The Interplay between Locus of Control and Reemployment

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ABSTRACT: Given the negative effects of unemployment on society and individuals alike, research needs to identify factors associated with reemployment. Under the guiding framework of the dynamic developmental model (DDM) of personality and work, the present study therefore investigates the role of locus of control as both a contributor to and an outcome of reemployment. Building on a sample of 538 participants of the German Socio-Economic Panel, we examined this potential interplay over a period of 6 years. Results indicated that an internal locus of control not only predicted reemployment, but that this career transition also fostered internal control beliefs. This was the case especially when individuals obtained a new position quickly after job loss and when their job satisfaction before job loss was high. The study thus suggests that personality traits may both predict and follow from work-related experiences, therewith offering support for the DDM and extending the current view on personality at work.

Keywords: cross-discipline, career development, vocational development, occupational mobility

Unemployment is not only related to negative effects for governments having to bear the costly benefits provided to the unemployed and lost revenues from taxes (Fraser & Sinfield, 1985), it is also considered one of the most stressful life events individuals can possibly encounter in the world of work (Holmes & Rahe, 1967). Job loss has been found to reduce social support (Atkinson, Liem, & Liem, 1986), is related to a number of adverse health outcomes (Jin, Shah, & Svoboda, 1995), and can cause psychiatric problems such as depression and substance abuse (Dooley, Fielding, & Levi, 1996). Reemployment, however, has the potential of reducing some of the negative effects of unemployment (Vinokur, Price, Caplan, van Ryn, & Curran, 1995) and has been found to restore the level of mental health that was present prior to the job loss (Vinokur & Schul, 2002). Despite the fact that it is well established that reemployment may mitigate some of the adverse consequences of unemployment (Kessler, Turner, & House, 1989), only a very limited number of studies has investigated the factors predicting reemployment (Gallo, Endrass, Bradley, Hell, & Kasl, 2003).

Locus of control (Rotter, 1966), a personality variable referring to the degree to which individuals believe that events depend on their own behavior and personal characteristics (internal locus of control) versus on luck, fate, or powerful others (external locus of control), may be one of those factors predicting reemployment. Research has indeed linked an internal locus of control to reemployment after job loss (Gallo et al., 2003; Holmes & Werbel, 1992; Kanfer, Wanberg, &
Kantrowitz, 2001; McGee, 2010; Vinokur & Schul, 2002; Waters & Moore, 2002). Those studies generally suggest that individuals with an internal locus of control make use of more purposeful coping strategies (Lazarus & Folkman, 1984) and are therefore more likely to gain reemployment.

What remains largely unresolved is the question of whether locus of control not only predicts reemployment, but may also be a consequence thereof. Although personality traits are commonly believed to be stable over time (West & Graziano, 1989), scholars have started challenging that assumption, showing that personality traits change in systematic ways over the lifespan (Helson, Kwan, John, & Jones, 2002; Lucas & Donnellan, 2011; Srivastava, John, Gosling, & Potter, 2003) and as a result of major life events (Roberts, Wood, & Smith, 2005; Specht, Egloff, & Schmukle, 2011). Recent research on the dynamic developmental model (DDM) of personality and work suggests that personality traits may not only serve as predictors of work-related outcomes, but that reciprocal effects of work and personality may also exist (Woods, Lievens, de Fruyt, & Wille, 2013). Applied to the context of the present study and in line with coping theory, job losers who successfully cope with the situation by finding reemployment may be especially prone to an increase in their internal locus of control. This may serve as an explanation for the common finding that reemployment has the potential of reversing the well-documented negative effects of unemployment (Kessler et al, 1989; Vinokur et al, 1995).

The present study aims to shed more light on the interplay between locus of control and reemployment over time, therewith pursuing three goals. First, we attempt to replicate existing findings concerning locus of control as a possible determinant of reemployment based on a large, longitudinal dataset. Second, we aim to extend current knowledge on the link between locus of control and reemployment by examining its underlying causal nature. Based on the DDM of personality and work, we investigate whether locus of control not only predicts reemployment, but whether obtaining reemployment also has an influence on subsequent changes in locus of control. Third, we build on attribution theory (Heider, 1958) and the theory of work adjustment (Dawis & Lofquist, 1984) to examine the impact of potential moderators that may have an effect on the relationship between reemployment and subsequent locus of control. The present study thus offers a novel perspective on the causal linkage between locus of control and reemployment, therewith yielding implications for
both practical interventions and theoretical developments concerning potentially reciprocal relationships between personality and work as proposed in the DDM of personality and work.

The present article is structured as follows. In the following section, we will develop our hypotheses concerning the relationships between locus of control and reemployment and introduce potential moderators of those relationships. We continue by describing our research methodology before turning to the results of our analyses. In the final section of this article, we will describe the contributions and limitations of our study and outline possible avenues for further research.

THEORY

The Impact of Locus of Control on Reemployment

In the workplace, locus of control has been identified as an especially relevant predictor of employment success (Andrisani & Nestel, 1976), such as job motivation (Ng, Sorensen, & Eby, 2006), organizational commitment (Irving, Coleman, & Cooper, 1997), and job performance (Judge & Bono, 2001). Locus of control is a concept developed out of Rotter’s social learning theory and refers to the degree to which individuals believe that they have control over events that affect them (Rotter, 1954). When individuals perceive events as contingent upon their own behavior or permanent characteristics, this is termed as an internal locus of control. However, when events are perceived as contingent upon luck, chance, fate or powerful others, this is referred to as an external locus of control. Although individuals are often classified as internals or externals, research suggests that the concept should not be viewed as dichotomous, but as a bipolar continuum ranging from highly internal to highly external (Marsh & Richards, 1986). In the present article, internal and external loci of control are therefore conceptualized as the extremes on a one-dimensional scale rather than as two independent dimensions.

In the event of job loss, locus of control may play a key role because it has been associated with certain coping strategies. Coping can be defined as the cognitive and behavioral efforts individuals exert in order to deal with events which they perceive as stressful (Lazarus & Folkman, 1984), such as unemployment. Coping strategies are often conceptualized as problem-focused or control-oriented coping on the one hand, including proactive strategies aimed at defining the problem, generating alternative solutions, and acting to eliminate the source of stress, versus emotion-focused
or escape-oriented coping on the other hand, including avoidant strategies such as minimization and distancing aimed at reducing emotional stress (Latack, 1986; Lazarus & Folkman, 1984). Lazarus and Folkman (1984) suggest that control beliefs are especially important coping resources that individuals can draw upon to deal with stressful demands of living, such as job loss (Holmes & Werbel, 1992). Since internals perceive that they have an impact on the events occurring in their environments, they are more likely to proactively deal with stressful situations, resulting in a higher use of the more purposeful problem-focused coping strategies (Anderson, 1977). In the context of job loss, an internal locus of control should thus foster problem-focused coping and stimulate unemployed individuals to proactively search for a new job (Leana & Feldman, 1988; Wanberg, 1997).

Empirical evidence indeed suggests that an internal locus of control contributes to reemployment (Gallo et al., 2003; Holmes & Werbel, 1992; Kanfer et al., 2001; McGee, 2010; Vinokur & Schul, 2002; Waters & Moore, 2002). Additionally, research has shown that internals search more for a new job (Caliendo, Cobb-Clark, & Uhlendorff, 2010) and do so more intensively than externals (McGee, 2010). Building on coping theory and as a longitudinal extension to the existing evidence, we thus propose:

**Hypothesis 1.** An internal locus of control positively predicts reemployment.

**The Impact of Reemployment on Locus of Control**

While personality traits such as locus of control are commonly regarded as predictor variables of outcomes in the workplace, scholars have more recently proposed a DDM of personality and work, suggesting that personality may not only affect work experiences but also be affected by them (Woods et al., 2013). Research has shown that career-related events such as the transition from college to work (Wille, Beyers, & de Fruyt, 2012), career success (Sutin, Costa, Miech, & Eaton, 2009), and retirement (Löckenhoff, Terracciano, & Costa, 2009) have the potential of evoking changes in individuals’ personality. With respect to the personality trait locus of control, a body of literature has focused on how control beliefs are negatively affected by unemployment (Layton, 1987; Legerski, Cornwall, & O'Neil, 2006; O'Brien & Feather, 1990; Winefield & Tiggemann, 1990). However, hardly any research has examined whether reemployment has the potential of restoring those control beliefs. This is particularly surprising against the background of the well-documented positive effects
of internal control beliefs on a number of desirable outcomes, especially in the workplace (Irving et al., 1997; Judge & Bono, 2001; Ng et al., 2006).

According to the theory of learned helplessness (Seligman, 1972), individuals who are faced with unfavorable events which they perceive as uncontrollable respond to the situation with increased passivity, restricted responding to the situation, and emotional stress. Persons who fail to find reemployment after job loss can therefore be expected to exhibit particularly low levels of internal locus of control. However, when individuals gain reemployment, their sense of helplessness may be reversed: They become active in their new occupation, they have new situations to respond to on the job, and their reemployment reduces their emotional stress because it offers financial stability.

Research in the domain of psychotherapy has indeed found that when individuals successfully cope with immediate difficulties, they are more likely to experience an increase in internal locus of control (Lefcourt, 1972). Individuals who lost their job and successfully cope with the situation by finding new employment may likewise be prone to such an increase in internal locus of control. Some preliminary empirical support for this notion stems from Ginexi et al. (2000), who find that permanent, full-time reemployment obtained five month after job loss has a small, but statistically significant positive effect on subsequent internal locus of control.

Hypothesis 2. Reemployment positively predicts and internal locus of control.

Moderating Role of Contextual Factors

Although personality traits are commonly regarded as stable inter-individual dispositions (West & Graziano, 1989), research in the domain of locus of control reveals that experiences in the world of work, such as unemployment or reemployment, may shape individuals’ control beliefs (Ginexi et al., 2000; Kessler et al., 1989; Vinokur et al., 1995; Vinokur & Schul, 2002). While there is a rather large body of literature linking unemployment to decreases in internal locus of control (Goldsmith, Veum, & Darity Jr., 1996; Kinicki, Prussia, & McKee-Ryan, 2000; Layton, 1987), the circumstances under which reemployment may restore such control beliefs remain largely unresolved. The present study therefore aims at investigating those circumstances by identifying potential moderators of the relationship between reemployment and subsequent locus of control.
The first set of moderators refers to the circumstances of unemployment that individuals have faced before gaining reemployment. According to attribution theory (Heider, 1958), individuals not only evaluate the extent to which events are contingent on the person versus external factors as proposed by the concept of locus of control, but also appraise the cause of an event as stable versus unstable. A large body of literature suggests that individuals commonly make certain attribution errors, such as a self-serving attribution error (Mezulis, Abramson, Hyde, & Hankin, 2004): While success is commonly attributed to internal and stable causes, failure is attributed to external and unstable causes. To account for such attribution errors, we investigate the duration of unemployment and the reason for job loss as potential moderators of the relationship between reemployment and subsequent locus of control.

When the duration of unemployment is short, individuals may be especially likely to suffer from a self-serving attribution error and attribute their reemployment to their own abilities, which could lead to an increase in their subsequent locus of control. When the duration of unemployment is however long, it becomes more difficult to attribute that success to one’s own stable characteristics, since those characteristics have not led to success for a large amount of time. Individuals who have spent a longer time in unemployment may thus not increase their internal locus of control as much as individuals gain reemployment quickly. Research by Ginexi et al. (2000) offers some preliminary support for that notion. The authors found that permanent reemployment that was obtained quickly after job loss had a small effect on locus of control, while this effect vanished entirely when reemployment was obtained eleven months following layoff. It is thus evident that the time individuals spend in unemployment until finding a new job most likely moderates the effect of reemployment on subsequent locus of control.

Hypothesis 3a: The time spent in unemployment moderates the relationship between transitions into reemployment and internal locus of control such that the relationship is weaker for longer time spent in unemployment.

The reason for job loss may be a second moderator of the relationship between reemployment and subsequent locus of control. Some reasons for unemployment, such as a business closure or the expiration of a temporary contract, are easily attributable to external circumstances such as bad luck
or a difficult economic situation. The unfavorable event of unemployment is thus self-serveingly attributed to external and unstable causes. Other reasons for job loss, such as one’s own resignation or dismissal, are less easily attributed to external and unstable circumstances. Such individuals may experience a more internal attribution of the event of job loss and remain that mind-set when gaining reemployment. They may thus be more likely to show a stronger increase in internal locus of control following reemployment.

*Hypothesis 3b: The reason for job loss moderates the relationship between transitions into reemployment and internal locus of control such that the relationship is stronger for job loss due to one’s own resignation or dismissal than for business closure or expiration of a temporary contract.*

**Moderating Role of Previous Work Adjustment**

In the theory of work adjustment (Dawis & Lofquist, 1984), work adjustment is defined as “the process by which the individual interacts and comes to terms with his work environment” (Betz, Weiss, Dawis, England, & Lofquist, 1966, p. 5). Work adjustment refers to the correspondence between individuals’ abilities and needs with the requirements and reinforcements of work environments. According to the theory of work adjustment, individuals make use of a number of behavioral patterns when they first enter a work environment. Over time, they adjust their behavioral patterns, abilities, and needs to the requirements of the work environment to achieve high levels of correspondence. Over time, those dynamic processes of adjustment between individuals and their work environments manifest in individuals’ work personalities. In the framework of the theory of work adjustment, individuals’ personalities are thus subject to change. This is the case especially when individuals are still in the process of adjusting to their work environments and levels of work adjustment are still low.

Applied to the context of this study, individuals who have developed high levels of work adjustment in their previous job thus have already developed rather stable work personalities. Individuals who were still in the process of adjusting to their work environments before losing their job, on the other hand, have not developed a stable work personality yet. Those individuals should be more prone to changes in their personality after having obtained reemployment. Based on the theory
of work adjustment, we thus investigate the moderating role of individual’s levels of previous work adjustment on the relationship between reemployment and subsequent locus of control. Since the theory of work adjustment and later empirical investigations (Rounds, Dawis, & Lofquist, 1987) have identified job satisfaction and tenure as the key indicators of work adjustment, those variables are also used as measures of work adjustment in this study.

Hypothesis 4a: Previous job satisfaction moderates the relationship between transitions into reemployment and internal locus of control such that the relationship is stronger for lower previous levels of job satisfaction.

Hypothesis 4b: Previous tenure moderates the relationship between transitions into reemployment and internal locus of control such that the relationship is stronger for shorter previous tenure.

METHODS

Sample

We used data from the German Socio-Economic Panel (GSOEP), a representative longitudinal survey of the adult population living in private households in Germany (Wagner, Frick, & Schupp, 2007). It has been conducted annually since 1984 and includes a sample size of roughly 20,000 individuals who are interviewed repeatedly each year. Due to its longitudinal structure, the GSOEP data allows investigating the effect of locus of control on subsequent reemployment as well as vice versa, rather than measuring all variables at the same point in time. Participants in the GSOEP are asked to indicate their employment statuses (such as full-time-employed, part-time-employed, unemployed, etc.) of each month in every wave, so that very detailed information on when occupational transitions take place is available. With the GSOEP data it is possible to control for a number of variables that may influence the relationships proposed between the variables of interest. Since data on locus of control was available for the years 2005 and 2010, the waves 2005 through 2010 were chosen for the statistical analyses. This resulted in a sample of 538 individuals, 251 of those being male and 287 being female. The mean age of the sample was 37.72 (SD = 11.64).

Measures

Locus of control
The GSOEP included ten items in 2005 and again in 2010 to measure respondents’ locus of control on a 7-point Likert scale ranging from 1 (does not apply) to 7 (does apply). Items that were phrased in a way to indicate external locus of control were reversed in their scoring. In line with previous research using the same and other measures of locus of control (Krause & Stryker, 1984; Trzcinski & Holst, 2010), we conducted confirmatory factor analyses via AMOS (Arbuckle, 2003) to assess whether all 10 items loaded sufficiently strongly on the latent variable locus of control for both 2005 and 2010. As can be seen in Table 1, there were three items in 2005 and the same three items in 2010 which loaded weakly on the latent factor. Therefore, we fitted a second model for both 2005 and 2010 which excluded those three items. Table 1 shows that the solution including only seven items yielded significantly better fit indices ($\Delta \chi^2(21) = 911.29, p < .001$ for 2005 and $\Delta \chi^2(21) = 1,094.38, p < .001$ for 2010). All remaining items loaded with factor loading of at least .41 on the latent factor, therewith indicating an acceptable solution. Furthermore, internal consistency, measured via Cronbach’s alpha, was acceptable ($\alpha = .67$ for 2005 and $\alpha = .73$ for 2010). Locus of control was thus entered into the analyses as a latent variable measured by the remaining seven items, resulting in the same scale that has already been used in previous studies (Specht, Egloff, & Schmukle, 2012).

Transitions into reemployment

Participants were coded as having made transitions into reemployment if they reported having become reemployed at some point between 2006 and 2009 after a previous period of unemployment and remained employed until 2010.

Time in unemployment

We operationalized individuals’ time spent in unemployment as a continuous variable, namely the number of months they reported having been unemployed until gaining reemployment or not in waves 2006 through 2009. To obtain an accurate estimate of individuals’ time spent in unemployment and to include short-term as well as long-term unemployed individuals, we traced their unemployment history up to ten years prior to the actual waves of analysis, thus starting in 1996.

Reason for Unemployment
Participants in the GSOEP who reported that they have changed their occupational status from employment to unemployment are also asked to indicate the reason why the employment terminated. When individuals indicated that the reason for their unemployment was either their own resignation or a dismissal, this was coded as self, while the reason for unemployment was coded as other if it was the end of a temporary contract or a business closure that ended the employment.

Previous Work Adjustment

Since work adjustment is operationalized as job satisfaction and tenure in the theory of work adjustment, we made use of those two variables in the present study. Individuals were asked to indicate their job satisfaction on an 11-point Likert scale ranging from 0 (low) to 10 (high). Individuals’ tenure is measured as the time they have worked for the same organization before losing their job.

Control Variables

We included a number of demographic control variables, such as age, gender, marital status, nationality, and educational attainment into the analyses, since they have been found to be related to employment statuses (Andrisani & Nestel, 1976; Kanfer et al., 2001).

Statistical Analyses

Before conducting our analyses, we made use of multiple imputation, a statistical procedure where several imputations (in this case $m = 5$ imputations) are generated for each missing data point. The percentage of missing data ranged from 0 to 10.00% (education being an exception at a missing percentage of 17.10%). The multiple imputation procedure results in analyses which avoid invalid statistical inferences due to missing data (Fichman & Cummings, 2003; Graham, 2009). We used linear regression for imputing continuous variables and logistic regression for imputing categorical variables to estimate five datasets. All analyses reported below were performed on each of those five datasets. Estimates were then combined using an algorithm based on Rubin’s (1987) rules.

The analytic strategy investigating the interplay between locus of control and reemployment over time made use of different methodological approaches. First, we used event history analysis (also known as survival analysis; Allison, 1984; Miller, 2011) to test for the effect of locus of control on subsequent reemployment (Hypothesis 1). Event history analyses not only estimate whether an event
occurred or not, but also take into consideration the time it took for the event to occur. This analytical approach thus treats reemployment as a time-dependent variable rather than as binary variable only. Furthermore, survival analyses have the potential of accounting for censored data. The observation period of the present study ended after the wave of 2010, but it is possible that unemployed individuals became reemployed after that point in time. The data used in this study are therefore right-censored, a fact that event history models can account for.

Second, we employed propensity score matching (Rosenbaum & Rubin, 1983; Connelly, Sackett, & Waters, 2013) before estimating the effect of reemployment on locus of control (Hypothesis 2) and the potentially moderating effects we propose (Hypotheses 3a, 3b, 4a, and 4b). Propensity score matching has been suggested as the method of choice when estimating causal effects of group membership on the basis of observational data (Harder, Stuart, & Anthony, 2010). When participants cannot be randomly assigned to experimental conditions such as continuous unemployment versus reemployment, a comparison between those experimental conditions may be distorted (Dehejia & Wahba, 2002). Propensity score matching aims at reducing this bias by pairing participants from the different experimental conditions who are similar in terms of certain pre-defined covariates, such as demographic variables and in this case previous locus of control. On the basis of the paired sample, we conducted an independent samples t-test for testing Hypothesis 2 and hierarchical multiple linear regression analyses for testing Hypothesis 3a, 3b, 4a, and 4b.

**RESULTS**

Table 2 includes the means and standard deviations of the studied variables as well as their correlations.

The Impact of Locus of Control on Reemployment

For testing Hypothesis 1, which suggests that an internal locus of control positively predicts transitions into reemployment, we made use of event history analysis, and more particularly Cox regression hazard rate models. The dichotomous variable reemployment (0 = continuously unemployed; 1 = reemployed) was included as a dependent variable, while the time until reemployment was included as the time variable. The demographic control variables age, gender,
marital status, nationality, and educational attainment were included as independent variables in a first step of the Cox regression in order to control for their effects on the outcome. In a second step, the latent factor locus of control in 2005 was entered into the analysis. As can be seen in Table 3, locus of control positively and significantly predicted reemployment ($B = .24, p < .001$), thus offering support for Hypothesis 1.

Insert Table 3 about here

**The Impact of Reemployment on Locus of Control**

To test Hypothesis 2, which states that reemployment has an effect on subsequent locus of control, we first made use of propensity score matching using the MatchIt software package for SPSS (Ho, Imai, King, & Stuart, 2011). We estimated the propensity score for each participant, which is a measure of the likelihood of a person’s group membership given the observed covariates. Participants’ propensity scores were estimated for each of the five imputed. The demographic control variables age, gender, marital status, nationality, and educational attainment as well as participants’ locus of control in 2005 were included as potential covariates. Participants from both groups were then matched using a 1:2 nearest neighbor matching with replacement, since the two groups of continuously unemployed and reemployed individuals are of different sizes. We furthermore imposed a caliper of .20 of the standard deviation of the propensity score’s logit to avoid matches of very diverging propensity scores. Across the five imputed datasets, the sample size after the matching procedure was on average $N = 503$.

An independent samples t-test was then conducted on the matched sample, comparing reemployed individuals to those who remained unemployed in terms of their locus of control in 2010. Results suggested that individuals who gained reemployment had significantly higher levels of internal locus of control in 2010 than individuals who remained unemployed ($t(402) = 6.86, p < .001$), thus offering support for Hypothesis 2. With a standardized effect size of Cohen’s $d = .71$, the effect could be classified as large.

**Moderating Role of Contextual Factors**

Hypothesis 3a, which states that the effect of reemployment on locus of control is moderated by the time individuals have spent in unemployment, was also tested on the basis of the sample that
resulted from the propensity score matching procedure. In a hierarchical multiple regression analysis, we then entered the independent variable reemployment and the centered moderator time spent in unemployment in a first step and the interaction term of those two variables in a second step to estimate their effects on the outcome locus of control in 2010. Results suggested that the interaction term between reemployment and time spent in unemployment significantly and negatively predicted locus of control in 2010 ($B = -.01, p < .001$). The results thus offered support for Hypothesis 3a, suggesting that the relationship between reemployment and subsequent locus of control is weaker when individuals spent a longer time in unemployment.

Hypothesis 3b, which states that the effect of reemployment of locus of control is moderated by the reason for unemployment, was also tested with a hierarchical linear regression analysis performed on the sample that resulted from the propensity score matching procedure. In a first step, the independent variables reemployment and the moderator reason for unemployment (1 = own; 0 = other) were entered into the analysis. In a second step, the interaction term between those two variables was added to the model while locus of control in 2010 again served as the dependent variable. Results suggested that interaction term between reemployment and reason for unemployment was not statistically significant. The results thus offered no support for Hypothesis 3b.

**Moderating Role of Previous Work Adjustment.**

To test Hypotheses 4a and 4b, which state that previous work adjustment moderates the relationship between reemployment and subsequent locus of control, we again performed a hierarchical linear regression analysis on the matched sample. The independent variable reemployment and the centered term of previous job satisfaction were added to the model in a first step to test Hypothesis 4a. In a second step, the interaction term between those two variables was added. Results suggested that the interaction term between reemployment and job satisfaction positively and significantly predicted locus of control in 2010 ($B = .08, p < .01$). The results thus contradicted Hypothesis 4a and suggested that previous job satisfaction moderates the relationship between transitions into reemployment and internal locus of control such that the relationship is stronger for higher previous levels of job satisfaction.
To test Hypothesis 4b, we followed the same procedure as outlined above, adding reemployment and tenure to the hierarchical regression model in a first step and their interaction term in a second step. Results suggested that the interaction effect between reemployment and tenure did not significantly predict locus of control in 2010, thus offering no support for Hypothesis 4b.

**DISCUSSION**

The aim of the present study was to shed more light on the underlying causal nature of the relationship between locus of control and reemployment. Building on coping theory (Lazarus & Folkman, 1984), we examined the role of locus of control as an antecedent of reemployment and found that an internal locus of control predicted reemployment. In line with recent theoretical considerations on the reciprocity of personality traits and work experiences (Woods et al., 2013), we furthermore investigated whether reemployment has the potential of evoking changes in individuals’ locus of control. Our results suggested that gaining reemployment served as a predictor of subsequent locus of control, especially when reemployment was obtained quickly after job loss and when individuals had a high job satisfaction before their job loss.

The findings of the present study thus offer support for a reciprocal relationship between locus of control and reemployment, as an internal locus of control both affects reemployment and is affected by it. While control beliefs have been regarded solely as a predictor of reemployment in much of the literature, our results extend this perspective and suggest that locus of control may also be subject to change based on the experience of gaining reemployment. We therewith contribute to an emerging stream of literature investigating the reciprocal effects of personality and work. Our results suggest that locus of control may both contribute to and develop on the basis of certain vocational experiences, offering support for a dynamic developmental model (DDM) of personality and work (Woods et al., 2013). We base those results on a rather large, longitudinal dataset collected over a 6-year time period, also including participants’ employment history up to 10 years earlier. The analytic strategy of propensity score matching lets us draw more confident conclusions than more conventional analyses would allow us to. The findings of the present study thus advance theoretical considerations on the role of career transitions as predictors of continuous personality development throughout the working life.
In a more applied vein, the results of this study have two main practical implications. First, the finding that an internal locus of control predicts reemployment may be relevant for institutions providing interventions assisting job losers in obtaining reemployment. If internal control beliefs lead to reemployment, interventions aimed at supporting jobless persons in finding reemployment may focus on enhancing their internal control beliefs. Second, while job loss is detrimental for individuals’ control beliefs, our results suggest that finding reemployment has the potential of restoring those control beliefs, particularly when the time individuals spend in unemployment is rather short. Given the well-documented positive effects of internal control beliefs on a number of work-related outcomes (Irving et al., 1997; Judge & Bono, 2001; Ng et al., 2006), our findings highlight the importance of quick reemployment for individuals’ future behavior at the workplace.

Limitations and Avenues for Future Research

Despite the fact that we based our analyses on a rather large dataset collected over time, this study is not without limitations. First, our sample included only German respondents, which limits the generalizability of the findings to the larger world population. Future research could aim at replicating the findings of the present study to other samples. Second, we cannot be fully certain of the causal nature underlying the relationships between locus of control and reemployment. However, we believe that due to the chronological measurement of the variables and the analytical approach taken, the effects obtained are most likely to be of a causal nature. Third, although we argue that restoring individuals’ internal locus of control has positive consequences in terms of their physical and mental health as well as for their behavior at the workplace, we do not directly measure those ultimate outcomes. The question of whether the positive effects of obtaining reemployment on locus of control also leads to further desired outcomes could be addressed in future research. Fourth, the present study aims at advancing our knowledge on dynamic reciprocal relationships between personality traits and work experiences. Our investigation is limited to solely one personality trait interacting with one career transition. More empirical research is certainly needed to provide a more compelling case that work experiences may shape personality development in general. Fifth and contrary to our hypothesis we found that job satisfaction (as an indicator of work adjustment) served as a positive moderator of
the relationship between reemployment and locus of control. Future research is needed to investigate
the role of work adjustment in explaining personality changes.

**CONCLUSION**

Our findings shed more light on the interplay between locus of control and reemployment. We
find that internal control beliefs not only predict reemployment, but that obtaining reemployment also
leads to a more internal locus of control, especially when the time spent in unemployment is short and
previous job satisfaction is high. The present findings offer support for the role of control beliefs in
coping with unemployment and contribute new insights on how career transitions foster personality
development.
REFERENCES


Table 1

Confirmatory Factor Analysis for Locus of Control

<table>
<thead>
<tr>
<th>Item</th>
<th>Locus of Control 2005</th>
<th>Locus of Control 2010</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Model 1</td>
<td>Model 2</td>
</tr>
<tr>
<td>My life’s course depends on me.</td>
<td>.49***</td>
<td>.51***</td>
</tr>
<tr>
<td>I haven’t achieved what I deserve. (R)</td>
<td>.63***</td>
<td>.61***</td>
</tr>
<tr>
<td>What you achieve depends on luck. (R)</td>
<td>.61***</td>
<td>.62***</td>
</tr>
<tr>
<td>Influence on social conditions through involvement.</td>
<td>.00</td>
<td>-.07</td>
</tr>
<tr>
<td>Others make the crucial decisions in my life. (R)</td>
<td>.69***</td>
<td>.69***</td>
</tr>
<tr>
<td>Success takes hard work.</td>
<td>-.04</td>
<td>.02</td>
</tr>
<tr>
<td>Doubt my abilities when problems arise. (R)</td>
<td>.45***</td>
<td>.45***</td>
</tr>
<tr>
<td>Possibilities are defined by social conditions. (R)</td>
<td>.45***</td>
<td>.41***</td>
</tr>
<tr>
<td>Abilities are more important than effort. (R)</td>
<td>.16***</td>
<td>.24***</td>
</tr>
<tr>
<td>Little control over my life. (R)</td>
<td>.73***</td>
<td>.74***</td>
</tr>
<tr>
<td>$X^2$</td>
<td>1167.23</td>
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<td>df</td>
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<tr>
<td>RMSEA</td>
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<tr>
<td>$\Delta X^2$</td>
<td>911.29***</td>
<td>1.094.38***</td>
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Note. N = 538. R = reverse scored item. CFI = comparative fit index; RMSEA = root mean square error of approximation.

*** p < .001.
Table 2

Means, Standard Deviations, and Correlations Among the Studied Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>M</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
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<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
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<tbody>
<tr>
<td>Locus of Control 2005</td>
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<tr>
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<td>-.68***</td>
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<tr>
<td>Reason for unemployment</td>
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<td>.49</td>
<td>.01</td>
<td>.04</td>
<td>-.06</td>
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<tr>
<td>Previous tenure</td>
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<td>58.42</td>
<td>.00</td>
<td>-.08</td>
<td>-.01</td>
<td>.03</td>
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<tr>
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<td>2.96</td>
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<td>.21***</td>
<td>-.31***</td>
<td>-.01</td>
<td>-.02</td>
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<td>-.01</td>
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<td>.20***</td>
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<td>.05</td>
<td>.02</td>
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<td>.01</td>
<td>.05</td>
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<td>.09*</td>
<td>.11*</td>
<td>-.08</td>
<td>.07</td>
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<td>.13**</td>
<td>-.15**</td>
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</table>

Note. N = 538.

* p < .05. ** p < .01. *** p < .001.
Table 3

Cox Regression Hazard Rate Model Predicting Reemployment

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<tr>
<th></th>
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<th>Step 2 (locus of control)</th>
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<td>SE B</td>
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<td>.11</td>
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<tr>
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</table>

Note. N = 538.

*** p < .001.