Introduction

Background:
- The psychosocial pathways connecting our physical and mental health have become an increasingly important topic of study in both youth and adult populations. Trends of psychological functioning such as mood and depressive symptoms have been tied with physical health outcomes.
- In an adult sample, Cohen and colleagues (2001) demonstrated that positive mood, but not negative mood, was associated with emotionally related illnesses. Unfortunately, much less is known about the effect of mood on health outcomes in children.
- In a sample of children, greater self-reported depression was associated with decreased salivary immune parameters (Daller et al., 2003); however, the impact of depressive symptoms on clinically relevant health outcomes in children is less well understood.
- While both changes in daily mood and more stable levels of depressive symptoms have been shown to affect physical health independently, we know much less about the interaction between these two variables in predicting physical health outcomes among children.
- Upper respiratory tract infections (URIs) are a particularly relevant health outcome to explore, as they are the most common cause of days missed from school (Centers for Disease Control and Prevention, 2004).
- Of Smiles and Sniffles: Child Daily Mood and Upper Respiratory Symptoms

Methods

Participants:
A total of 26 children between the ages of 8-13 years (mean age = 11.13 years; 56% female) comprised the current sample. Children and their families were recruited from the greater Los Angeles area to take part in a daily diary study on health and mood.

Measures:
- URI Symptoms: A checklist was used to assess daily experiences of upper respiratory symptoms such as plugged nose, cough, and sore throat, which were rated on a 0-3 scale (0 = not at all, 3 = very much). Mixed: A 4-item measure (Cohen et al., 2006) assessed daily experience of positive mood (e.g., “happy,” “cheerful”) and negative mood (e.g., “sad,” “worried”) on a 0-3 scale (0 = not at all, 3 = all day today).
- Depression Symptoms: The short form of Children’s Depression Inventory (Kraemer, 1992) was used to assess childhood depression over the past two weeks on a 0-3 scale (0 = not depressed, 2 = depressed).

Procedure:
As part of an ongoing study of family characteristics, daily stress, and upper respiratory symptoms, data were collected between the months of February and May (Child Health and Human Development Study, 1 year, 3 waves).

Results

Discussion

Hypotheses were tested in a series of multilevel models using the HLM statistical program. Daily endorsement of URI symptoms served as the outcome in each model and daily reports of positive and negative mood served as the primary predictors. Control variables included study day (with the first study day coded as zero), prior-day URI symptoms, and prior-day positive and negative mood.

Average child-reported depressive symptoms on the CDI were modeled as a level 2 (between-person) predictor on the intercept and the slope associated with each predictor and control variable. The intercept was modeled as random and slopes were modeled as fixed effects.

A significant negative coefficient associated with positive mood would lend support to hypothesis 1 (i.e., on days when children report less positive mood, they may endorse more URI symptoms).

A significant effect of stable depressive symptoms on the slope associated with positive mood would support hypothesis 2 (i.e., that the relationship between daily reports of positive mood and daily endorsement of URI symptoms is stronger for those children who are characterized by more stable depressive features).