The Relationship between Control, Job Seeking and Well-being in Unemployed People

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Abstract

We tested the usefulness of the competence-contingency-control model to account for well-being and job seeking in the unemployed. We surveyed 216 job seekers (54% female; mean age = 35 years; average unemployment = 12.4 months) with measures of personal competency, beliefs about contingency relationships, job seeking and well-being. We hypothesised that control (competency and contingency) would be positively related to well-being and job seeking, and that job seeking would be positively associated with well-being, and mediate and/or moderate between control and well-being. We found that control accounted for 1/3 of the variance in well-being, and was positively associated with job seeking (7% of variance). Job seeking did not mediate or moderate between control and well-being.

Key words: control; competence; contingency; well-being; job seeking; unemployed

There is now strong and consistent evidence that, for most people, the experience of unemployment is negative and psychologically damaging (McKee-Ryan, Song, Wanberg, & Kinicki, 2005; Murphy & Athanasou, 1999). Observing and accounting for the general decline in well-being associated with unemployment has a long history (e.g., see Jahoda, 1979), and has involved many causal explanations. Some general psychological theories have been employed to explain this decline in well-being, including theories of attribution (Winefield, Tiggemann, Winefield, & Goldney, 1993), self-determination (Vansteenkiste, Lens, De Witte, De Witte, & Deci, 2004), stress and coping (Kinicki, Prussia, & McKee-Ryan, 2000), and social comparison (Sheeran, Abrams, & Orbell, 1995). Several specific unemployment and well-being theories have also been proposed and employed. The most notable being the latent deprivation (Jahoda, 1982), agency restriction (Fryer & Payne, 1984) and vitamin models (Warr, 1987).

Most of these theories imply, or explicitly refer to, perceived loss of control being a causal factor in psychological decline. For example, the stress and coping model (Lazarus & Folkman, 1984) predicts that the level of stress associated with unemployment is dependent on the assessment of possible threats associated with joblessness (primary appraisal) combined with the person's perceived capacity to cope with or control these threats (secondary appraisal). The agency restriction model (Fryer & Payne, 1984) places the decline in well-being in the context of loss of income, which directly reduces the individual's capacity to plan and organise a meaningful and satisfying life. Warr (1987) included loss of control as one of his environmental factors, which he argued contributed to producing negative health effects both directly, and indirectly, by influencing other variables (e.g., loss of control impinges on people's sense of purpose, which, in turn, reduces well-being).

Control has been operationalised mainly as locus of control in unemployment studies, when testing correlates of both well-being (McKee-Ryan et al., 2005) and job seeking

(Kanfer, Wanberg, & Kantrowitz, 2001). According to these empirical studies, an external locus of control in unemployed people is negatively related to well-being (e.g., Price, Choi, & Vinokur, 2002). However, Skinner (1996) argued that any conceptualisation of control should include both agent-means and means-ends beliefs. Agent-means beliefs, operationalised as efficacy, agency or competence, refer to whether a person (agent) has the capacity (means) to exert an influence over a particular outcome. Means-ends beliefs refer to whether a person sees a causal connection between their capacity (means) to exert an influence and the outcome (end). Skinner operationalised these beliefs as instrumentality and response-outcome expectations or contingency.

One model of control that meets the requirements for agent-means and means-ends beliefs is Weisz and Stipek's (1982) competence-contingency-control (CCC) model. In this model, perceived control is the result of two underlying dimensions; namely, perceived contingency of outcomes (the expectation that an outcome is causally dependent upon the person's behaviour) and perceived competence (the belief that there is sufficient skill to utilise the expected contingency). According to this model, assessment of both perceived contingency and perceived competence is needed to assess accurately a person's perceived capacity for control. The CCC model has been used widely to test for psychological decline in children and adolescents (Compas, Banez, Malcarne, & Worsham, 1991; Weisz, Southam-Gerow, & McCarty, 2001) and has been used to test the relationship between aging and well-being in adults (Smith, Kohn, Savage-Stevens, Finch, Ingate, & Lim, 2000). We applied the model to an unemployed sample and tested the hypothesis (H1) that control, operationalised as contingency and competence, would be positively related to well-being.

Apart from influencing an individual's level of well-being, perceived control is also likely to determine an individual's actions. "When people perceive that they have a high degree of control, they exert effort, try hard, initiate action, and persist in the face of failures and

setbacks...” (Skinner, 1996, p. 556). An important action for unemployed people is job seeking, which is the second most widely researched construct in the unemployment literature after well-being. Job seeking includes activities such as preparing a resume, reading job advertisements, contacting employers and going to job interviews. It is related strongly to re-employment (Schmit, Amel, & Ryan, 1993; Wanberg, 1997) and the quality of that re-employment (Kanfer et al., 2001). Kanfer et al. in their meta-analysis on job-search and employment found a significant, though weak, relationship between control (as measured by locus of control) and job seeking behaviour. Thus, in the present study we tested the hypothesis (H2) that perceptions of control (i.e., viewing oneself as competent and seeing a connection between what you do and what you achieve) would be positively related to job seeking.

Outcomes from studies testing the relationship between job seeking and well-being have been somewhat mixed. Several studies have identified a negative relationship, finding that higher levels of job seeking were associated with poorer levels of well-being (Leana & Feldman, 1992; McKee-Ryan et al., 2005; Wanberg, 1997), and have explained these findings by citing the difficulties associated with job seeking and the frustration and rejection that often result from the job seeking process. Other studies have found a positive relationship for unemployed people, although only in the early stages of job seeking (e.g., Miltenburg & Woldringh, 1989, cited in McFadyen & Thomas, 1997). We tested the relationship between job seeking and well-being, but as our sample was not recently unemployed and unlikely to produce results similar to those found by Miltenburg and Woldringh, we expected (H3) that job seeking would be negatively associated with well-being. As H1 to H3 imply that job seeking mediates the relationship between control and well-being, we also tested this relationship (H4).

The inconsistent results found for the job seeking and well-being relationship may have occurred because this relationship is dependent on other variables. In the stress and coping model (Lazarus & Folkman, 1984), secondary appraisal, or the person's perceived capacity to cope with appraised threats, moderates the relationship between perceived threats and well-being. Coping strategies are typically categorised as either problem-focused (i.e., attempts to resolve the cause of the stressful situation) or emotion-focused (i.e., attempts to regulate the emotional response to the stressful situation). Job seeking is an important problem-focused coping behaviour for unemployed people (Kinicki & Latack, 1990). Thus, we also tested the capacity for the active coping strategy of job seeking to moderate the relationship between the individual's primary appraisal of control over their situation and the outcome of well-being. Given the argument that high levels of job seeking are associated with frustration and distress (Leana & Feldman, 1992; Wanberg, 1997), we expected (H5) that increments in job seeking would have their most dramatic effects on the well-being of those who perceived lower levels of control for themselves. All hypotheses are represented in Figure 1.

Insert Figure 1 about here

Method

Participants

We distributed 318 surveys to adults attending two offices of the national social security agency in mid-eastern Australia. One hundred and two surveys were discarded, primarily because the respondents were not unemployed (e.g., in receipt of disability pension or sickness benefit). A small proportion was discarded, as the surveys were not adequately completed. This left 216 unemployed participants, comprising 117 women (54%) and 99 men, whose mean age was 34.9 years (Range = 16 to 63 years; *SD* = 13.8), and average length of unemployment was 12.4 months (Range = < 1 month to > 4 years; *SD* = 20.8). Five participants (2.3%) reported < 10 years of education, 105 (48.6%) reported 10 years, 63

(29.2%) reported 12 years, and 39 (18.1%) reported tertiary education (4 participants, 1.9%, did not respond to this question).

Materials

The survey consisted of scales to measure perceived competence, contingency, job seeking and well-being. Unless otherwise stated, items had a 5-point Likert response format with end-points of *strongly disagree* and *strongly agree*. In all cases, higher scores reflected higher levels of the construct.

Competence: We operationalised competence as general self-efficacy, measured using the 10-item General Self-efficacy scale (Schwarzer & Jerusalem, 1995). Sample item = “I can handle whatever comes my way”. The original scale was created in German, but has since been translated into many languages and used extensively in research (Scholz, Doña, Sud, & Schwarzer, 2002). Previously reported internal reliability coefficients ranged from .75 to .91 (Scholz et al., 2002). The current sample yielded $\alpha = .91$.

Contingency: Based on the original contingency scale by Weisz, Sweeney, and Proffitt (1991), we constructed a 7-item scale to assess beliefs about contingency of outcomes that was suitable for use with unemployed adults. A sample item was, “The time I spend looking for a job will be worth it”. We conducted a principal-axis factor analysis to determine the underlying structure of the scale. This analysis indicated that one factor accounted for 64% of the variance. All items had a positive relationship with the factor, with factor loadings ranging from .55 to .87; $\alpha = .90$.

Job seeking: This was operationalised using five items from the Proactive Job seeking subscale of the Coping with Job Loss Scale (Kinicki & Latack 1990). A sample item was “I focus my time and energy on job search activities”. Lai and Wong (1998) tested the validity of the scale using factor analysis and reported internal reliability coefficients of .72 for the 5-

items. We removed one item because of low item-total correlations; α for the remaining four items was .85.

Well-being: We operationalised this as the 12-item General Health Questionnaire (Goldberg, 1972), which is one of the most widely used measures of well-being in unemployment research (McKee et al., 2005). The scale assesses the common mental health domains of depression, anxiety, somatic symptoms and social withdrawal. A sample item is, “Have you recently felt constantly under strain?”, with a 4-point response format containing anchors of *more so than usual/ same as usual/ less than usual/ much less than usual*. Items were scored from 0-3, giving a possible range of 0 to 36. For convenience of interpretation, we reverse scored all items so that high scores represented better well-being. The scale has excellent psychometric properties (Goldberg & Williams, 1988); $\alpha = .89$.

Procedure

The study was survey based, cross-sectional and based on a convenience sample of unemployed adults. Paid university research assistants distributed anonymous surveys to unemployed volunteers, who were attending several offices of nationally funded unemployment agencies. The volunteers were informed about the nature of the study, and if they agreed to participate, completed the survey and returned it immediately to a research assistant. The survey took approximately 10-15 minutes to complete. As a reward for participating, respondents were offered the opportunity to have their names included in a draw to win a \$100 voucher at the store of their choice. The study had approval from the authors’ university human ethics committee.

Results

We tested the hypothesized structural model shown in Figure 1 using maximum likelihood estimation available through AMOS software. Model fit was assessed using the Comparative

Fit Index (CFI), the χ^2 statistic, and the Root Mean Square Error of Approximation (RMSEA; Byrne, 2001). The CFI and χ^2 indices compare the specified model to a model with complete independence. A non-significant χ^2 and CFI values greater than .90 to .95 reflect a good model fit. The RMSEA estimates the error due to the approximate fit of the model, with less error being more desirable. RMSEA values below .05 to .08 reflect a good model fit. As the χ^2 statistic is sensitive to sample size (the more participants, the higher the χ^2 value), it has been recommended it be used with caution and to also consider a χ^2 value two to three times greater than the degrees of freedom as acceptable (Carmines & McIver, 1981). Thus, we also considered the χ^2/df statistic.

Bentler and Chou (1987) recommended a ratio of between 5:1 and 10:1 for participants to parameters estimated in a latent variable analysis. Including all items from all scales in the one analysis would have violated this assumption. Thus, we reduced the number of parameters by creating two multi-item parcels for each scale, as recommended by Landis, Beal, and Tesluck (2000). To create these parcels, we subjected the items from each measure to an exploratory factor analysis and specified a single-factor solution. We then paired the highest and lowest loading items and allocated them to the first composite, paired the second highest and second lowest loading items and allocated them to the second composite, and repeated these steps until all items were exhausted. Items were then summed to form the individual parcels. From this point, the steps in the data analysis were to assess a measurement model for the latent variables being tested (well-being, job seeking, control), test the hypothesized structural model, test whether job seeking mediated the relationship between control and well-being, and finally test whether job seeking moderated the relationship between control and well-being.

Test of Measurement Model

We conducted a confirmatory factor analysis to test whether the multi-item parcels represented the individual latent variables as intended. The measurement model consisted of three covarying latent variables of well-being (represented by two parcels), control (represented by two contingency parcels and two competence parcels) and job seeking (represented by two parcels). The fit statistics for this analysis, $\chi^2(13) = 26.74$, $p = .013$, $\chi^2/df = 2.06$, CFI = .98, RMSEA = .07, demonstrated a good fit to the data. All standardized regression weights were significant ($p < .001$) and ranged from .47 to .93. Control was significantly associated with job seeking ($r = .26$, $p = .004$) and well-being ($r = .58$, $p < .001$); and job seeking was significantly associated with well-being ($r = .24$, $p = .03$). These correlations paralleled the zero-order correlations calculated for the scale totals. See Table 1 for summary data, latent variable correlations and zero-order correlations.

Insert Table 1 about here

Test of Structural Model

First, we tested the hypothesised model reported in Figure 1 without an interaction term included. As the outcome variable was only weakly correlated with age ($-.06$, *ns*), gender ($-.03$, *ns*), education ($.15$, $p = .03$) and length of unemployment ($.02$, *ns*), these potential control variables were not included in the model. This model had a satisfactory fit to the data, $\chi^2(13) = 26.74$, $p = .013$, $\chi^2/df = 2.06$, CFI = .98, RMSEA = .07. Job seeking ($\beta = .09$, $p = .33$) and control ($\beta = .55$, $p < .001$) accounted for 33.8% of the variance in well-being, with more control associated with better well-being. Control was also significantly associated with job seeking ($\beta = .26$, $p = .003$), accounting for 6.9% of variance.

Test of Mediation and Moderation

Second, we examined whether job seeking mediated the relationship between control and well-being. However, as job seeking was not significantly associated with well-being, it did not meet the criteria for mediation (Shrout & Bolger, 2002). Third, we tested whether job

seeking moderated the relationship between control and well-being, using the procedure recommended by Kline and Dunn (2000). This was to include a latent variable interaction term in the model (based on the product of the centred observed variables that were used to measure control and job seeking), and then to test two models using data based on high (≥ 1 SD above the mean) and low scores (≥ 1 SD below the mean) for the moderator variable. This latter step assesses how the relationship between control and well-being differs for “high” versus “low” job seekers. However, when the latent interaction variable was included in the model, it did not contribute significantly to predicting well-being ($\beta = -.18, p = .06$), indicating that no interaction was present; $\chi^2(24) = 46.87, p = .003, \chi^2/df = 1.95, CFI = .97, RMSEA = .07$.

Discussion

This study tested the ability of the competence-contingency-control (CCC) model to account for psychological well-being in unemployed people. Previously, perceived control was found to be associated with positive affect in unemployed people (e.g., Price et al., 2002); however, the measure used to operationalise control has primarily been locus of control, and has not included agent-means and means-ends beliefs, as recommended by Skinner (1996). The CCC model of control was an appropriate model to operationalise perceived control, as it incorporates agent-means and means-ends dimensions: the belief that there is a connection between behaviour and outcome, and the belief that the person can act to achieve that outcome. The study also tested the relationship between the CCC model and the important variable of job seeking, which can be construed as an active coping strategy for unemployed people.

First, the CCC model appears to be a useful heuristic to explain well-being in unemployed people. In support of H1, the model accounted for about one third of the variance in well-being, reflecting that subjective feelings of control, as represented by competence and

contingency, are important correlates of well-being in unemployed people. The CCC model has been used to examine depressive and anxiety symptoms in clinical and non-clinical settings (Smith et al., 2000; Weisz et al., 2001), and it is appropriate to use it to test for well-being in the unemployed. Depression and anxiety are the most widely measured variables when examining well-being during unemployment (McKee-Ryan et al., 2005), and were strongly represented by the well-being outcome variable used in this study. Greater prominence needs to be given to the role of perceived control when considering well-being in unemployed people. Unemployed people are often marginalised, have reduced financial and other resources, and typically lack control over their environment.

Second, and in support of H2, the CCC model was positively associated with job seeking, with the control variable accounting for about seven percent of the variance in the job seeking. This outcome is consistent with Skinner's (1996) proposition that when people perceive to be in control, they initiate actions, commit energy to those actions, and persevere with the actions in the face of adversity. This outcome reinforces the need for practitioners to target individual competence and emphasise contingency relationships, as they are not only associated with positive affect, but also are associated with the active coping behaviour of job seeking. While it might be difficult to provide interventions that directly increase perceptions of control in this population, breaking control down into the more manageable component parts guided by the CCC model should assist practitioners to structure interventions that meet needs relating to managing negative feelings and activating job seeking behaviours.

We found that job seeking was not significantly associated with well-being (H3), and that job seeking did not mediate (H4) or moderate (H5) the relationship between control and well-being. Previous research has produced mixed results when testing the relationship between job seeking and well-being, with some studies identifying a positive relationship (see McFadyen & Thomas, 1997) and others identifying a negative one (e.g., Wanberg, 1997).

McKee-Ryan et al. (2005) in their meta-analysis concluded that a negative relationship was more plausible, because of the difficulties associated with job seeking. The problem with these studies is that they mostly operationalised control as locus of control. Nonetheless, our results are inconsistent with results found when testing active coping in other populations, where typical findings are that active coping is positively associated with well-being (Coyne & Racioppo, 2000). It may be that job seeking does not reflect adequately the types of problem-focused coping engaged in by the unemployed, and other variables need to be included when considering this coping focus. Future studies could profitably tease out the relevant domains of active coping in the unemployed, and test the relationship between more specific active coping strategies (including job seeking) and outcome variables such as well-being. This may also shed additional light on the assumption that withdrawal from job seeking (i.e., reducing one's active coping) is better for well-being. Withdrawing from job seeking is likely to have long-term negative consequences for unemployed people. A very consistent finding in the literature is that job seeking is associated with re-entry to the workforce (Kanfer et al., 2001; Schmit et al., 1993; Wanberg, 1997). Our results suggest that withdrawing from job seeking does not reduce well-being. The challenge for practitioners is to provide strategies for unemployed people that will allow them to maintain high levels of job seeking while at the same time maintain their psychological health and optimism. Increasing feelings of control is likely to be helpful with this.

This study has contributed to the literature by directly testing a control model of well-being with unemployed people, and showing that control, job seeking and well-being are related in important ways. The study is not without its limitations. While longitudinal studies with this population are difficult and expensive, the CCC model needs to be tested across time to be able to confirm the causal relationships proposed in the model. Other interpretations are possible. It may be, for example, that improved well-being (because of

increased perceptions of control) may also contribute to increased job seeking as the unemployed person is energised by feelings that are more positive. Importantly, no specific CCC scales have been devised for the unemployment population, and this needs to occur to be able to provide a more rigorous testing of the model and to confirm our results. We assessed one aspect of well-being, represented by the General Health Questionnaire, and other well-being domains, such as autonomy, mastery, personal growth and positive relationships (Diener, Suh, Lucas, & Smith, 1999), need to be examined to gain a fuller understanding of the relationship between control and well-being. Finally, while the CCC model accounted for meaningful levels of variance in well-being and job seeking, we tested the model without any third variables, and it needs to be tested along with other possible predictors to provide a fuller explanation of well-being for unemployed people. McKee-Ryan et al. (2005) identified over 100 variables associated with well-being, and the more important ones found in that meta-analysis need to be considered along with the CCC. Unemployment is socially and physically, as well as psychologically detrimental, and the relationship to these variables also needs to be examined.

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Figure 1. Control, operationalised as competence and contingency (Weisz & Stipek, 1982), is positively associated with well-being and job seeking. Job seeking is negatively associated with well-being, mediates the relationship between control and well-being, and moderates the relationship between control and well-being.

Table 1

Summary data for study variables, with zero-order correlations reported above the diagonal and correlations among the latent variables reported below; $N = 216$

Variables	<i>M</i>	<i>SD</i>	1	2	3
1. Control (GSE + OE)	63.50	11.65	-	.33***	.45***
2. Job seeking	14.37	3.28	.26**	-	.12
3. Well-being (GHQ)	33.00	6.88	.58***	.24*	-

Note: GSE = General self-efficacy; OE = Outcome expectations; GHQ = General Health Questionnaire; * $p < .05$, ** $p < .01$, *** $p < .001$