



Information about health and physical activity may motivate people with SCI to change their physical activity beliefs and behaviour. However, scientists know very little about the most effective way to present health and physical activity information. The *Messages that Move* study focused on investigating the effectiveness of health and physical activity information; Changing people's physical activity beliefs and behaviour following SCI.

Summary:

- Providing people with information about the risks associated with various physical and psychological health problems **can effectively change people's perceptions** of their own individual health risks.
- People had an **increase in their perceived personal risk** for physical and psychological health problems **after reading** health risk information.
- Information emphasizing the **health risks** of physical *inactivity* was persuasive in changing people's beliefs about the effectiveness of physical activity for reducing health risks and people's intentions to be physically active.
- Information emphasizing the **health benefits** of physical activity was not persuasive in changing people's beliefs about physical activity.
- Neither type of information was persuasive in changing people's actual physical activity behaviour.
- Information emphasizing the **health risks** associated with physical inactivity may be an **effective tool for changing people's beliefs** about personal health risks and physical activity.
- Health and physical activity information alone **may not be an effective tool** for changing people's physical activity behaviour.

Possible Applications:

- Healthcare professionals should consider using health risk information to change people's perceptions of their individual health risks.
- When presenting health and physical activity information, healthcare professionals should consider emphasizing the *risks* of physical *inactivity* rather than emphasizing the *benefits* of physical activity.
- Information emphasizing the *risks* of physical inactivity may be effective in positively changing people's beliefs about physical activity and intentions to be physically active.

- Healthcare professionals should not rely solely on health and physical activity information to change people's actual physical activity behavior.
- The use of information emphasizing the *risks* of physical *inactivity* to change physical activity beliefs and intentions is a good first step in motivating physical activity behavior change. However, healthcare professionals should employ additional strategies to aid individuals in physical activity behavior change following SCI.

Research Abstract:

Consistent with Prospect theory, the effectiveness of health information varies depending on the emphasis on *benefits* of adopting a health behaviour (i.e., gain-framed) versus the *risks* of not adopting the behaviour (i.e., loss-framed). Gain-framed information is thought to be more effective (vs. loss-framed) for persuading health-prevention behaviours such as physical activity. Guided by protection motivation theory, this study examined the effects of physical activity information targeting people with spinal cord injury (SCI). Gain-framed information was hypothesized to be more effective than loss-framed. People with SCI (N=96) were randomized to receive control, gain-framed, or loss-framed information targeting health and physical activity. Perceived health risk, response efficacy, and intentions, were measured pre and 24hr-post intervention. Physical activity was measured pre-and 2 week-post intervention. A series of 2(time) x 3(frame) repeated-measures ANOVAs indicated time x frame interactions (partial-eta² >.01). Post-hoc analyses indicated significant changes in perceived health risk for loss- and gain-framed conditions ($p < .05$), with larger effects for loss-framed messages. Significant changes in response efficacy ($t = -2.0$, $p = .05$) and intentions ($t = -3.3$, $p < .01$) were found for loss-framed messages. No significant main or interaction effects were observed for PA. Contrary to hypothesis, loss-framed information was more effective than gain-framed information and may be an effective tool for changing PA beliefs and cognitions among people with SCI.

An SCI Action Canada Initiative