Depressive symptom trajectories after an unexplained loss in later life: The role of locus of control

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As one ages, the propensity to experience the loss of a spouse, other family member, or friend increases exponentially. Previous research has shown that growth in the experience of such events is strongly related to the well-known increase in depressive symptoms at the oldest ages, but significant heterogeneity in the relationship between trajectories of stress and depressive symptoms remains. In this paper, we investigate (1) whether the expectedness of a stressful loss event mediates the relationship between the experience of the event and its long-term mental health consequences, and (2) whether locus of control moderates the role the expectedness of the event plays. We hypothesize (1) that expected events have less potential impact on long-term trajectories of mental health than unexpected events, and (2) that persons with stronger internal locus of control experience fewer mental health consequences to unexpected events than those with external locus of control. We use growth models of data from the Duke EPESE, a multiwave study of elders in North Carolina, to investigate the hypotheses.

Extended Abstract (Note: this is very rough at the moment)

The risk of mortality increases across age, and as we age, our peers are increasingly susceptible to death just as we are. Therefore, one byproduct of aging, especially in late life, is an accumulation of loss events. For example, using data from southeastern U.S. cities during the early 1990s, Norris (1992) found that, of 10 potentially traumatic events, tragic death, or the unexpected loss of a loved one, was most common. Roughly 30 percent of the sample had experienced such a loss in his or her lifetime.

Depressive symptoms also tend to increase at later ages after experiencing a long-term decline throughout young and middle adulthood (Mirowsky and Ross 1992). A variety of theories have been developed to account for the upswing in symptomatology in later life, but none have been very promising. The most common, residual explanation for the upswing has been a biological one.

In 2002, however, Lynch and George (2002) found that growth patterns in loss events and depressive symptoms were very strongly related at older ages, with growth in stressful loss events accounting for 40% of growth in depressive symptoms. Their findings fit well within the well-known stress process model, which similarly predicts that experiencing a stressful life event will be associated with worse mental health. Yet their study expanded contemporary knowledge and theory by following a life course perspective more closely than previous research. Most previous research, even when involving longitudinal data, has tended to rely on two wave panels covering a relatively short time period. Furthermore, most studies using short-term longitudinal data have used relatively simple change score models that do not allow the investigation of patterns of stress and symptomatology. Lynch and George's research, in contrast, used long-

term panel data and investigated the relationship between patterns of stress and patterns of symptomatology.

Their research, however, did not consider well-known factors that have been shown to mediate (or moderate) the stress-depressive symptom association, including external factors, such as social support, and internal factors like mastery. An additional possible moderator of this association, and one that has seen a substantial amount of attention in the psychological literature, is locus of control. Individuals are believed to fall somewhere on a continuum, from an internal to external locus of control, with those having an internal locus believing that the events that occur to them are well within their control and those having an external locus of control believing that events are due to other people or chance. The attributional model of depression suggests that how an individual chooses to view the events in his life (i.e., as controllable or not), especially negative life events or stressors, is highly related to his mental health status.

This paper seeks to test elements of both the stress process model and the attributional model of depression. Specifically, it will examine trajectories of depressive symptoms following an unexpected, or traumatic, loss of a loved one among a group of older adults. An important focus of the paper is the role of locus of control in shaping these trajectories. Do individuals who experience an unexpected loss have more (or less) adverse reactions, as measured by trajectories of depressive symptoms, based on their locus of control, either internal or external?

The work expands the existing literature in three important ways. First, it applies attributional theory to a sample of older adults, a group that has rarely been the focus of this literature. Second, it maximizes the utility of longitudinal data by using latent growth curve models to examine long-term trends in the association between stress and depression. And third, because it does use longitudinal data, the study can address issues of timing with respect to stress, locus of control, and mental health outcomes. Given the aforementioned increases in both loss events and depressive symptoms with age, this study may underscore important aspects of therapies and clinical practices among the elderly aimed at relieving the mental health burden following a stressful life event.

Data and Methods

For this study, we use the Duke Established Populations for Epidemiologic Studies of the Elderly (EPESE). The Duke EPESE is a multiwave prospective study of elders, begun in 1986-7 and ending in 1996, with in-person interviews conducted in years 1, 4, 7, and 10. While stressful events were measured at every wave of the study, the expectedness of events was only measured in the baseline wave. We estimate growth models of depressive symptoms from baseline through year 10 separately for those who had experienced a loss event immediately prior to baseline, and we control on the expectedness of the event to determine whether trajectories of depressive symptoms vary for the two groups. We then include measures of locus of control at baseline to determine whether locus of control moderates the effect of expectedness on symptom trajectories. Very preliminary views of the data indicate that a fair number of loss events had been experienced prior to baseline, giving us sufficient “cases” to address the hypotheses.

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