

Stress impacts society's functioning at all levels, as it affects individual mental and physical health, which are closely tied to psychosocial functioning in the family, at school, at work, and in the community. Stress occurs when one perceives that the demands of a situation exceed their resources. Chronic or cumulative stress at crucial life stages may explain some individuals' inability to reach optimal functioning in the long term.

ISSUES TO BE ADDRESSED

From a methodological perspective, naturalistic studies conducted throughout the life course are needed to understand the complex associations between stress and psychosocial functioning. However, longitudinal studies spanning decades are scarce. Furthermore, linear statistical models are insufficient to understand the mechanisms underlying these associations, and more sophisticated statistical models are needed.

Because stress affects psychosocial functioning through unconscious, physiological mechanisms as well as cognitive mechanisms, a combination of physiological stress measures, like hair cortisol, along with measures of perceived stress is needed to fully capture the experience of chronic stress and its impacts on psychosocial functioning.

OBJECTIVES

We will use the momentum created by our ongoing multi-sample study ("Nontraditional paths") to launch a new study involving the collection of hair samples, enabling us to assess hair cortisol concentration, a physiological measure of chronic stress. Information from our longitudinal datasets will be added to the cortisol data to reach the following objectives:

Objective 1: Explore and compare the size and shape of the associations among stressors, perceived stress, and levels of hair cortisol concentrations across our samples.

Objective 2: Test how stressors, perceived stress, and cortisol predict psychosocial outcomes either additively, sequentially, or in interaction; check for differences across samples.

Objective 3: Investigate moderators of the associations described in Objectives 1 and 2, including gender, life stage, cumulative social/economic stress, and health.

METHODOLOGY

Our ongoing data collection includes a 1st sample of participants recruited in the 1970s for the Concordia Project (now 50 to 60 years old). The 2nd sample includes adults in their 20s or 30s, who are the offspring of the original participants in the Concordia Project. The 3rd sample includes adults in their mid-20s who were recruited in high school through a project at UQAM. All samples came from disadvantaged neighborhoods in the Montreal area.

Cortisol concentrations will be extracted from hair samples and used as a physiological measure of stress over 3 months. This data will be combined with measures of perceived

stress and stressors, and with information from previous waves, including parent, peer, and self-reports, and government records of health and schooling. State-of-the-art quantitative analyses will enable us to test linear and nonlinear models, including moderation and mediation effects.

ADVANCEMENT OF KNOWLEDGE

Cortisol measures have enhanced research methods and results in the health sciences. Integrating such measures with self-report and government data will advance social sciences as well. Integrating prospective and cortisol data into this new study of chronic stress will provide a breakthrough in the study of psychosocial well-being in the Canadian population.

BROADER BENEFITS

Our study will help justify government investments in programs that support individuals experiencing poverty, trauma, or other chronic stress conditions. We will raise public awareness of the negative impacts of chronic stress on well-being and help individuals make decisions that are compatible with their long-term well-being.