the point of view of stakeholders who received the sensitization session and participated in individual interviews is discussed in this chapter. The relevance of involving stakeholders who can significantly influence the four environments is underscored in the literature (Cohen et al., 2000). These stakeholders include employees in the various sectors, all of whom have the potential to take action in their respective workplaces.

3. CONCEPTUAL FRAMEWORK

The 2006 Kirkpatrick Evaluation Model involving four levels of impacts served as a theoretical and methodological guide for this study. The use of this model makes it possible to qualify the nature of the impacts resulting from a program, in this instance, a sensitization session. It proved to be the one best suited to our objectives, since it appears no model has yet been developed for specific sensitization sessions. The Kirkpatrick and Kirkpatrick model (2006) consists of a pyramid with four levels of impacts, ranging from the base (level 1) having the least impact, to the top (level 4) having the most impact. Satisfaction (level 1), at the base, refers to participants' degree of satisfaction with an activity, in this case, the sensitization session. Acquisition (level 2) is how well participants acquire the expected knowledge and skills based on their participation in the session. Transfer (level 3) refers to how participants apply what they learned in practice. Finally, Organizational performance (level 4), at the top of the pyramid, indicates the extent to which targeted results are achieved and integrated into the organization's decision-making and action processes. Regarding the impacts on the work performed by sensitized stakeholders, we focused on the acquisition of knowledge and skills (level 2) and the transfer of theory into practice (level 3).

4. OBJECTIVES

The objectives were 1) to explore the knowledge and skills acquired during the sessions (level 2) and 2) to examine the transfer from sessions toward concrete actions for fostering environments conducive to healthy lifestyles (level 3).

5. METHOD

5.1. Participants

The reference group consists of 52 participants (F=41, M=11; \bar{X} =43 years) randomly selected from those who took part in a sensitization session, responded in advance to an online questionnaire (previous research phase) and agreed to participate in a subsequent individual interview (between February and April 2014). The participants include stakeholders from five professional sectors: school (n=8), municipal (n=7), community (n=11), health (n=14) and government/political organizations (n=12). These are actors of influence whose tasks are likely to influence one of the four environments presented in the sensitization session.

5.2. Tool and analysis strategy

A qualitative approach was best suited to achieve our research objectives (Poupart, 2011). We privileged this approach by using telephone interviews to easily reach participants throughout the 17 administrative regions of Quebec. The personal interview is a highly useful tool for understanding an individual's point of view, grasp of experience and insight for purposes of in-depth analysis (Baribeau & Royer, 2012). Direct access to stakeholders' live experience is precisely what enables a deeper understanding of a situation (Savoie-Zajc, 2009; Yin, 2014). With the flexible interaction of the "semi-directed" interview, a rich understanding of the subject of study is gained at the same time (Savoie-Zajc, 2016). The interview included 11 questions and was developed based on the Kirkpatrick and Kirkpatrick model (2006), particularly levels 2 and 3, keeping our two objectives in mind. The phone interviews, which lasted about 17 minutes, were conducted during the spring of 2014, audio-recorded and fully transcribed. A deductive content analysis (Patton, 2002) was performed based on two categories of the Kirkpatrick and Kirkpatrick model (2006). The analysis strategy comprised four stages adapted from Boutin (2007): 1) preliminary readings, 2) grouped statements, 3) identification of sub-categories, and 4) description of findings. Use of the NVivo 8 software facilitated the delineation, coding and grouping of units of meaning, the emergence of sub-categories and content analysis. Two analysts intercoded the data with 98% agreement (Yardley, 2008).

5.3. Limitations

Our qualitative study has certain limitations. Recruitment on a voluntary basis may have skewed the results, since the participants were perhaps more interested in the topic of healthy lifestyles, such as those working in the health sector. However, we think the social desirability often associated with interviews (Savoie-Zajc, 2016) was limited because participants were informed there were no right or wrong answers and the interview style was friendly, casual and respectful.

5.4. Ethical considerations

The Research Ethics Board of the home institution found that an ethics certificate was not necessary insofar as the study was part of a program evaluation. Nevertheless, individuals were free to participate or not in the study.

6. FINDINGS

Findings are presented in keeping with the objectives of the study. First, regarding the knowledge and skills acquired during sensitization sessions (level 2), most participants either learned about the existence of the four favourable environments or honed their understanding of them, as the following statement illustrates: *“The fact of knowing about the four environments helped me better distinguish the types of environments in my context and stay more alert to ways of improving them.”* (Participant#11). The theoretical concepts discussed offered a more nuanced knowledge of favourable environments, and the related concrete examples enabled participants to better grasp the importance of their role in this respect. The session was apparently an opportunity to learn a common vocabulary deemed useful within the context of their work. However, the information acquired seems to have been less significant for stakeholders in the health sector. Indeed, these stakeholders already had the knowledge and skills specific to this area of activity. The concept of lifestyles was an integral part of their daily lives, as the following passages indicate: *“I already had on extensive knowledge in this field [health] before attending the session. My objective in coming was not necessarily to learn more, but rather to establish contact with people in the community.”* (Participant#10) and *“[...] being from this field, we were already working with that, the session confirmed what we were doing.”* (Participant#9).

Our second objective, the transfer of knowledge and skills into concrete actions (level 3), appears possible, albeit complex. On one hand, the vast majority of participants were able to influence their environments to a greater or lesser extent. Influencing the political environment seems more difficult insofar as the interviewees' comments mainly relate to the three other environments. Examples include improved access to sports facilities (physical environment), improved cafeteria and school canteen menus and reduced costs (economic environment), collective walking initiatives (sociocultural environment), etc. In connection with the physical environment, one participant stated: *“I try to focus more on action in my work. I'm developing a corridor for active transportation that encourages alternatives to driving, such as walking or biking (...).”* (Participant#23). Another adds: *“Exercise modules have been installed in the parks.”* (Participant#15). Another person views matters from an economic perspective: *“They set up health combos, cheaper than just buying chocolate, so they really applied the concept of offering a favourable economic environment.”* (Participant#3). On the other hand, organizational challenges proved to be obstacles, notably for stakeholders working in compartmentalized frameworks as government/political organizations without concertation committees or with supervisors having little interest in change. This is the reason for their problems regarding the political environment, as the following excerpt shows: *“I couldn't apply anything at all to my profession because first of all, as a political assistant, I don't have the power to make decisions. All I do is follow orders, and my boss, the deputy, has a very rigid way of looking at things. I really can't change anything.”* (Participant#22).

7. DISCUSSION

Consistent with level 2 of the Kirkpatrick and Kirkpatrick model (2006), our findings show that the sensitization sessions regarding favourable environments fostered a shared vision and sharply improved participants' knowledge and skills. As well, the sessions enabled them to accurately distinguish the four environments related to lifestyles. In other words, distinguishing the four types of environment in their work also led to an improved evaluation of the potential for positive change. In other words, an assessment could clarify achievable goals and identify realistic actions and strategies to implement. In this respect, a sensitization is deemed relevant if it encourages reflection and raises awareness concerning a social problem or a common need (Nexus santé, 1998). The importance of a common vision also becomes obvious in the deployment of every new population initiative (Savoie-Zajc, 1993).

The next findings are in agreement with level 3 of the Kirkpatrick and Kirkpatrick model (2006). Progress was somewhat more modest regarding concrete reinvestment in certain professional sectors, particularly the health sector. In keeping with the literature, it refers to the profile and level of knowledge of the target audience, which must be learned for the purpose of adapting content and strategies (Gérard, 2003; Noyé & Piveteau, 2009). Otherwise, the diversity within stakeholder groups appears to have been an advantage. As Curtis and Riva (2010) point out, health promotion must consider interventions from different domains and contexts in order to build an alliance between actors in different sectors, professions and, even, organizations. Sensitization must reach influential stakeholders having little knowledge of healthy living environments, as is often the case for municipal decision-makers who play a major role in the creation of environments likely to influence citizens' way of life. According to Gérard (2003) and Jetter and Cassady (2006), public policies are important for creating healthy eating environments. In the specific matter of introducing change, policy environment appears to be the most resistant to innovation and physical environment to be the most welcoming (McCreedy & Leslie, 2009). In defense of our study, it should be noted that the deployment of "sensitization session", in various professional sectors, implies that the impacts within the organization (level 4) are actually less important. With this in mind, we propose that a second phase focused on "training" should follow a "sensitization session" in order to optimize the impacts, especially a transfer in practice (level 3) and even an organizational modulation (level 4). Thus, we hypothesize that the evaluation of organizational performance, the top of the fourth level of the Kirkpatrick and Kirkpatrick model (2006), would be more impactful at the "training session".

Our project is unique in that it focuses on sensitization and networking rather than training. It is therefore aimed at the large and highly diverse population that it reaches. The responsibility for a healthy life cannot be left to individuals alone (Québec en Forme, 2014). Accordingly, this project targets groups of stakeholders with an important role to play in promoting health. Furthermore, the sensitization session targeted adults as well as children, something rarely encountered in the scientific literature, if at all (Wolfenden et al., 2014). Collecting and analyzing participants' perceptions of the implementation of this initiative is essential because stakeholders' involvement is one of the keys to successful interventions (Franks et al., 2007, Grimshaw, Eccles, Lavis, Hill, & Squires, 2012). However, the involvement of stakeholders from different professional backgrounds raises challenges related to the collaboration and concerted actions considered necessary in the creation of healthy environments promoting healthy food choices and active lifestyle (Beuret, 2006).

Our study leads us to advance two hypotheses: first, a large-scale sensitization sessions should be held prior to every training phase intended for a targeted public, and second, a sensitization session should be a prelude to a second phase aimed at concrete, long-term impacts in the field. Training sessions focused on developing expertise, for example, have a greater impact potential (Rivard et al., 2016).

8. FUTURE RESEARCH DIRECTIONS

New approaches to healthy lifestyles are emerging in Quebec. We firmly believe that the sensitization sessions are a prerequisite for training sessions. We suggest that future initiatives should target actors most likely to be impacted by sensitization training: those with little or no knowledge of the subject of healthy lifestyles and favourable environments, but having a certain interest in it. We could also potentially improved impacts keeping in mind to develop expertise in key stakeholders with strong powers of persuasion, influence or decision-making (e.g., people in politics). Content better suited to level of expertise is therefore proposed to maximize the impacts of these sensitization sessions. We agree with Curtis and Riva (2010) regarding the importance of putting forward research based on an interdisciplinary strategy. To this end, our hope is that Quebec policymakers will agree to fund training sessions on healthy lifestyles and favourable environments along with parallel evaluation studies.

9. CONCLUSION

Our study's results show that the sensitization session evaluated had an impact on participants' knowledge and skills as well as on their professional practices. A vast population strategy deployed throughout the province of Quebec, combined with the theme of favourable environments together with eating habits and physical activity and based on the influence of stakeholders from different professional backgrounds, was the key to the success of a health sensitization session. We believe this approach can serve as a model in other professional fields whose members are likewise concerned about health behaviours and motivated to act in all four environments. Environments can be examined to determine the type of intervention most likely to affect people's health behaviours. A sensitization session, when used as an education strategy, offers a better understanding of the mechanisms of an intervention and its impacts on users. In light of our study, we argue that actors committed to such an approach are likely to benefit from the sensitization session as a lever for real concerted and sustainable actions over time. The study reveals that the physical environment is the most flexible and highlights the need for a partnership between actors from different sectors to effect improvements in the economic, sociocultural and political environments. Focusing on the potential of the physical environment is crucial because the quality and appearance of physical structures send a message that can influence individuals' behaviours, especially if these individuals possess minimal health knowledge (Cohen et al., 2000). However, a large-scale influence on the political and economic environments that transcend physical and sociocultural environments is also relevant. In short, the four environments cannot be considered separately given that they interact with each other and impact health behaviours.

In conclusion, individuals are not entirely responsible for healthy lifestyles. The improvement of lifestyles and the creation of environments facilitating the adoption or maintenance of healthy lifestyles should be responsibilities shared by all the community.

REFERENCES

- Baribeau, C. & Royer, C. (2012). L'entretien individuel en recherche qualitative: usage et mode de présentation [Individual interview in qualitative research: use and manner of presentation]. *Revue des sciences de l'éducation*, 38(1), 23-45. doi.org/10.7202/1016748ar
- Beuret, J. E. (2006). La conduite de la concertation. Pour la gestion de l'environnement et le partage des ressources [The conduct of the consultation. For environmental management and resources sharing]. France, Paris: Hamattan.
- Booth, K. M., Pinkston, M. M., & Poston, W. S. (2005). Obesity and the built environment. *Journal of American Dietetic Association*, 105(5 Suppl 1), 110-S117. doi.org/10.1016/j.jada.2005.02.045
- Boutin, G. (2007). *L'entretien de groupe en recherche et formation* [Focus group for research and training]. Montréal: Éditions nouvelles.
- Cohen, D. A., Scribner, R. A., & Farley, T. A. (2000). A structural model of health behavior: A pragmatic approach to explain and influence health behaviors at the population level. *Preventive Medicine*, 30(2), 146-154. doi.org/10.1006/pmed.1999.0609
- Commission européenne. (2014). Programme d'action de l'Union dans le domaine de la santé (2014-2020) [Union's action program for health (2014-2020)]. *Journal officiel de l'Union européenne*. Retrieved September 14, 2016, from: <http://eur-lex.europa.eu/legal-content/FR/TXT/HTML/?uri=CELEX:32014R0282&from=EN>
- Curtis, S. & Riva, M. (2010). Health geographies I: complexity theory and human health. *Progress in Human Geography*, 34(2), 251-223. doi.org/10.1177/0309132509336026
- de Souto Barreto, P., Cesari, M., Andrieu, S., Vellas, B., & Rolland, Y. (2017). Physical activity and incident chronic diseases: a longitudinal observational study in 16 European countries. *American Journal of Preventive Medicine*, 52(3), 373-378.
- Franks, A. L., Kelder, S. H., Dino, G. A., Horn, K. A., Gortmaker, S. L., Wiecha, J. L., & Simoes, E. J. (2007). Peer reviewed: school-based programs: lessons learned from CATCH, Planet Health, and Not-On-Tobacco. *Preventing Chronic Disease*, 4(2), 1-9.
- Gérard, F.-M. (2003). L'évaluation de l'efficacité d'une formation [Evaluation of the effectiveness of a training]. *Gestion*, 20(3), 13-33.
- Gadais, T., Boulanger, M., Trudeau, F., & Rivard, M.-C. (2018). Environments favourable to healthy lifestyles: A systematic review of initiatives in Canada. *Journal of Sport and Health Science*, 7(1), 7-18. doi.org/10.1016/j.jshs.2017.09.005
- Gordon, R., McDermott, L., Stead, M., & Angus, K. (2006). The effectiveness of social marketing interventions for health improvement: What's the evidence? *Public Health*, 120(12), 1133-1139. doi.org/10.1016/j.puhe.2006.10.008
- Grimshaw, J. M., Eccles, M. P., Lavis, J. N., Hill, S. J., & Squires, J. E. (2012). Knowledge translation of research findings. *Implementation Science*, 7(50), 1-17. doi: 10.1186/1748-5908-7-50
- Jetter, K. M., & Cassady, D. L. (2006). The availability and cost of healthier food alternatives. *American Journal of Preventive Medicine*, 30(1), 38-44. doi: 10.1016/j.amepre.2005.08.039
- Kirkpatrick, D. L., & Kirkpatrick, J. D. (2006). *Evaluating training programs: the four levels*. San Francisco, CA: Berrett-Koehler Publications Ltd.
- Handicap International. (2012). Guide pratique: réaliser une action de sensibilisation à la situation des personnes handicapées [Practical guide: Achieving awareness concerning the situation of handicapped persons]. Retrieved March 12, 2015, from: http://www.hiproweb.org/fileadmin/cdroms/Handicap_Development/www/index_fr.html
- Hill, J. O., Wyatt, H. R., Reed, G. W., & Peters, J. C. (2003). Obesity and the environment: where do we go from here? *Science*, 299(5608), 853-855. doi.org/10.1126/science.1079857
- Québec en Forme (2014). *Mémoire présenté dans le cadre de la consultation publique sur la stratégie gouvernementale de développement durable «Une société mobilisée de façon durable en faveur des saines habitudes de vie »* [Brief report as part of the public consultation on the government's sustainable development strategy "A society mobilized in a sustainable way to privilege healthy lifestyles"]. Janvier 2015.

- Mccree, M. & Leslie, J. G. (2009). Get Active in Orlando: changing the built environment to increase physical activity. *American Journal of Preventive Medicine*, 37(6 Suppl. 2), 395-402. doi.org/10.1016/j.amepre.2009.09.013
- Ministry of Health and Social Services. (2006). *Investir pour l'avenir* [Investing for the future]. Plan d'action gouvernemental de promotion des saines habitudes de vie et de prévention des problèmes reliés au poids 2006-2012. Québec, QC : Gouvernement du Québec.
- Nexus santé (1998). *Inform + Sensibiliser = Mobilisation réussie!* [Inform + Awareness = Successful Mobilization!]. Retrieved August 8, 2015, from: <http://www.leblocnotes.ca/node/832>
- Noyé, D., & Piveteau J. (2009). *Guide du formateur: concevoir, animer, évaluer une formation* [Trainer's Guide: Design, Facilitate, Evaluate Training] (10^e éd.). Paris, INSEP Consulting.
- Office of Disease Prevention and Health Promotion. (2014). *About Healthy people*. Retrieved October 22, 2015, from: <https://www.healthypeople.gov/2020/About-Healthy-People>
- Patton, M. Q. (2002). *Qualitative Research and Evaluation Methods*. Thousand Oaks, CA: SAGE Publications.
- Poupart, J. (2011). Tradition de Chicago et interactionnisme: Des méthodes qualitatives à la sociologie de la déviance [Chicago tradition and interactionism: Qualitative methods in sociology of deviance]. *Recherches qualitatives*, 30(1), 178-199.
- Prochaska, J. O. & DiClemente, C. C. (1985). Common processes of change in smoking, weight control and psychological distress. In S. Shiffman and T. Wills (Eds.), *Coping and substance use: A conceptual framework*, (pp.345-363). New York: Academic Press.
- Public Health Agency of Canada. (2010). *The Chief Public Health Officer's, Report on the state of public health in Canada 2010. Growing Older - Adding Life to Years*. Retrieved April 21, 2015, from: http://www.phac-aspc.gc.ca/cphorsphc-respcacsp/2010/fr-rc/pdf/cpho_report_2010_e.pdf
- Rivard, M.-C., Trudeau, F., Roy, V., Lemoyne, J., Stoloff, S., Laurencelle, L., Blanchette, S., Boulanger, M., Couture, M.-È., Dubreuil, P., & Ngopva Djiki, S. (2016). *Évaluation de la formation sur les environnements favorables aux saines habitudes de vie (phase 1)* [Evaluation of training on environments favourable to healthy lifestyles (phase 1)]. Rapport final. UQTR/Québec en Forme, janvier.
- Savoie-Zajc, L. (1993). *Les modèles de changement planifié en éducation* [Models for planned change in education]. Québec, QC : Les éditions Logiques.
- Savoie-Zajc, L. (2009). L'entrevue semi-dirigée (5^e éd.) [The semi-directed interview]. In B. Gauthier (Ed), *Recherche sociale: de la problématique à la collecte des données*, (pp.337-360). Québec, QC: Presses de l'Université du Québec.
- Savoie-Zajc, L. (2016). L'entrevue semi-dirigée [The semi-directed interview]. In B. Gauthier & I. Bourgeois (Eds.). *Recherche sociale : de la problématique à la collecte de données* (337-362). Québec, QC : Presses de l'Université du Québec.
- Schultz, J. T., Moodie, M., Mavoa, H., Utter, J., Snowdon, W., McCabe, M. P., & Swinburn, B. A. (2011). Experiences and challenges in implementing complex community-based research project: the Pacific Obesity Prevention in Communities project. *Obesity Reviews*, 12(s2), 12-19. doi.org/10.1111/j.1467-789X.2011.00911.x
- Wolfenden, L., Wyse, R., Nichols, M., Allender, S., Millar, L., & McElduff, P. (2014). A systematic review and meta-analysis of whole of community interventions to prevent excessive population weight gain. *Preventive Medicine*, 62, 193-200. doi: 10.1016/j.ypmed.2014.01.031
- World Health Organization. (2004). Global Strategy on Diet, Physical Activity and Health. Retrieved June, 5 2015, from: http://apps.who.int/iris/bitstream/handle/10665/43035/9241592222_eng.pdf;jsessionid=AA56B215E58E81D7C20B648B328F39FF?sequence=1
- World Health Organization (2013). Follow-up to the Political Declaration of the High-level Meeting of the General Assembly on the Prevention and Control of Non-communicable Diseases. Retrieved March 14, 2016, from: http://apps.who.int/gb/ebwha/pdf_files/wha66/a66_r10-en.pdf
- World Health Organization (2014). Obesity and overweight. Retrieved February 21, 2016, from: <http://www.who.int/mediacentre/factsheets/fs311/fr/>
- Yardley, L. (2008). Demonstrating validity in qualitative research. In J. A. Smith (Ed). *Qualitative psychology: A practical guide to research methods* (235-251). London: Sage.
- Yin, R. K. (2014). *Case study research. Design and methods* (5th ed.). Thousand Oaks, CA: Sage Publications. doi: 10.3138/cjpe.30.1.108

ADDITIONAL READING

- Ngopya Djiki, S., Trudeau, F., & Rivard, M.-C. (2016). Changement de pratiques et d'actions à la suite de séances de sensibilisation sur les environnements favorables aux saines habitudes de vie [Change of practices and actions following sensitization sessions on environments conducive to healthy lifestyles]. *Revue Canadienne des Jeunes Chercheurs en Éducation*, 7(1), 19-29.
- Rivard, M.-C., Boulanger, M., & Stoloff, S. (2016). Trainers as key actors in sensitization sessions toward transformative activities. In M. Carmo (Ed.), *International Conference on Education and New Developments 12-14 June 2016* (287-289). Ljubljana, Slovenia.
- Roy, V., Trudeau, F., & Rivard, M.-C. (2016). Sensibiliser aux environnements favorables aux saines habitudes de vie : Évaluation d'une intervention auprès des personnes-relais [Sensitizing to environments conducive to healthy lifestyles: Evaluation of an intervention with resource persons]. *Revue Française en Santé Publique*, 28(1), 33-42. doi: 10.3917/spub.161.0033
- Stoloff, S., Boulanger, M., Roy, V., & Rivard, M.-C. (2015). Sensitization sessions as the foundation for training transformation activities. *Journal of Education and Learning*, 4(3), 146-154.

ACKNOWLEDGEMENTS

The authors wish to express their thanks to Virginie Roy and Sébastien Blanchette for their collaboration in collecting and analyzing data. We are also grateful to *Québec en Forme* for its financial support.

AUTHORS' INFORMATION

Full name: Marie-Claude Rivard

Institutional affiliation: Université du Québec à Trois-Rivières, Department of Human Kinetics

Institutional address: C.P. 500 Trois-Rivières, G9A5H7, Canada

Short biographical sketch: Marie-Claude Rivard, Ph.D., is an associate professor at the Department of Human Kinetics, Université du Québec à Trois-Rivières. She holds a doctorate in physical activity intervention from Université Laval, Québec. Her research focuses on health education from the perspective of healthy lifestyles and on teacher training in physical and health education. Professor Rivard is a regular researcher at *Groupe interdisciplinaire de recherche appliquée en santé (GIRAS)* at the Université du Québec à Trois-Rivières and *Centre de recherche et d'interventions sur la réussite scolaire au Québec (CRIRES)*.

Full name: Maude Boulanger

Institutional affiliation: Université du Québec à Trois-Rivières

Institutional address: 3351, boul. des forges, C.P. 500, Trois-Rivières (Québec), G9A5H7, Canada

Short biographical sketch: Maude Boulanger, Ph.D. (c) is a doctoral student in psychology and a lecturer at the Bachelor of physical education and health program at the Université du Québec à Trois-Rivières. Her master's studies focused on collaboration between the school and the family as part of the Healthy Schools approach. This approach favors, among other things, the educational success of students. The subject about collaboration in her doctoral studies focuses on another initiative that promotes educational success: the deployment of interdisciplinary projects in the context of entrepreneurial school. Her research interests also include project-based pedagogy, physical activity and methodology approach using qualitative analysis.

Full name: Sacha Stoloff

Institutional affiliation: Université du Québec à Trois-Rivières, Department of Human Kinetics

Institutional address: C.P. 500 Trois-Rivières, G9A5H7, Canada

Short biographical sketch: Sacha Stoloff, Ph.D., is a professor at the Department of Human Kinetics, Université du Québec à Trois-Rivières. She holds a doctorate in education from Université de Sherbrooke, Québec. Her research focuses on professional competency development through reflective practice and training. Professor Stoloff is a regular researcher at *Groupe interdisciplinaire de recherche appliquée en santé (GIRAS)* at the Université du Québec à Trois-Rivières and *Centre de recherche International pour la formation et la profession enseignante (CRIFPE)*.

Full name: François Trudeau

Institutional affiliation: Université du Québec à Trois-Rivières, Department of Human Kinetics

Institutional address: C.P. 500 Trois-Rivières, G9A5H7, Canada

Short biographical sketch: Dr. François Trudeau, Ph.D., is professor and researcher in exercise physiology at the Université du Québec à Trois-Rivières since 1992. He is interested in the role of the school in promoting physical activity among youth, including active transportation, physical education and sport. He also conducts research in rehabilitation through exercise in people with chronic diseases. He is a regular researcher at *Groupe interdisciplinaire de recherche appliquée en santé (GIRAS-UQTR)* and a Fellow of the *American College of Sports Medicine*.

Full name: Sylvie Ngopya Djiki

Institutional affiliation: Université du Québec à Trois-Rivières, Department of Human Kinetics

Institutional address: C.P. 500 Trois-Rivières, G9A5H7, Canada

Short biographical sketch: Sylvie Ngopya Djiki, held a BSc in Chemical, Molecular and Cell Biology at University of Cape Town in South Africa and a Medical Degree at Université El Hadj Ibrahima Niassé in Sénégal prior to engaging on a masters in physical activity and recently a doctoral in biomedical sciences at Université du Québec à Trois-Rivières. These studies looked at the influence that the physical, sociocultural, economic and political environments can have on growing problem of obesity. Her research focussed on sensitizing stakeholders to ways of facilitating healthy environments, promoting an active lifestyle and healthy food choices. The main aim was to develop projects that will raise awareness on sedentary lifestyle, inadequate diet and develop environments favourable to healthy lifestyles.