

## **Marital Status and Depressive Symptoms Over Time: Modeling the Effects of Status Duration**

### **Research Problem**

According to crisis theory, the experience of transitioning out of a marriage or partnership is a stressful life challenge that leads to temporary changes in psychological well-being. The role transition is the source of stress (Holmes and Rahe 1967), and once the transition has passed and an individual has had time to adjust to the new role, depressive symptoms and other measures of psychological distress should return to pre-transition levels (Booth and Amato 1991; Tschann, Johnston and Wallerstein, 1989; Wheaton 1990). Role theory and the marital resource model direct our attention to the persistent stresses and strains of particular roles (Pearlin 1999a), including access to economic and social resources. If social roles, and their associated stressors and resources, account for the differences in psychological distress between different marital states, and the features of these roles are constant and have constant effects on psychological distress, then the relationship between marital status and depressive symptoms should not change over time and there should be little to no evidence of adaptation (Johnson and Wu 2002; Lucas et al. 2003). In theory, both short-term and long-term processes could be influencing the frequently observed association between marital status and depressive symptoms.

Investigation of the duration spent in various marital statuses can shed some light on the short-term versus long-term impact of various marital states on mental health. Even if not examining the impact of marital status duration directly, it is believed to be important to control for time spent in a marital status when making comparisons across different marital groups (Kitson 1992). In response to this, some researchers have included a variable controlling for marital status duration when comparing depressive symptoms between different marital status categories (e.g. Brown 2000; Kim and McKenry 2002; Williams and Umberson 2004). This approach however, is problematic as the relationship between marital status duration and depressive symptoms is poorly understood for most marital status categories,

and there is no theoretical reason to believe that the effect of duration on depressive symptoms is the same for each marital status category. Furthermore, any misspecification of the marital status duration variables will result in biased and unstable estimates for the marital status categories. Marks and Lambert (1998) caution that failure to consider changes in the impact of a marital status on health over time may lead to an overestimation of the differences in health outcomes among different marital statuses. Until the role of status duration is better understood we will not know how to model it correctly.

The purpose of this study was to critically examine the relationship between marital status duration and depressive symptoms, and how this relationship may vary by marital status and gender. A variety of empirical specifications of marital status duration were tested to determine the implications of modeling status duration in various ways.

### **Data and Research Methods**

Data for this study came from two waves (1987-1988, 1992-1994) of the National Survey of Families and Households (NSFH). Of the 10,005 respondents interviewed at both waves 9,221 (92%) had valid responses for all measures used in this study and were included in the analyses. The dependent variable was a measure of depressive symptoms at Wave 2. Depressive symptoms were measured in the NSFH using 12 items from the Center for Epidemiological Studies Depression (CES-D) Scale. The CES-D is a commonly used measure of depressed mood that has high construct validity and internal consistency (Radloff 1977). The responses for the 12 depressive symptom indicators were summed and then divided by 7, to represent the average number of depressive symptoms experienced per day in the previous week. Given the skewed distribution of the Wave 2 depressive symptoms variable the natural log of this variable was used for the OLS analyses. Taking the natural log of skewed distributions decreases the violation of OLS normality assumptions and makes estimates less sensitive to outlying observations (Wooldridge 2003).

Marital status duration was measured at Wave 2 and broken down into a number of discrete categories for each marital status to be included in the analyses as a series of dummy variables. Dummy variables were used to investigate potential nonlinearity, and produce estimates that are less sensitive to misspecification errors than nonlinear transformations of a continuous duration variable (Mastekaasa 1994a). The results from analyses including marital status duration as a series of dummy variables were compared to additional analyses that investigated the impact of a continuous duration variable and various non-linear transformations.

Multivariate ordinary least squares (OLS) regression (STATA/SE9.1) was used to estimate the impact of marital status duration on Wave 2 depressive symptoms (logged) by marital status category and gender, controlling for potentially confounding variables such as age, race and socio-economic status. The marital status categories included: 1) Married (first marriage), 2) Remarried (higher order marriages), 3) Separated/Divorced, 4) Widowed, 5) Never-married 6) Cohabiting. All analyses were weighted to account for complex survey design.

## **Results**

A consistent finding from the analyses of categorical and continuous measures of marital status duration is that the relationship between status duration and depressive symptoms is not linear and varies by marital status and gender. These results further our understanding of the role of marital status duration in the relationship between marital status and depressive symptoms over time. Overall, the duration analyses show a 'crisis' effect of marital dissolution for both men and women. However, the majority of the adaptation to this new role occurs within the first six months, and persistence in this state over time leads to increases in depressive symptoms after adjustment for widowed men and women and separated/divorced women. These findings support earlier work by Johnson and Wu (2002) that investigated the relationship between marital disruption and psychological distress, and conclude that

higher levels of psychological distress among the divorced are primarily a result of enduring role characteristics with crisis effects making only a minor contribution.

In general, for men, transitions to a partnered status do not exhibit a negative 'crisis' effect that dissipates over time, although there is some evidence of a 'honeymoon' effect that lasts approximately a year for first marriages, after which duration effects remain relatively constant. First-married and cohabiting women, on the other hand, do experience a 'crisis' effect where depressive symptom levels are highest in the first six months and after this initial adaptation period they drop and remain relatively constant. Remarried women do not display a clear 'crisis' or 'honeymoon' effect. It could be that their previous marital experiences have taught them what to expect and that exiting a previously married state has additional benefits above and beyond those of marriage in general.

These findings are of major importance to future research on marital status differences in depressive symptoms. Based on the findings in this study it is clear that a single continuous indicator of marital status duration is a misspecification of the effect of marital status duration. This now obvious misspecification of the impact of marital status duration on depressive symptoms leads to biased and unstable estimates of marital status differences and should not be continued in the future.