

# ENVIRONMENTAL PSYCHOLOGY NEWSLETTER

December 8, 2008

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## CPA, Montreal June 11 –13 2009:

- Invited speaker: Dr. Paul Stern, National Research Council, Washington, DC.
- Presentation of “An Inconvenient Truth” by a member of The Climate Project Canada
- Symposia and posters



Montreal in Winter

## MESSAGE FROM THE CHAIR **DR. JENNIFER VEITCH**

### A few words from the Chair...

This must be a comfortable seat, as I seem to find myself back in it again this year. Thank you for the opportunity to serve the Section again. In the traditional manner, I'll begin with a series of thank-yous:

Thanks to Loraine Lavallee for volunteering to take on the Newsletter Editor position. Please send her lots of material — abstracts of forthcoming or presented papers, news and announcements, or even opinion articles — so that we will have interesting and stimulating newsletters throughout the year.

Thank you to Mark Sandilands for his willingness to continue as our Secretary-Treasurer. Mark has been watching closely over our funds for several years, and providing sage advice on the Section Executive to a series of Chairs. In his other life, Mark's also run twice as an NDP candidate in his Lethbridge riding; see <http://www.marksandilands.ca/>.

Thank you also to Fred Grouzet, our Past-Chair, for all his contributions. Fred served as Chair for three years (or was it four?), and he is continuing on as our



Jennifer Veitch, Chair of Environmental Psych

Webmaster for the time being. Not having learned HTML coding yet, I'm especially grateful that he's willing to do that! Visit our site at: [https://web.uvic.ca/~fgrouzet/CPA\\_Environmental/](https://web.uvic.ca/~fgrouzet/CPA_Environmental/).

Much of the Chair's work revolves around the preparations for the CPA Convention. As I write this, the submission period is over and soon we will be reviewing abstracts for presentations. I am confident that interesting papers will be presented. In addition, this year we will host a CPA/Sections Invited Speaker: Dr. Paul Stern of the National Research Council in Washington, D.C., will give an invited address titled

“Contributions of Psychology to Meeting the Challenges of Climate Change”. His abstract and biography appear later in this newsletter. We hope to

pair this address with a presentation of “An Inconvenient Truth” given by a volunteer from The Climate Project Canada (<http://www.climateprojectcanada.org/>). The volunteers are trained by Al Gore, and the presentation is updated with Canadian content, as compared with the version you may have seen in the film of the same title. We hope that these two events will raise awareness among our CPA colleagues about environmental issues and about the contributions researchers can make to resolving these problems.

I hope to see you all at CPA (Montreal, June 11-13)! Long before then I hope to have heard from you with questions or comments at: [jennifer.veitch@nrc-cnrc.gc.ca](mailto:jennifer.veitch@nrc-cnrc.gc.ca) or by phone at 613-993-9671.



Montreal in June

## Quelques mots de la présidente ... *DR. JENNIFER VEITCH*

Merci de l'opportunité que vous donnez de servir une nouvelle fois la Section. Comme il est de coutume en la circonstance, je commencerai par une série de remerciements :

Merci à Loraine Lavallee pour avoir accepté le poste de rédactrice du Bulletin. Je compte sur vous pour la submerger de matériaux — résumés d'articles parus ou à paraître, nouvelles, annonces et autres articles d'opinion — pour que notre Bulletin reste aussi intéressant que stimulant tout au long de l'année.

Merci à Mark Sandilands pour avoir accepté de continuer d'être notre secrétaire-trésorier. Mark veille sur notre trésorerie depuis plusieurs années déjà, et ses précieux conseils ont aidé plusieurs de mes prédécesseurs à diriger la Section comme elle le mérite. (Mark s'est également présenté comme candidat NPD deux fois dans la circonscription de Lethbridge. Voir <http://www.marksandilands.ca/>).

Merci à Fred Grouzet, notre président sortant, pour sa généreuse contribution à la Section. Après trois (ou quatre ?) ans à la tête de la Section, Fred a décidé de continuer à nous aider à titre de Webmaster. Moi qui ne connais encore rien du codage html, je lui en suis particulièrement



Jennifer Veitch, Présidente du Environmental Psych

reconnaissante ! Visitez notre site à : [https://web.uvic.ca/~fgrouzet/CPA\\_Environmental/](https://web.uvic.ca/~fgrouzet/CPA_Environmental/).

La majeure partie du travail du président ou de la présidente de la Section tourne autour de la préparation de la convention de la SCP. La période des soumissions vient juste de se terminer, et nous aurons bientôt à passer en revue les résumés des présentations. Je suis persuadée que nous présenterons de nombreux articles intéressants. Cette année, nous aurons la chance d'accueillir Paul Stern du National Research Council de Washington (DC), qui nous parlera des « Contributions de la psychologie dans la lutte contre les changements climatiques. La biographie et le résumé de la présentation du M. Stern seront publiés prochainement dans le Bulletin. Nous espérons jumeler cette présentation avec la présentation, par un volontaire du Projet climatique – Canada

(<http://www.climateprojectcanada.org/>), d'un

documentaire sur *Une vérité qui dérange*. Les volontaires du Projet sont formés par Al Gore lui-même, et le documentaire qui nous sera présenté traite spécifiquement du contexte canadien, contrairement au film du même nom que vous avez peut être déjà eu l'occasion de voir. Nous espérons que ces deux événements permettront de sensibiliser davantage nos collègues de la SCP aux questions environnementales et de leur mettre en lumière l'impact potentiel de leurs travaux et recherches dans le domaine.

J'espère vous voir tous à la convention de la SCP (Montréal, du 11 au 13 juin), mais d'ici là, n'hésitez pas à m'envoyer vos questions ou vos commentaires, par courriel : [jennifer.veitch@nrc-cnrc.gc.ca](mailto:jennifer.veitch@nrc-cnrc.gc.ca), ou par téléphone : (613) 993-9671.



Montreal: Printemps



Montreal: l'hiver

### **CPA, Montreal June 11–13 2009:**

- Invited speaker: Dr. Paul Stern, National Research Council, Washington, DC.
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## DR. PAUL STERN THE SECTION'S INVITED SPEAKER FOR CPA 2009

### *Contributions of Psychology to Meeting the Challenges of Climate Change*

Paul Stern is a principal staff officer at the National Research Council/National Academy of Sciences in Washington, D.C. and director of its standing committee on the human dimensions of global change. His research interests include the determinants of environmentally significant behavior, particularly at the individual level; participatory processes for informing environmental decision making; and the

governance of environmental resources and risks. He is coauthor of the textbook *Environmental Problems and Human Behavior* (2<sup>nd</sup> ed., 2002); coeditor of numerous National Research Council publications, including *Decision Making for the Environment: Social and Behavioral Science Priorities* (2005), *The Drama of the Commons* (2002), *Making Climate Forecasts Matter* (1999), *Environmentally Significant Consumption: Research Directions* (1997), *Understanding Risk* (1996), *Global Environmental*

*Change: Understanding the Human Dimensions* (1992), and *Energy Use: The Human Dimension* (1984). He coauthored the article "The Struggle to Govern the Commons", which was published in *Science* in 2003 and won the 2005 Sustainability Science Award from the Ecological Society of America. He is a fellow of the American Association for the Advancement of Science and the American Psychological Association (APA). Dr. Stern is a member of the APA Presidential Task Force on climate change.



## ENVIRONMENTAL PSYCHOLOGY AT APA 2008 IN BOSTON

BY ELIZABETH NISBET, CARLETON UNIVERSITY

*During the convention, an article appeared in USA Today ... "Psychologists determine what it means to think 'green,'" August 14, 2008.*

[http://www.usatoday.com/printdition/life/20080814/d\\_cover14\\_ecoapa.art.htm](http://www.usatoday.com/printdition/life/20080814/d_cover14_ecoapa.art.htm)

The 2008 APA convention, held in Boston, included diverse programming from Division 34, and in particular, a number of sessions devoted to the psychology of environmental behaviour. Some of the highlights included Paul Stern's symposium on the challenges of global climate change and sustainable development, during which Ellen Matthies succinctly reviewed two decades of environmental psychology research. Jon Krosnick presented fascinating polling research on climate change

attitudes in the U.S. By editing news reports on global warming, he discovered that adding footage of a skeptic, for less than a minute, can



Boston

undermine public opinions about the scientific consensus concerning

climate change. Craig Anderson discussed the disturbing links between global temperature changes, human health, violence, and aggression. Frances Kuo provided compelling evidence of how important nature and natural elements are for human physical and psychological well-being. Susan Clayton engaged her audience with insights into zoo experiences and how the presence of animals fosters interaction between human visitors. Louise Chawla described her

(Continued on page 4)

## ADDITIONAL CONFERENCES IN 2009

3rd International Conference on Design Principles and Practices (Berlin, Germany)

February 15-17, 2009

This conference explores the meaning and purpose of design.

<http://g09.cg-conference.com/>

97th meeting of the Assoc. of Collegiate Schools of Architecture

March 26-29, 2009

Portland, OR

The Value of Design

<https://www.acsa-arch.org/conferences/annual2009.aspx>

Environmental Design Research Association EDRA

EDRA40 Kansas City, MI

The Ethical Design of Places

May 27 to May 31, 2009

[www.edra.org](http://www.edra.org)

APA 2009

Toronto, ON

Aug. 6-9, 2009

<http://www.apa.org/convention09/>

International Society for Quality of Life Research

Oct. 28-31, 2009

New Orleans, LA

<http://www.isoqol.org/>

## FOR MORE CONFERENCE INFORMATION SEE:

Conservation Psychology Website:

<http://www.conservationpsychology.org/conferences/>

APA-Population and Environmental Psychology

<http://apa34.cos.ucf.edu/>

International Association for Society and Resource Mgmt

<http://www.iasnr.org/>

investigations of how children connect with the natural world, and the social and psychological benefits of doing so. Amara Brook explained the potential for negative feedback to backfire with people who are not already concerned about the environment. Along with the usual paper sessions and symposiums, there were also conversation sessions, which provided opportunities to network and brainstorm with others working on environmental issues. All sessions with an environmental theme drew enthusiastic and passionate audiences.

During the convention, an article appeared in *USA Today* ('Psychologists determine what it means to think 'green', August 14, 2008; [http://www.usatoday.com/pri\\_ntedition/life/20080814/d\\_coyer14\\_ecoapa.art.htm](http://www.usatoday.com/pri_ntedition/life/20080814/d_coyer14_ecoapa.art.htm)) highlighting some of the APA presenters and their research. The article spawned a stream of online responses, including some very negative reactions to this 'brainwashing' or

'greenwashing' attempt by psychologists. No doubt, this was prompted, in part, by Rush Limbaugh's 'critique' of our research and the article on his nationwide radio broadcast.

These reactions to 'thinking green' simply highlight the need to better communicate how our research aims to improve people's health and well-

about environmentally-relevant behaviour. We could also adopt the format of APA's conversation sessions, to expand our audience, invite more dialogue about our research goals, and make the environmental section of CPA a more active and dynamic section. The health of our environment is everyone's concern. With changing political climates, in both the

*Environmental psychology was front and centre in the APA presidential address. Dr. Alan Kazdin argued that psychologists must contribute to sustaining the environment and to addressing global climate change.*

*Check out the podcast at:*

<mms://multimedia.apa.org/convention08/kazdin20080816.wma>

being. We need to continue working to engage people in open and honest discussion about environmental problems and find ways to motivate people toward sustainable behaviour that are not misconstrued as a threat to economic, social, or psychological health. CPA 2009 is an opportunity to network with other sections (social, health, and personality, for example) whose members may have insights and ideas to offer

U.S. and Canada, environmental psychologists have an opportunity to be part of the shift towards sustainability. The diversity of presenters and attendees at the APA environmental sessions is an encouraging sign that our discipline is poised to take on the challenge of promoting not only green thinking... but healthy and sustainable or 'green' behaviour. *Elizabeth Nisbet, PhD Candidate, Carleton University, Ottawa*

## Does nature make us happy?

*Elizabeth Nisbet & Dr. John Zelenski, Carleton University*



Elizabeth Nisbet and John Zelenski of Carleton

Elizabeth Nisbet and John Zelenski, researchers at Carleton University in Ottawa, have been studying how being connected to nature improves psychological well-being and promotes ecological behaviour. See the *Vancouver Sun* article for more about their research and findings:

<http://www.canada.com/vancouver/sun/news/story.html?id=7cb6fe0a-428e-4155-b193-7b532e4247fd>

# POLICY EVALUATION: BC'S CARBON TAX

DR. LORAINNE LAVALLEE, UNIVERSITY OF NORTHERN BC



Lorraine Lavallee, UNBC

*As experts on human behaviour, psychologists are in a position to evaluate public policy and policy initiatives in terms of the possible impact on human behaviour. For the UNBC Update publication, I evaluated the BC carbon tax as a tool for increasing people's energy conservation.*

Individual Canadians are among the biggest contributors of greenhouse gases on the planet. Per capita we contribute about the same as our American neighbours and significantly more than the Swedes and Norwegians (other residents of cold climates). However, surveys, including my own, have shown that Canadians care deeply about the environment. It follows that we should be thinking more about our carbon footprint.

Most of our daily activities involve energy use, yet the majority of us think about energy conservation only occasionally. For example, in a recent survey that we conducted as part of the University of Northern BC's Sustainable Landscaping Project,

residents of Prince George, BC stated that environmental conservation should be one of the top concerns of the municipal government. However, the residents also admitted that they rarely thought about environmental conservation when making decisions about activities such as the landscaping practices they use on their own yards.

In an effort to get Canadians to do something about our large and expanding carbon footprint the Government of BC introduced the first carbon tax in North America. It's based on the simple idea that increasing the cost of carbon-emitting fuels will discourage their use. And this is a valid assumption. As a psychologist interested in the factors that motivate and impede people's conservation efforts I know that changing people's behaviour is not easy and educational campaigns on their own have little impact. In terms of reducing people's energy consumption, the carbon tax has three strengths: it affects a wide range of behaviours, it brings some of the costs of our energy consumption into the immediate short-term, and it generates funds for incentive programs that can further encourage energy conservation.

Environmental problems such as climate change are challenging because they are collective

rather than individual problems: no one person causes climate change and no one person can stop it. Furthermore, with energy use we are dealing with lots of different behaviours from choices of large consumer items (e.g., major appliances and vehicles) to daily behaviours such as water use. Also, with energy-consumption the positive outcomes are immediate (e.g., a SUV gives us access to the outdoors, it makes us

Policy makers have to realize, however, that many aspects of our energy-consumptive lifestyle are governed by forces beyond the control of the individual. Societal barriers to conservation include lack of affordable access to renewable energy or to energy-efficient products (cars, trucks, water heaters, and appliances), leaky and poorly-insulated homes and rental-

*Policy makers have to realize, however, that many aspects of our energy-consumptive lifestyle are governed by forces beyond the control of the individual.*

feel safe, it offers a "cool" image), but the negative environmental outcomes of gas-guzzling vehicles emerge much later in time and thus tend to have a weaker influence over our behaviour. Collective problems require strategies that influence the behaviour of large numbers of people and a carbon tax is one of the few strategies that can influence most people and a wide range of behaviours. A carbon tax also brings some of the costs of fossil-fuel use into the short-term and thus can make us think about different choices now rather than later when the problem becomes much more serious and difficult to solve.

accommodation, and car-dependent urban and regional planning and design. All have an enormous influence on people's choices and ability to reduce their use of fossil fuels. Until some of these barriers are removed, the affordable choices for energy conservation are very limited. But the carbon tax might help with this as well by getting us to start pressuring government and business to make energy-efficiency a priority.



## L'EVALUATION DE L'IMPÔT SUR LE CARBONE DR. LORAINNE LAVALLÉE, UNIVERSITY OF NORTHERN BRITISH COLUMBIA

*En temps qu'experts du comportement humain, les psychologues peuvent contribuer à l'évaluation de l'impact de nos politiques et de nos initiatives publiques. Dans le cadre de la publication dite The UNBC Update, j'ai présenté cette évaluation de l'impôt sur le carbone qu'a adopter le gouvernement de la Colombie Britannique en temps qu'instrument pouvant inciter les gens à la conservation d'énergie. Loraine Lavallée, UNBC, Décembre 2008.*

Les Canadiens sont parmi les plus grands producteurs de gaz à effet de serre sur la planète. Par habitant nous y contribuons, d'une part à peu de chose près comme le font nos voisins américains, et d'autre part sensiblement plus que le font les Suédois et les Norvégiens qui vivent aussi dans des pays nordiques. Cependant les sondages, y compris le nôtre, trouvent que les Canadiens s'inquiètent profondément de l'environnement. Nous devrions alors penser davantage à notre empreinte dit de carbone.

La plupart de nos activités quotidiennes impliquent l'utilisation d'énergie pourtant, en général nous ne pensons à la conservation d'énergie que seulement de temps à autre. Par exemple, dans un sondage récent que nous avons fait en tant qu'élément d'un projet sur l'aménagement durable pour la University of Northern British Columbia (UNBC), les résidents de la ville de Prince George, en Colombie Britannique (CB), ont déclaré que ce qui entoure la protection de l'environnement devrait être un

des soucis prioritaires de leur gouvernement municipal. Cependant, les résidents ont également admis qu'ils pensent rarement à la protection de l'environnement lorsqu'ils prennent des décisions à propos de l'aménagement de leur propre fond de cour.

Afin d'obliger ses citoyens de faire quelque chose à propos de la croissance de leur empreinte carbone, le gouvernement de la CB a introduit la première taxe sur le carbone en Amérique du Nord. Celle-ci est fondée sur l'idée qu'en augmentant les coûts de carburants émettant un empreinte de carbone important, ceci devrait décourager leur utilisation. Et nous croyons que c'est une idée valide. En tant que psychologue intéressé aux facteurs qui motivent et qui empêchent les efforts de conservation des gens, je sais qu'il n'est pas facile de changer le comportement des gens et les campagnes éducatives à elles seules ont peu d'impact. En termes d'une réduction de la consommation d'énergie, l'impôt sur le carbone a trois avantages : il touche tout un éventail de comportements, il introduit à court terme des coûts à la consommation d'énergie, et il libère des fonds publics pour la création de programmes pouvant encourager la conservation d'énergie.

Les problèmes écologiques présentent des challenges particuliers par-

ce qu'ils sont de nature collective, plutôt qu'appartenir qu'à certains individus. Le changement climatique n'est pas la faute d'une seule personne et une personne seule ne peut l'empêcher. En plus, la consommation d'énergie impliquent plusieurs comportements différents : allant de nos choix de grands articles de consommation (par exemple, les grands appareils ménagés et nos véhicules personnels) jusqu'à nos comportements quotidiens tels que dans notre utilisation de l'eau. En outre, avec la consommation de l'énergie les effets positifs sont immédiats (par exemple, en achetant un véhicule tout terrain comme un SUV, cela nous donne accès au plein air, cela nous fournit un sentiment de sécurité et il cela nous donne une certaine image sociale), mais les effets négatifs sur l'environnement de ces véhicules gaz-givres se font sentir beaucoup plus tard et ont ainsi une influence plus faible sur nos comportements. Les problèmes collectifs exigent des stratégies qui influencent le comportement d'un grand nombre de personnes et un impôt sur le carbone est une stratégie qui peut influencer la plupart des gens et toute une gamme de comportements. Un impôt sur le carbone introduit également certains coûts à l'utilisation de combustibles non-renouvelables dans le court terme et peut ainsi nous inciter à penser aux différents choix possibles, et ce dès maintenant plutôt que plus

tard lorsque le problème devient sérieux et difficile à résoudre.

Les politiciens doivent cependant réaliser que plusieurs aspects de notre style de vie énergivore sont régis par des forces qui ne sont pas sous le contrôle de l'individu. Les barrières sociales à la conservation incluent : le manque d'accès à une forme d'énergie renouvelable ou à des produits ayant un rendement optimal (tels certains types de voiture, de camions, de chauffe-eau, et d'appareils ménagés); vivre dans une maison ou un logement mal isolé; et/ou vivre dans une région éloignée ou dans un design urbain qui créé une dépendance sur la voiture. Ils ont tous une grande influence sur les choix que portent les individus et sur leur capacité de réduire leur utilisation de combustibles non-renouvelables. Jusqu'à ce que certaines de ces barrières soient enlevées, les choix encourageant la conservation d'énergie seront limités. Cependant, d'ici ce temps cet impôt sur le carbone pourrait aider, en nous obligeant à faire pression sur nos gouvernements et sur nos gens d'affaires afin de faire de l'efficacité énergétique une priorité.

## WORKSHOPS, WEBSITES & SUMMER SCHOOL

### SUMMER SCHOOL: THEORIES IN ENVIRONMENTAL PSYCHOLOGY 2009, JULY 13-17. Department of Psychology, University of Groningen, Netherlands

STEP: the First Summer school on Theories in Environmental Psychology 2009, will be held at the University of Groningen, the Netherlands. The aim of the summer school is to provide PhD students in environmental psychology the opportunity to learn from leading scholars in the field, and to meet and discuss their work with peers. Students will actively participate in one of five theme sessions:



- Values, norms and environmental behavior
- Changing behavior via community approaches
- Strategies to reduce household energy-use
- Transport pricing
- Stress and the city - restorative environments



For more information about lecturers, workshop themes, organizing committee, expenses and accommodation, as well as registration for the summer school, please visit the website: <http://www.rug.nl/psy/onderwijs/firststep/>.

### FOSTERING SUSTAINABLE BEHAVIOUR

**DR. DOUG MCKENZIE-MOHR** [dmm@cbsm.com](mailto:dmm@cbsm.com)

The *Fostering Sustainable Behavior* website was developed to assist individuals who design programs to promote sustainable behavior (e.g., recycling, water and energy efficiency, etc.). Its purpose is to provide information that can enhance the success of their efforts. This website consists of six resources: an online guide which provides valuable information on designing and evaluating programs; a listserv and associated archive for sharing information and asking questions of others; and searchable databases of articles, downloadable reports, cases and graphics on fostering sustainable behavior. The *Fostering Sustainable Behavior* website is located at <http://www.cbsm.com>. To join the Fostering Sustainable Behavior listserv, send an email with "subscribe" in the subject line to [web@cbsm.com](mailto:web@cbsm.com).

Doug McKenzie-Mohr also runs workshops on community-based social marketing (cbsm). Community-based social marketing, which draws upon research in the social sciences, and particularly psychology, is an effective approach for identifying strategies for increasing conservation behaviour. Community-based social marketing involves four steps: 1) Identifying the barriers and benefits to an activity, 2) Developing a strategy that utilizes "tools" that have been shown to be effective in changing behavior, 3) Piloting the strategy, and 4) Evaluating the strategy once it has been implemented across a community.

## RECENT RESEARCH AND PUBLICATIONS

The 4<sup>th</sup> issue of *Canadian Psychology* (2008) contains a special section devoted to psychology and the environment, "The Greening of Psychology: Intra and Interdisciplinary Approaches to Current Environmental Challenges". In this special section Robert Gifford (Managing Editor, *Journal of Environmental Psychology*) discusses the role for psychology in addressing the challenge of climate change. Environmental section Chair Jennifer Veitch summarizes the influence of the built environment on human health and emphasizes the importance of interdisciplinary research. Catherine O'Brien discusses the links between environmental behaviour and sustainable happiness. Elizabeth Nisbet and Mary Gick (Guest Editors of the special section) illustrate the interconnectedness of human and environmental health, and suggest research strategies based on health behaviour change models. Finally, Luc Pelletier (Associate Editor, *Canadian Psychology*), Karine Lavergne, and Elizabeth Sharp provide a commentary on the articles and suggest ways psychologists can contribute to addressing environmental challenges.

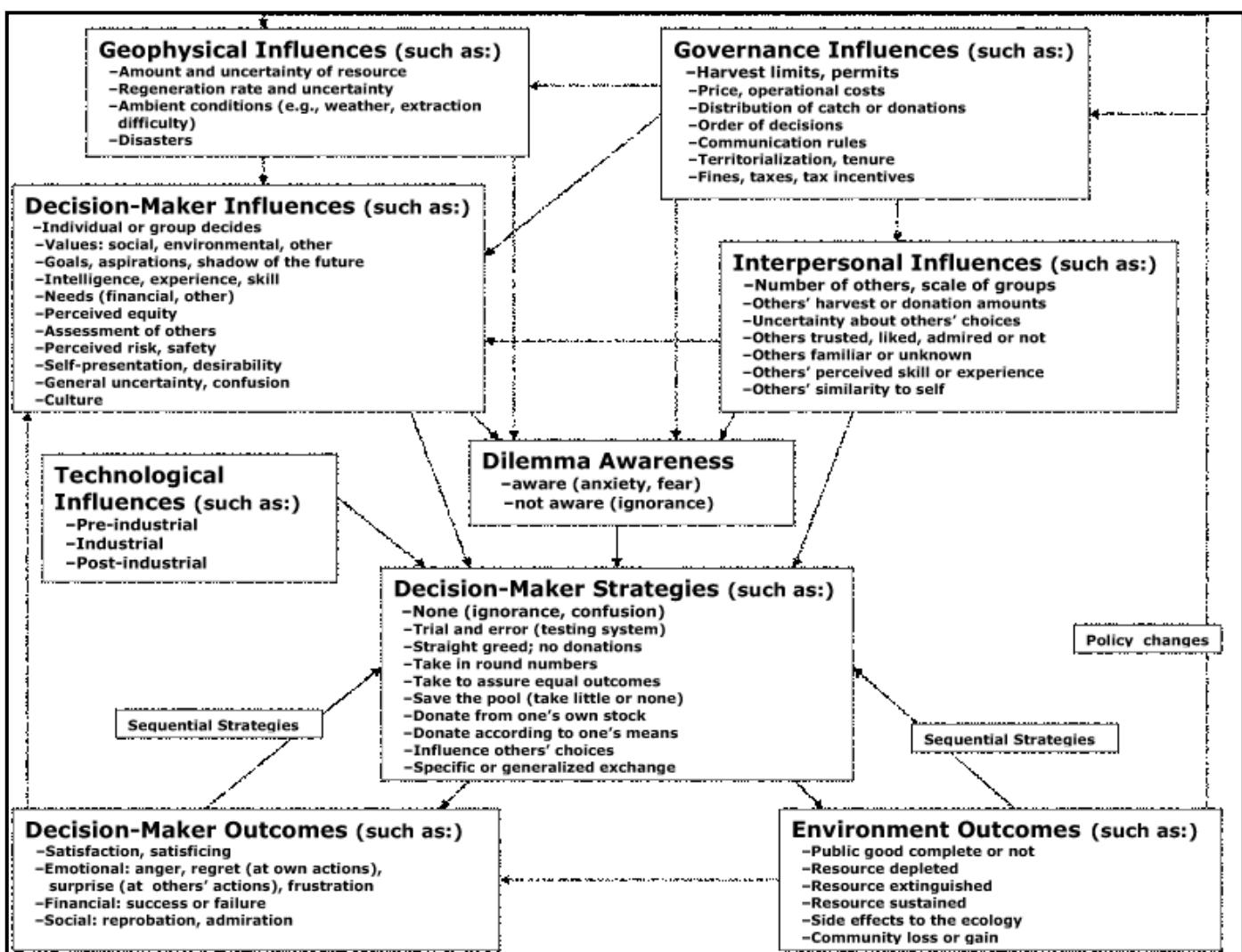
# Dr. Robert Gifford

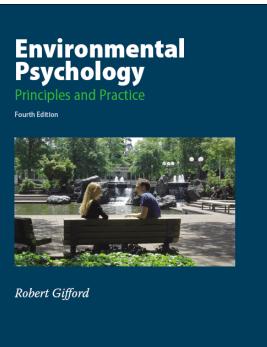
## University of Victoria, BC



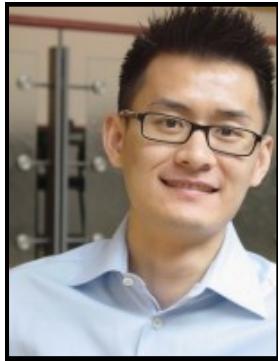
Gifford, R. (2006). A general model of social dilemmas. *International Journal of Ecological Economics and Statistics*, 5, 23-40.

In this article I attempted to develop a comprehensive model describing the antecedents and consequences of decisions made in resource dilemmas. In doing so, I included the role of the physical environment itself, such as the amount of the resource available and even transitory factors such as weather. I also included regulatory and economic factors such as pricing, customary practices, and laws. The psychological factors included were values and attitudes, of course, but also skill and experience, and social and interpersonal influences. The dilemma itself is represented in terms of awareness or lack of it; the decisions themselves consist of a number of strategies aimed at self-interest, social or societal interest, resource-oriented interest, or what I call environmental numbness (acting without any particular dilemma cognition). The decisions made, with or without a strategy, nevertheless have consequences for the individual, the individual's significant others, the resource, and society. Finally, the model posits feedback loops from these outcomes back up to other factors, such as regulations, harvester skill and experience, and social consequences. The model is also described in a recent book chapter: Gifford, R. (2008). Toward a comprehensive model of social dilemmas. In A. Biel, D. Eek, T. Gärling, & M. Gustafsson (Eds.). *New issues and paradigms in research on social dilemmas*. Springer.





The fourth edition of *Environmental Psychology: Principles and Practice* (2007, Optimal Books) by Robert Gifford is available. The text follows the basic structure of the 3rd edition, but includes new material on sustainability, as well as the results from several hundred studies that have been published over the last five years. The fourth edition also includes an updated laboratory manual and instructors' manual, including essay and multiple-choice questions and chapter outlines. Additionally, this edition has been professionally designed and is available in full color. For more details, go to the publisher's website: [www.optimalenvironments.com/optimalbooks.htm](http://www.optimalenvironments.com/optimalbooks.htm)



## DR. CHEN-BO ZHONG & DR. GEOFFRGY LEONARDELLI

ROTMAN SCHOOL OF MANAGEMENT,  
UNIVERSITY OF TORONTO, ON



### Cold and Lonely: Does Social Exclusion Literally Feel Cold?

Zhong, C.B. & Leonardelli, G. J. (2008) Cold and lonely: Does social exclusion literally feel cold?  
*Psychological Science*, 19 (9) 838-842

When we hear somebody described as “frosty” or “cold”, we automatically picture a person who is unfriendly and antisocial. There are numerous examples in our daily language of metaphors which make a connection between cold temperatures and emotions such as loneliness, despair and sadness. We are taught at a young age that metaphors are meant to be descriptive and are not supposed to be taken literally. However, recent studies suggest that these metaphors are more than just fancy literary devices and that there is a psychological basis for linking cold with feelings of social isolation.

Psychologists Chen-Bo Zhong and Geoffrey Leonardelli from the University of Toronto’s Rotman School of Management wanted to test the idea that social isolation might generate a physical feeling of coldness. They divided a group of volunteers into two groups. One group recalled a personal experience in which they had been socially excluded—rejection from a club, for example. This was meant to tap into their feelings of isolation and loneliness. The other group recalled an experience in which they had been accepted into a group. Then, the researchers had all the volunteers estimate the temperature in the room, on the pretense that the building’s maintenance staff wanted that information. The estimates ranged widely, from about 54 degrees F to a whopping 104 degrees F. Here’s the interesting part: Those who were told to think about a socially isolating experience gave lower estimates of the temperature. In other words, the recalled memories of being ostracized actually made people experience the ambient temperature as colder. “We found that the experience of social exclusion literally feels cold,” Zhong said. “This may be why people use temperature-related metaphors to describe social inclusion and exclusion.”

In another experiment, instead of relying on volunteers’ memories, the researchers triggered feelings of exclusion by having the volunteers play a computer-simulated ball tossing game. The game was designed so that some of the volunteers had the ball tossed to them many times, but others were left out. Afterwards, all the volunteers rated the desirability of certain foods and beverages: hot coffee, crackers, an ice-cold Coke, an apple, and hot soup. The findings were striking. As reported in the September issue of *Psychological Science*, a journal of the Association for Psychological Science, the “unpopular” volunteers who had been ostracized during the computer game were much more likely than the others to want either hot soup or hot coffee. Their preference for warm food and drinks presumably resulted from physically feeling cold as a result of being excluded. “It’s striking that people preferred hot coffee and soup more when socially excluded,” Leonardelli said. “Our research suggests that warm chicken soup may be a literal coping mechanism for social isolation.” These results open up new opportunities in exploring the interaction between environment and psychology, such as the study of mood disorders (e.g., Seasonal Affective Disorder). Research on Seasonal Affective Disorder has focused on the idea that lack of sunlight during winter results in feelings of depression in normally healthy people. The current study indicates that the cold temperatures may also contribute to feelings of sadness and isolation felt during the winter months. In addition, this study suggests that raising the thermostat a bit might be an easy method of promoting group interaction and cooperation in social settings.

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## **Objectif de recherche: identifier les compétences pouvant faciliter une adaptation efficace aux changements climatiques**

Pour 72% des Américains, les changements climatiques représentent une préoccupation importante (Leiserowitz, 2007). Cette préoccupation est encore plus pressante pour les populations habitant le littoral. Les chercheurs du *Groupe de recherche Littoral et vie*, qui travaillent en éducation relative à l'environnement, dans les provinces Maritimes, débutent une étude intitulée «*Les capacités démontrées par des citoyens impliqués dans des processus d'atténuation et d'adaptation aux changements climatiques*». La recherche comporte deux parties. Dans l'une, les chercheurs étudient les capacités d'atténuation de quatre familles ayant décidé d'adopter des comportements environnementaux à la maison. Dans l'autre, les chercheurs veulent décrire les compétences démontrées par des employés municipaux et des agriculteurs, lorsqu'ils tentent de trouver des mesures d'adaptation aux changements climatiques.

Mon sujet de thèse se situe dans cette deuxième partie du projet du Groupe Littoral et vie. Je vais étudier les compétences de pensée prospective, de prédiction et de gestion des risques, d'analyse de vulnérabilité ainsi que les habiletés mathématiques des employés municipaux impliqués dans le projet. J'ai choisi ces employés parce que ceux-ci ont le pouvoir d'implanter des solutions d'adaptation dans leur ville. Mon objectif de recherche est le suivant : décrire les compétences utilisées par les employés municipaux lorsqu'ils cherchent ensemble des mesures d'adaptation aux impacts des changements climatiques sur un problème de leur choix.

On retrouve peu de littérature théorique et empirique sur les compétences mises à profit par des citoyens, pour développer et ensuite entreprendre efficacement des mesures d'adaptation aux changements climatiques. Une fois ces compétences identifiées et décrites, des recherches subséquentes permettront l'élaboration de stratégies pédagogiques permettant le renforcement de ces compétences afin d'outiller adéquatement les gens à faire face aux problèmes reliés aux changements climatiques.

Si vous connaissez de la littérature pertinente, faites-m'en part s'il vous plaît. Jackie Kerry, B.Ps et présentement candidate à la maîtrise en environnement, Université de Moncton.

Leiserowitz, A. (2007). *American Opinions on Global Warming*. A survey carried out by Gallup for Yale University; School of Forestry & Environmental Studies. In: <http://environment.yale.edu/climate/list-of-action-items/research-to-test-the-impact-of-environmental-communications/>

## **Competences demonstrated by citizens in adaptation and attenuation processes related to climate change.**

*I am a graduate student now in environmental studies at l'Université de Moncton and my thesis is an outcrop of my work with a new collaborative research and environmental education group here in the Maritimes, entitled «Litorale et vie». We are hoping to identify those competencies employed by farmers and municipal workers when successfully adopting environmentally sustainable actions to deal with climate change. Ultimately we hope to improve the success rate of educational training programs used in sustainable development projects. If you have any questions or know of any pertinent literature I would be most pleased to hear from you. Jackie Kerry, Université de Moncton.*

# The National Research Council, Ottawa ON,

<http://www.nrc-cnrc.gc.ca/>

## Open-plan Offices

Newsham, G. R., Veitch, J. A., Charles, K. A. (2008). Risk factors for dissatisfaction with the indoor environment in open-plan offices: an analysis of COPE field study data. *Indoor Air*, 18 (4), 271-282.

We applied binary logistic regression techniques to data collected from 779 participants in a field study of open-plan ('cubicle') offices conducted in nine buildings. Independent variables were physical conditions in the workplace, and dependent variables were derived from occupant satisfaction measures; personal characteristics were included as covariates. There was a significantly higher risk of dissatisfaction with privacy and acoustics (defined as being below the 20th percentile as opposed to being above the 80th percentile) associated with being in a small workstation, or being seated next to a window. A higher risk of dissatisfaction with ventilation was associated with being seated next to a window, temperatures substantially higher than the average neutral temperature, and a carbon dioxide concentration greater than 650 ppm. A higher risk of dissatisfaction with lighting was associated with panel heights greater than 66 inches (1.7 m), high reflected glare on computer screens, desktop illuminances outside 300–500 lux, desktop illuminance uniformity (min/max ratio) less than 0.5, and being in a workstation distant from a window. Practical Implications We have demonstrated statistically significant relationships between indoor environment conditions in office spaces and environmental dissatisfaction risk. Although generally supported by prior research, not all of these risk factors are reflected in existing recommended practice documents for office design. Consideration of these findings in future revisions of such documents may be warranted.

## Lighting and Office View

Cetegen, D.; Veitch, J.A.; Newsham, G.R (2008). View size and office luminance effects on employee satisfaction. Balkan Light 2008, Ljubljana, Slovenia, Oct. 7-10, 2008, pp. 243-52.

In this parametric study, the influence of office design variables on occupant satisfaction was examined, using high dynamic range (HDR) images as stimuli. The setting was an open plan office with cubicles defined by modular systems furniture. Photographs were taken of the view afforded to the occupant sitting in the second row in from the window. Accessible window area varied depending on combinations of panel height, panel material (opaque or semitransparent) and window blind condition. Twelve HDR images taken from the viewpoint of this occupant were displayed on a special HDR computer monitor at realistic luminance levels (average luminance range: 24-348 cd/m<sup>2</sup>; for the image with the lowest average luminance, range was 3-82 cd/m<sup>2</sup>; for the image with the highest average luminance, range was 5-2608 cd/m<sup>2</sup>). Thirty-six participants viewed each image for 30 seconds with the instruction to imagine it as their own workplace, and then rated their satisfaction with the image on eight scales. Satisfaction with amount of view, visual comfort, pleasantness and spaciousness increased with both image luminance and view size, although most of the curves were non-linear

Dans le cadre de cette étude paramétrique, on a examiné l'influence qu'ont les variables de conception des bureaux sur le degré de satisfaction des occupants, en utilisant comme stimuli des images à grande portée dynamique (GPD). Le cadre d'étude était un bureau à aires ouvertes comprenant des postes de travail modulaires définis par un mobilier d'architecture modulaire. Des photographies ont été prises de la vue procurée à l'occupant se trouvant assis dans la deuxième rangée à partir de la fenêtre. L'aire des fenêtres accessible variait en fonction des différentes combinaisons de hauteur des panneaux, de matériau des panneaux (opaque ou semi-transparent) et de condition liée aux stores de fenêtre. Douze (12) images GPD prises du point de vue de cet occupant ont été présentées sur un écran d'ordinateur spécial GPD à des niveaux de luminance réalistes (contrastes de luminance moyens : 24-348 cd/m<sup>2</sup>; pour l'image présentant la luminance moyenne la plus faible, le contraste était de 3-82 cd/m<sup>2</sup>; pour celle dont la luminance moyenne était la plus élevée, il était de 5-2608 cd/m<sup>2</sup>). On a demandé à trente-six (36) participants de visionner chaque image pendant 30 secondes et d'imager qu'il s'agissait de leur propre lieu de travail, puis d'évaluer leur satisfaction face à l'image sur huit (8) échelles d'appréciation différentes. La satisfaction par rapport à l'étendue de la vue offerte, le confort visuel, l'agrément éprouvé ainsi que l'impression d'espace augmentaient tant selon le degré de luminance des images que selon l'ampleur de la vue, bien que la plupart des courbes se soient révélées non linaires.

## **Canadian Psychological Association**



### **Environmental Psychology Section**

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## **Join Us**

The purposes of the Environmental Psychology Section include ensuring that the discipline of Environmental Psychology is represented within the Canadian Psychological Association, and serving as a national organization uniting researchers and professional practitioners in the advancement of knowledge about the interaction between people and built and natural environments.

We welcome new members and welcome everyone's contributions to the newsletter. If you wish to join the section, please contact Dr. Jennifer Veitch at [jennifer.veitch@nrc-cnrc.gc.ca](mailto:jennifer.veitch@nrc-cnrc.gc.ca) or by phone at 613-993-9671. If you are not a member of CPA, you are welcome to join as a member of the Behaviour-Environment Interest Group (BEInG).

I would like to express my deepest gratitude to Elizabeth Nisbet of Carleton University for her extensive contributions to this edition of the newsletter and to Dr. John Tivendell of Université de Moncton for ensuring that we included content *en Francais*. Please send ideas and submissions for the next newsletter to me, Loraine Lavallee, at [lavalle@unbc.ca](mailto:lavalle@unbc.ca).

A business meeting for the Environmental Section will be held at the CPA convention in Montreal. Keep an eye out for the CPA conference registration at [www.cpa.ca/convention](http://www.cpa.ca/convention). We look forward to seeing you at the meetings in Montreal.



***Season's Greetings***



*The opinions expressed in this newsletter are strictly those of the author and contributors and do not reflect the opinions of the Canadian Psychological Association, its officers, directors, or employees*