# WHAT IF I'M THE ONE?

### DR. HEATHER POND LACEY ON HEALTH RISK PERCEPTIONS

CO-AUTHORS: DR. STEVEN LACEY, DR. LAURA SCHERER, AND DR. BRIAN J. ZIKMUND-FISHER

### WHY STUDY RISK PERCEPTION?

Our ability to evaluate risk impacts important decision-making in our lives. Yet, there are differences in how we react to useful probability information about risks. Surprisingly, some people may feel the same amount of concern about a 1 in a million risk as a 1 in 10 risk. Also, some people may focus on the fact that something is merely possible, and be somewhat insensitive to the improbability of an event occurring.





### **RESEARCH PROBLEMS AND GOALS**

The current theories of risk perception suggest the powerful role of emotion and the neglect of probabilistic information in the face of risk, but these tendencies differ across individuals. The goal of the research was to examine how people interpret and emotionally respond to risk. To examine this, the research team developed a novel way to gauge individuals' emotional sensitivity to probability risks and their emotional reactivity to the possibility of different outcomes.

#### **POSSIBILITY/PROBABILITY QUESTIONNAIRE (PPQ)**

Participants were asked to consider a collection of positive and negative scenarios with varying degrees of likelihood. The participants rated their emotional reactions to each scenario. Specifically, participants were asked how worried (or excited) they would be if they were the one person (out of 10 to 10,000,000) who would have the particular event happen. Worry about rare risks (1 in a million) and likely risks (1 in 10) are not experienced uniformly across individuals. Some people are generally indifferent to the stated probabilities and respond similarly even as risk information varies.



# THE PPQ AND HEALTH DECISIONS

The PPQ measure was modeled to predict responses, including risk assessment, to hypothetical health decisions. Participants were asked to make hypothetical health decisions about prenatal alcohol intake, homeowner asbestos abatement, and cancer surgery. The findings demonstrate the importance of examining individual differences in emotional sensitivity to probability information as a way to better understand the process of making meaningful decisions.

## INDIVIDUAL DIFFERENCES AND HEALTH PROMOTION

A better understanding of people's interpretation of risk is important for health communication. To convince someone to participate in preventative behaviors, the behaviors should be seen as necessary and helpful. For some people, statistical information is convincing, but for others, it may not be. Identifying those who are less responsive to statistical risk information can allow medical providers and others engaged in health promotion to tailor their message to be more effective for those people.



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