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Change and stability in subjective well-being over the transition from higher education to employment

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ABSTRACT

The transition from higher education (HE) to employment is an anticipated life event experienced by many adults. This transition involves further socialization into work but is typically paralleled by other life changes. While the negative effects of such transitions have been investigated, little is known about changes in subjective well-being (SWB). This study set out to investigate SWB trajectories in terms of affective well-being (AWB) and cognitive well-being (CWB) in the transition from HE to employment. Data came from a seven-year nationwide longitudinal cohort study where student nurses ($N = 1702$) were assessed annually. Longitudinal analyses showed a positive effect, particularly on AWB, of leaving higher education and starting work. Yet the effects decreased over time, suggesting that individuals over time adapt to this anticipated life event and that other factors, including challenges at work, influence long-term SWB. Consistent with previous findings, demographic factors had little impact, which may partly relate to the relative homogeneity of the student cohort. In showing that an anticipated life event such as the transition from HE to employment is paralleled by differential AWB and CWB trajectories, this study furthers the understanding of individual development as related to SWB during adulthood.

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1. Introduction

The transition from higher education (HE) to employment is a challenging life event experienced by many adults that affects individual development and functioning (cf. Lüdtke, Roberts, Trautwein, & Nagy, 2011). Although previous research has investigated personality trait development (Lüdtke et al., 2011), the understanding of how the transition from higher education to working life relates to changes in individuals' ways of thinking and feeling about their lives in terms of subjective well-being (SWB), is limited. This study set out to address this question by investigating SWB development in the transition from HE to employment.

1.1. Adult development

Adulthood is a period involving development and secondary socialization. According to the neo-socioanalytic model of personality development (Roberts, Wood, & Caspi, 2008), experiences related to age-graded social roles including work and family are important drivers of personality development during adult socialization. This means that the transition from HE to employment is accompanied by other changes, including engaging in serious partner relationships, starting a family and changes in social networks (e.g., Wrzus, Hänel, Wagner, & Neyer, 2013). However, the specific event of leaving HE and starting work involves moving from the more structured context of HE into the work context, which involves a different set of expectancies, contingencies and responsibilities. This shift in contexts requires the individual adjusting to new situations. Besides influencing personality development, this challenging event is likely to influence other individual characteristics including SWB.

1.2. Subjective well-being

Subjective well-being is a broad concept relating to how individuals think and feel about their lives (Diener, 1984). SWB can

be divided into two components: affective well-being (AWB) and cognitive well-being (CWB). While AWB refers to the presence of positive affects and emotions and the absence of negative or unpleasant affects and emotions, CWB refers to the overall cognitive evaluation of satisfaction with the general life situation (i.e., life satisfaction) or with specific life domains (e.g., job satisfaction). AWB and CWB are separate constructs that differ in stability and variability and are also differently related to other variables (Eid & Diener, 2004). For instance, a recent meta-analysis (Luhmann, Hoffmann, Eid, & Lucas, 2012) showed that common major life events had differential effects on AWB and CWB, with effects on CWB being stronger and more consistent. Such findings underscore the importance of the parallel investigation of the affective and cognitive components of SWB in relation to challenging life events.

1.3. Study aim

To further the understanding of positive development during a challenging period of life, this study aimed to investigate how a life event, namely the transition from HE to employment, influenced AWB in terms of positive emotions and CWB in terms of life satisfaction among individuals being part of a nationwide HE cohort. In view of previous research (Luhmann et al., 2012), the transition was hypothesized to have differential effects on AWB and CWB.

2. Material and methods

2.1. Sample and procedure

This study used data from the prospective study Longitudinal Analyses of Nursing Education (LANE; for details see Rudman, Omne-Pontén, Wallin, & Gustavsson, 2010; flow diagrams showing recruitment and participation for HE and working life can be found in Rudman & Gustavsson (2012) and in Rudman, Gustavsson, and Hultell (2014), respectively). The sampling frame consisted of all 2331 student nurses who were enrolled in the second semester at all universities in Sweden in the autumn 2002. Of these, 1702 (73%) gave informed consent and constituted the cohort. Data were collected annually through mailed questionnaires. The present study included data from the two last years of higher education (2003, 2004) and the first five years of employment (2006–2010). A total of 1567 (92%) respondents completed the questionnaire two years before graduation (T-2), 1418 (83.3%) during the final year of higher education (T-1), 1401 (82.3%) during the first year of employment (T1), 1292 (75.9%) during the second year of employment (T2), 1175 (69.0%) during the third year of employment (T3), 1099 (64.6%) during the fourth year of employment (T4), and 1047 (61.5%) during the fifth year of employment (T5). In the final semester, there were no differences between the population and those participating in the study. The declining response rate did not interact with age, gender or health (Rudman et al., 2010). Inclusion criteria for the present study involved responding to AWB and CWB questions during at least one wave of measurement. A total of 1637 individuals met the inclusion criteria and constituted the study sample. The Karolinska Institutet Research Ethics Committee, Sweden (Ref. No. KI01-045) approved of the research. The presentation of the project, and the analyses reported, was guided by the structured reporting requirements for observational longitudinal studies (Tooth, Ware, Bain, Purdie, & Dobson, 2005).

2.2. Measures

Outcome variables were AWB (positive emotions) and CWB (life satisfaction). AWB was measured using a study specific scale

including eight items capturing different positive emotions. Respondents were asked to rate how often over the past two weeks they had felt positive minded (e.g., happy, optimistic, proud). Ratings were made along a frequency response format ranging from 1 to 4 (1 = *Not at all*, 2 = *Some of the time*, 3 = *Most of the time*, 4 = *All of the time*). CWB was measured using three items from the Satisfaction With Life Scale (SWLS; Diener, Emmons, Larsen, & Griffin, 1985). The original measure includes five items, of which the two that were found age biased (Hultell & Gustavsson, 2008) were excluded. A Likert response format ranging from 1 to 5 (1 = *Strongly disagree*, 2 = *Slightly disagree*, 3 = *Neither agree nor disagree*, 4 = *Slightly agree*, 5 = *Strongly agree*) was used. The independent variables included sex, age, immigrant background, and childhood social position (SP). Table 1 presents sample items, descriptive statistics, and internal consistency coefficients (Cronbach's alpha). Descriptive statistics and Cronbach's alpha were analyzed using SPSS 20 (SPSS, 2011).

2.3. Data analysis

Data were analyzed using latent growth modeling (LGM), a method allowing examination of both intra-individual (within person) change over time and inter-individual (between person) variability in intra-individual change (Preacher, 2008). Given the assumption of two different developmental phases (i.e., HE and employment), a piecewise growth model including a mutual intercept and two different slopes (i.e., change factors) was specified. The first piece included the slope for each outcome variable during the two final years in HE through the transition and first year of employment (T-2, T-1, and T1). The second piece included the slope for each outcome variable over the first five years of employment (T1, T2, T3, T4, and T5). Thus, the model included an intercept and two slopes with both pieces of the model change being modeled as linear. The variance of the intercept and slopes were estimated to test individual differences in the initial level of the outcome variables and in change trajectories. To get comparable estimates of the effect of time on AWB and CWB as well as the effect of the covariates, Z-scores were calculated using the model estimated means and standard deviations at T-2. The second step included adding covariates. All covariates were assessed at second year of education (T-2) and were time invariant. The intercept and slopes were regressed on the time-invariant covariates. The same analytic procedure was used to analyze both AWB and CWB development. The analyses were performed using Mplus 6.1 (Muthen & Muthen, 2010).

Examining normality of AWB and CWB assessments showed that AWB was normally distributed which motivates use of regular ML. However, CWB was positively skewed and the Yuan–Bentler correction for non-normality (Yuan & Bentler, 2000) was applied using an ML estimation with robust standard errors (MLR) in CWB modeling. In addition to the χ^2, model fit was evaluated using the root mean-square error approximation of the mean (RMSEA), the standardized root mean-square residual (SRMR), and the comparative fit index (CFI). Following previous recommendations (Hu & Bentler, 1998), additional fit indices were chosen due to their sensitivity to sample size and model misspecification. An RMSEA close to or lower than .06, an SRMR close to or lower than .08, and a CFI close to or higher than .95 were used as criteria for good model fit (Hu & Bentler, 1999).

2.3.1. Missing data and auxiliary variables

Individuals who participated in all seven waves of measurement and responded to AWB and CWB at each occasion were compared to non-completers (i.e., those who participated in at least one wave) regarding sex, age, immigrant background, parenthood, childhood SP, AWB at T-2, and CWB at T-2. The magnitude of the