The effectiveness of the JOBS program among the long-term unemployed: a randomized experiment in the Netherlands

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SUMMARY
Given the adverse effects of long-term unemployment, it is of major concern that evidence-based interventions are available for the long-term unemployed. Therefore, we examined the effectiveness of the JOBS program, a group training for the unemployed [Caplan, R. D., Vinokur, A. D., Price, R. H. and Van Ryn, M. (1989). Journal of Applied Psychology, 74, 759–769], among long-term unemployed individuals. In a randomly controlled trial, JOBS was compared with a control condition and a voucher intervention, in which individuals were given the opportunity to spend a certain budget on services that could help them reintegrate. After 6 months JOBS participants had more often found a job and were more satisfied with the intervention. After 12 months effects were still visible, but less pronounced.

Key words: unemployment; intervention study; vocational guidance; self-efficacy

INTRODUCTION
Unemployment has important consequences for individuals’ well-being and health. Several studies, both cross-sectional and longitudinal, have demonstrated the association between unemployment and health problems, such as depressive complaints, physical health problems and alcohol abuse [for a review see (McKee-Ryan et al., 2005)]. Moreover, research shows that mental health problems increase with a longer duration of unemployment. This deterioration in mental health may hinder individuals in finding a job (Taris, 2002). In other words, individuals who lose their jobs may wind up in a downward spiral of increasing health problems that diminish the chance of finding a new job.

In the Netherlands, long-term unemployment is a topic of particular concern. In 2007, 344 thousand individuals were unemployed (4.5% of the labor force), of which 144 thousand were unemployed for 12 months or longer (Statistics Netherlands, 2008a). The government in the Netherlands, the local authorities, trade unions and employers’ organizations have identified unemployment as a major political issue, resulting in various initiatives to combat unemployment and exclusion from society. The combat against long-term unemployment in the Netherlands corresponds to the European Commission initiative to combat poverty and social exclusion. The European Commission designated 2010 as the ‘European Year for Combating Poverty and Social Exclusion’ in order to promote the well-being of individuals, their ability to play a part in society and the economic development of the European Union (see http://ec.europa.eu).
The combat against long-term unemployment also corresponds to several action areas formulated in the Ottawa Charter for Health Promotion (World Health Organization, 1986) in order to achieve ‘health for all’. By stimulating employment, a more supportive environment may be created for individuals and participation in community may be strengthened. Furthermore, the personal and social development of individuals may be fostered, as well as personal skills for exercising control over one’s life. In this way, long-term unemployed individuals may eventually have a more fulfilling life and a better (mental) health. The influence of individuals’ living conditions and environment on their health is also emphasized in the concepts of ‘Healthy Public Policy’ (Milio, 1988) and its current redefinition ‘Health in All Policies’ [see (Ståhl et al., 2006)]. Both concepts underline that, in addition to policies that directly target health, a variety of other policy areas may be relevant for individuals’ health. By addressing social determinants of public health, such as for instance unemployment, health inequalities may be reduced.

To reduce long-term unemployment, it is of major concern that interventions are available to support long-term unemployed individuals in finding a job. Several effective interventions are available that may ameliorate the functioning of the long-term unemployed, such as interventions designed to alleviate poverty and to increase problem solving skills [see for instance (Sturgeon, 2006)]. In addition, individuals experiencing severe mental health complaints, such as depression or anxiety disorders, may receive clinical treatment by mental health-care institutions. But what would be an effective intervention that targets unemployment directly? In the scientific literature only a few studies have reported about the effectiveness of interventions for the unemployed. And with respect to long-term unemployment, even fewer studies have been conducted. We conducted a literature search using PsycINFO 1988–2004, with the following search terms: [(long-term or longterm or (long near term)) and (unemployment or reemployment)] and (training or intervention or guidance or treatment or therapy). This literature search revealed five studies that described interventions among long-term unemployed using a controlled experimental design. These studies only included psychological measures as dependent variables. The outcome of this literature search illustrates the need for additional, more elaborate intervention studies among the long-term unemployed. A similar literature search on interventions for the unemployed (without the term long-term) yielded somewhat more studies, often concerning the JOBS program. The JOBS program is a group intervention developed in the USA that targets unemployment (Caplan et al., 1989). Several studies have demonstrated the effectiveness of JOBS among the unemployed [e.g. (Caplan et al., 1989; Vinokur et al., 1991; Vuori et al., 2002)]. In these studies the duration of unemployment is generally rather short. For instance, in the study by Caplan et al. the duration of unemployment was 13 weeks on average. Considering the characteristics of this training (see below) and the effects of JOBS among unemployed individuals in general, JOBS may be a promising intervention for the long-term unemployed.

Interventions combating unemployment

JOBS intervention

The JOBS program was developed in 1984 at the Michigan Prevention Research Centre (Caplan et al., 1989) and supports unemployed individuals in finding a job. The program was initially designed to target depressive symptomatology among the unemployed. The JOBS program is a short, intensive group training that is guided by two facilitators. The size of the group may vary from 12 to 20 participants. The program uses a strict protocol with a fixed order of exercises. Exercises encompass topics such as networking, ‘thinking as an employer’, writing an application letter and curriculum vitae and conducting a job interview.

The JOBS program distinguishes itself from other interventions for its methodology and its theoretical background, combining various theories and principles from behavioral and social sciences. The methodology is not primarily aimed at the acquisition of skills, but on the strengthening of self-confidence, self-efficacy and problem-solving skills, for which the work of Bandura on self-efficacy (1977) is an important theoretical basis. Furthermore, JOBS is characterized by four components that are to a certain extent overlapping (Van Ryn and Vinokur, 1992). The first component of the JOBS program is the active learning process.
The learning process comprises group discussions, brainstorming sessions, role playing exercises and other activities in which individuals can enhance their job search skills and knowledge. The second component of JOBS is inoculation against setbacks, based on the work of Meichenbaum (Meichenbaum, 1985) and Janis and Mann (Janis and Mann, 1977). Participants are prepared to cope with setbacks and barriers through problem-solving strategies and skill acquisition. The third component of JOBS concerns social support within the group and from the facilitators. The fourth component refers to the referent power of the facilitators, that is, the extent to which the participants value and respect the facilitators.

Targeting individuals' sense of self-efficacy and problem-solving skills is frequently used as key components in health interventions. For instance, many self-management programs for individuals with a chronic disease (such as arthritis, heart conditions, diabetes) focus on enhancing self-efficacy and problem-solving (see for a review (Marks and Allegrante, 2005)). A similar approach can be found in interventions with respect to marital problems, smoking cessation, weight management, substance abuse and the treatment of a variety of mental health problems (see (D’Zurilla and Nezu, 2001; Murawskia et al., 2009)). For many of these health-related issues, interventions may occur in group settings, in which the knowledge, experiences and support of other group members are used to promote the functioning/recovery of individual group members. Vicarious learning, one of the mechanisms to increase individuals' self-efficacy (Bandura, 1977), is an important element in these group interventions.

Employment voucher

The JOBS intervention was compared with an employment voucher intervention which gave individuals the opportunity to spend a certain budget on training and services that can enhance their chances on the labor market. We included this type of intervention in our study because of its popularity among policy makers in the Netherlands. Policy makers, both local and from the government, had quite high expectations of employment voucher interventions. These interventions would result in 'tailor-made' solutions (solutions specifically tailored to the individual's needs and circumstances) and would stimulate an active approach of the client. Not only in the field of social services, also in the public health domain, voucher interventions are becoming increasingly popular (Leece and Bornat, 2006). Voucher interventions are offered for instance in the care for chronically ill, for the elderly, and for individuals with a mental handicap.

In the voucher intervention condition, individuals could spend a personal budget on training and services that were not covered by other formal regulations in the Netherlands. An example of such an activity/service is the acquisition of a driving license.

Scope of current article

In the current experiment, the effects of JOBS are studied in a sample of long-term unemployed individuals. We compared the effectiveness of the JOBS program with an employment voucher intervention (see below) and a control condition. Individuals were randomly assigned among conditions and were followed for 12 months.

METHOD

Procedure

Participants were recruited in the moderately large city of Lelystad (~70 000 inhabitants), in the center of the Netherlands. The city of Lelystad is a suburban city, with a relatively young population and with a relatively high percentage of ethnic minorities (27%). A relatively high percentage of the inhabitants is divorced (11%, Statistics Netherlands, 2004; 2008b). The study was conducted in close co-operation with the municipality of Lelystad, to address both practical and ethical concerns related to the project.

Recruitment occurred in the four following steps:

Step 1. All individuals receiving benefits (mostly unemployment or social welfare benefits) in the city of Lelystad (n = 900) were screened for a number of exclusion criteria. Individuals were excluded if they were younger than 18 years or older than 57.5 years (individuals older than 57.5 years did not have the
obligation to search actively for a job). Individuals were also excluded if they had serious psychosocial problems or behavioral problems that could hinder the interventions (e.g. drug addiction, serious psychiatric disorders, aggressive delinquent behavior). A total of 300 individuals were excluded on the basis of these criteria.

**Step 2.** All remaining individuals were invited for an open information meeting about the interventions and the research project. Participation in the intervention was mandatory; however, individuals were free to decline participation in the research project. One-third of the individuals did not show up at the open information meeting, despite repeated requests.

**Step 3.** A total of 160 individuals agreed to participate in the research project. These individuals were randomly divided across conditions, resulting in 60 individuals in the JOBS condition, 49 individuals in the voucher condition and 51 individuals in the control condition. A Chi-square test for the equality of distributions showed that this distribution can be considered as random ($\chi^2(2) = 1.05, \text{ns}$).

**Step 4.** Eventually, a total of 125 individuals entered the project. The distribution of drop outs ($n = 35$) was about the same in all conditions: 13 in the JOBS condition, 12 in the voucher condition and 10 in the control condition. Reasons for drop out varied. Some individuals did not show up ($n = 15$), some had moved ($n = 7$), some decided to decline participation on second thought ($n = 9$), and some individuals got ill before the start of the intervention ($n = 4$). At the start of the interventions, it appeared that seven participants had (obtained) a job. They were excluded in the analysis. Eventually, a total of 118 participants were included in our analyses (47 in the JOBS condition, 33 in the voucher condition and 38 in the control condition). The characteristics of the participants are displayed in Table 1.

**Interventions**

**JOBS**

Participants attended five half-day classes in 1 week. Because the JOBS program was originally designed for relatively short-term unemployed individuals, we extended the program with a number of individual consultations with one of the facilitators of the program, once or twice per month, for a maximum of 5 months. The goal of these consults was to further explore the topics that were discussed during the JOBS training, to strengthen the acquired skills and knowledge, and to offer support in overcoming barriers.

**Employment voucher intervention**

In the employment voucher intervention, the wishes and possibilities for each participant were explored in individual consults with a social service employee. Consults occurred three interventions. Randomization occurred without replacement.

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1 Randomization was obtained by drawing an envelop from a box with envelopes, each containing one of the
every 2 weeks. Participants were told that their personal budget was €700 at the most.

**Control group**

Participants in the control group had two appointments with an employee of the local social service institution. During these appointments, the entitlement of the received benefit was checked. The period between the two appointments was 6 months.

**Instruments**

Employment status was our main dependent measure. Other dependent measures included job search behavior (i.e. the extent to which an individual performs job search activities), the intention to perform job search behavior, job search self-efficacy (i.e. the belief that one is able to perform effective job search behavior) and satisfaction with the intervention.

**Employment status**

Employment status was assessed by inspecting the individual file at the local social service institution. We checked for several forms of work: remunerated work (full-time and part-time) and subsidized work. In the analyses, no distinction was made between these types of work. Hence, the variable employment status is a dichotomous variable (employment versus no employment).

**Job search behavior**

Job search behavior was measured with three items concerning the amount of time that individuals spent on job searching activities in the last 4 months [see (Van Hooft et al., 2004)]. An example of an item in this scale is ‘In the four last months, how much time did you spend on writing application letters or filling in application forms?’. Items could be answered on a five-point Likert scale. The internal consistency of this scale was good for most measurements, but was somewhat lower for Time 2 (Cronbach’s α between 0.62 and 0.83).

**Job search intention**

Job search intention was assessed with three items concerning the amount of time individuals intended to spend to find a job in the next 4 months [see (Van Hooft et al., 2004)]. An example of an item in this scale is: ‘How much time do you intend to spend on finding a job or another job in the next four months?’. Items could be answered on a five-point Likert scale. The internal consistency of this scale was good for most measurements, but was somewhat lower for Time 2 (Cronbach’s α between 0.62 and 0.83).

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### Table 1: Characteristics of the sample (n = 118)

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Category</th>
<th>Distribution (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Male</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>70</td>
</tr>
<tr>
<td>Age</td>
<td>Dutch</td>
<td>55</td>
</tr>
<tr>
<td></td>
<td>Antillean</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>Surinamesian</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>17</td>
</tr>
<tr>
<td>Ethnicity</td>
<td>Pre-vocational/lower secondary education (and lower)</td>
<td>65</td>
</tr>
<tr>
<td></td>
<td>Vocational/general secondary education (and higher)</td>
<td>35</td>
</tr>
<tr>
<td>Education</td>
<td>Single</td>
<td>46</td>
</tr>
<tr>
<td></td>
<td>Divorced</td>
<td>35</td>
</tr>
<tr>
<td></td>
<td>Married/living together</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>4</td>
</tr>
<tr>
<td>Children</td>
<td>Having children living at home</td>
<td>65</td>
</tr>
<tr>
<td>Duration of unemployment</td>
<td>Shorter than 1 year</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>Between 1 and 5 years</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>Longer than 5 years</td>
<td>54</td>
</tr>
<tr>
<td>Type of benefit</td>
<td>Social welfare</td>
<td>85</td>
</tr>
<tr>
<td></td>
<td>Disability</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Unemployment</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>11</td>
</tr>
</tbody>
</table>

*a*As participants may touch different benefits simultaneously, percentages do not add up to 100.
for the various measurements (Cronbach’s $\alpha$ between 0.81 and 0.84).

**Job search self-efficacy**

Job search self-efficacy was measured with six items derived from scales used by Ellis and Taylor (Ellis and Taylor, 1983) and Van Ryn and Vinokur (Van Ryn and Vinokur, 1992). A typical item is: ‘I am aware of my strong and weak points that are relevant for searching a job’. Items could be answered on a five-point Likert scale. The internal consistency of this scale was good (Cronbach’s $\alpha$ between 0.74 and 0.88).

**Satisfaction**

Satisfaction with the intervention was measured with a three-item scale. Participants were asked to what extent they were satisfied with the content and the kind of the guidance that they had received. They were also asked to what extent the guidance had been helpful in the job searching process. Items could be answered on a five-point Likert scale. The internal consistency was high for all measurements (Cronbach’s $\alpha$ between 0.86 and 0.89).

**RESULTS**

**Statistical analyses**

Data were analyzed using SPSS 16. First, we checked to what our extent our randomization had succeeded using one-way ANOVAs with post hoc comparisons between groups. Second, we tested to what extent the interventions resulted in a job, using multivariate logistic regression, using indicator contrasts in which JOBS served as a reference category (i.e. JOBS was compared with the voucher and control condition). These analyses were repeated with correction for potential confounders. Subsequently, we examined to what extent the other dependent variables increased in the various conditions, using univariate repeated measures analyses (GLM). As the number of participants reduced after 6 months, partly due to switches between interventions, the results are separately described for the short-term effects (up to 6 months) and the long-term effects (up to 12 months). Hypotheses were tested at $p < 0.05$, one-tailed. Therefore, 90% confidence intervals have been reported for Odd Ratios.

**Check on randomization**

We assessed to what extent the three conditions differed on demographic variables (gender, age, ethnicity, education, marital status, children, duration of unemployment) and the dependent measures (job search behavior, job search intention, job search self-efficacy) at T0. It appeared that the groups differed with respect to the duration of unemployment and job search behavior ($F_{(2,110)} = 3.84$, $p < 0.05$ and $F_{(2,113)} = 3.27$, $p < 0.05$, respectively). In the JOBS condition, the duration of unemployment appeared to be shorter and job search behavior appeared to be higher, compared with the other two conditions.

**Short-term effects**

Table 2 displays the means and standard deviations for Time 0 to Time 4.

**Employment status (short term)**

The percentage of individuals who had found employment after 6 months was 26% in the JOBS condition versus 9% in the voucher and 11% in the control condition (see Table 2). Participants mostly obtained regular, unsubsidized employment. Differences between the JOBS condition and the other two conditions appeared to be statistically significant: Odd ratios (Exp. B) for the voucher and the control condition were lower than 1.00 [Exp. B = 0.29 (CI 0.09–0.91) and 0.34 (CI 0.12–0.96), respectively, $p = 0.05$, one-tailed], indicating that individuals in the JOBS condition had a higher chance of finding work. Omnibus Chi-square tests (two-tailed) for the effect of condition were significant too [$\chi^2(2) = 5.08$, $p = 0.05$, one-tailed].

$^2$ When corrected for initial scores on job search behavior and duration of unemployment, the significance of these effects was somewhat reduced (Exp. B = 0.32 (CI 0.10–1.04) and 0.33 (CI 0.10–1.09), respectively, $p = 0.10$, one-tailed), Omnibus Chi-square tests [$\chi^2(2) = 4.71$, $p < 0.05$, one-tailed].
Job search behavior (short term)
The JOBS training did not result in a significant increase in job search behavior in the first 6 months. We did not find a significant interaction effect between condition and time \[F(4,204) = 0.20, \text{ ns}\]. The effect of time was not significant either \[F(2,101) = 0.38, \text{ ns}\]. However, we did find a significant effect of condition \[F(2,106) = 3.36, p < 0.05\], indicating that individuals in the JOBS condition generally scored higher on job search behavior.

Job search intention (short term)
The JOBS training neither resulted in a significant increase in job search intention in the first 6 months. We found no significant effects of condition \[F(2,92) = 1.51, \text{ ns}\], time \[F(2,91) = 1.78, \text{ ns}\], or time X condition \[F(4,184) = 0.99, \text{ ns}\].

Job search self-efficacy (short term)
As shown in Table 2, individuals generally reported a significant increase in job search self-efficacy in the first 6 months \[F(2,100) = 3.41, p < 0.05\]. The effect of condition \[F(2,101) = 1.01, \text{ ns}\] and the time X condition \[F(4,202) = 1.29, \text{ ns}\] were both not significant.

Satisfaction with intervention (short term)
Satisfaction with the intervention was on average higher in the JOBS condition \[F(2,57) = 4.37, p < 0.01 \text{ one-tailed}\]. Participants in the JOBS condition were more satisfied with the intervention they had received in comparison with participants in the voucher condition \[F(1,57) = 5.93, p < 0.01 \text{ one-tailed}\] and the control condition \[F(1,57) = 6.49, p < 0.01 \text{ one-tailed}\]. Additionally, we found a significant interaction effect between condition and time \[F(1,61) = 5.09, p < 0.05\], indicating that after Time 1, satisfaction declined in the voucher condition \[F(1,57) = 8.49, p < 0.01\] and in the JOBS condition \[F(1,57) = 4.58, p < 0.01\].

Long-term effects
Employment status (long term)
After 12 months, 28% of the individuals had found a job compared with 15% in the control condition (see Table 2). The difference appeared to be marginally significant: the Odd ratio (Exp. B) for the control condition was lower than 1.00 \[\text{Exp. B} = 0.44 (\text{CI } 0.17–1.15), p < 0.10, \text{ one-tailed}\].

Job search behavior (long term)
After 12 months, the JOBS participants did not report more job search behavior compared with the control group. We did not find significant

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Table 2: Means and standard deviations of outcome variables at 0, 1, 6 and 12 months for all three conditions

<table>
<thead>
<tr>
<th>Variable</th>
<th>Condition</th>
<th>Time 0 (0 months)</th>
<th>Time 1 (1 month)</th>
<th>Time 2 (6 months)</th>
<th>Time 3 (12 months)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
<td>M (%)</td>
</tr>
<tr>
<td>Employment status (having a job)</td>
<td>JOBS</td>
<td>2.02 (0.84)</td>
<td>1.96 (0.96)</td>
<td>2.02 (0.84)</td>
<td>12 (26)</td>
</tr>
<tr>
<td></td>
<td>Voucher</td>
<td>1.75 (0.80)</td>
<td>1.75 (0.67)</td>
<td>1.72 (0.54)</td>
<td>3 (9)</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>1.60 (0.60)</td>
<td>1.61 (0.69)</td>
<td>1.74 (0.74)</td>
<td>4 (11)</td>
</tr>
<tr>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Job search behavior</td>
<td>JOBS</td>
<td>2.81 (0.87)</td>
<td>2.87 (1.08)</td>
<td>2.73 (1.07)</td>
<td>15 (28)</td>
</tr>
<tr>
<td></td>
<td>Voucher</td>
<td>2.45 (1.06)</td>
<td>2.74 (0.91)</td>
<td>2.61 (0.88)</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>2.61 (1.01)</td>
<td>2.59 (1.07)</td>
<td>2.31 (0.97)</td>
<td>—</td>
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<tr>
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<tr>
<td>Job search intention</td>
<td>JOBS</td>
<td>3.12 (0.78)</td>
<td>3.33 (0.71)</td>
<td>3.18 (0.83)</td>
<td>3.25 (0.79)</td>
</tr>
<tr>
<td></td>
<td>Voucher</td>
<td>2.85 (0.93)</td>
<td>3.06 (0.75)</td>
<td>3.09 (0.86)</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>3.09 (0.88)</td>
<td>3.02 (0.77)</td>
<td>3.03 (0.82)</td>
<td>—</td>
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<tr>
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<tr>
<td>Job search self-efficacy</td>
<td>JOBS</td>
<td>3.12 (0.78)</td>
<td>3.33 (0.71)</td>
<td>3.18 (0.83)</td>
<td>3.25 (0.79)</td>
</tr>
<tr>
<td></td>
<td>Voucher</td>
<td>2.85 (0.93)</td>
<td>3.06 (0.75)</td>
<td>3.09 (0.86)</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>3.09 (0.88)</td>
<td>3.02 (0.77)</td>
<td>3.03 (0.82)</td>
<td>—</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Satisfaction with Intervention</td>
<td>JOBS</td>
<td>3.78 (0.97)</td>
<td>3.46 (1.15)</td>
<td>3.09 (1.06)</td>
<td>3.12 (0.84)</td>
</tr>
<tr>
<td></td>
<td>Voucher</td>
<td>3.43 (0.96)</td>
<td>2.97 (0.91)</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>2.86 (1.08)</td>
<td>2.88 (1.13)</td>
<td>2.55 (0.87)</td>
<td>—</td>
</tr>
</tbody>
</table>

Note: n may vary as a result of missing values.

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3 When corrected for initial scores on job search behavior and duration of unemployment, this effect was no longer significant: the Odd ratio (Exp. B) was 0.46 (CI 0.15–1.37), p < 0.15.
effects of condition \( F_{(1,32)} = 0.09, \text{ ns} \), time \( F_{(1,32)} = 0.06, \text{ ns} \), or time X condition \( F_{(1,32)} = 1.06, \text{ ns} \).

**Job search intention (long term)**

JOBS participants did not have a stronger job search intention, compared with the control condition, measured after 12 months. The effects of time \( F_{(1,30)} = 0.05, \text{ ns} \), condition \( F_{(1,30)} = 1.12, \text{ ns} \) and time X condition \( F_{(1,306)} = 0.00, \text{ ns} \) were not significant.

**Job search self-efficacy (long term)**

We found no significant effects of time \( F_{(1,33)} = 0.04, \text{ ns} \), condition \( F_{(1,33)} = 0.00, \text{ ns} \) or time X condition \( F_{(1,33)} = 0.71, \text{ ns} \).

**Satisfaction with intervention (long term)**

After 12 months, participants in the JOBS condition were somewhat more satisfied with the intervention than individuals in the control condition \( F_{(1,32)} = 2.16, p < 0.10, \text{ one-tailed} \).

**DISCUSSION**

In this article, we examined the effectiveness of the JOBS program among long-term unemployed individuals, in comparison with a control condition and a voucher intervention. The JOBS program appeared to be superior to the voucher condition and control condition on both employment status and satisfaction with the intervention. After 6 months, participants in the JOBS condition had found a job more frequently and were more satisfied with the intervention. After 12 months effects were still visible, but less pronounced. It can be concluded that JOBS is not only effective for relatively short-term unemployed people, as witnessed in research by Caplan et al. and Eden and Aviram, but also for long-term unemployed people (Caplan et al., 1989; Eden and Aviram, 1993).

By promoting employment, the JOBS program may eventually have beneficial consequences for individuals’ physical and mental health. It may help long-term unemployed individuals escape from the downward spiral of increasing health problems (e.g. depressive complaints, physical health problems) that may hinder re-employment. Stimulating employment also fosters individuals’ participation in the community and may in this way contribute to their social and personal development. Hence, employment may eventually lead to a more fulfilling and healthier life for individuals.

In general, this study indicates how effective the principles and components of the JOBS program are to improve the (employment) situation of a particularly vulnerable group: the long-term unemployed. The JOBS program focuses primarily on the strengthening of self-efficacy and problem-solving skills and employs four, partly overlapping components or techniques (active learning, inoculation against setbacks, social support and referent power of the facilitators). The combination of these principles and components seems to result in an atmosphere in which individuals feel safe to talk about themselves and experiment with new behaviors. The principles and components of the JOBS program may therefore offer a fruitful approach to obtain behavioral changes among (vulnerable) individuals and may in this way be relevant for group interventions targeting health behaviors as well.

Our results showed that the voucher intervention had no significant effects whatsoever compared with the control condition. This is a remarkable finding since Dutch politicians assumed that the voucher intervention would offer unparalleled tailor-made solutions. However, a number of conditions are important for voucher interventions to be effective. For example, both the client and the consultant need good insight in the capabilities of the client and in the capacities to be acquired to find a job. In the current study, clients did not always have tangible ideas about the capacities they wished to develop. This obstacle may not only be relevant for our specific intervention, it also underlines to what extent voucher interventions in general are dependent upon the insight of clients and consultants into individual strengths, wishes and needs [see also (Glasby and Littlechild, 2009)]. Vouchers interventions, whether applied in the domain of employment or in the field of health promotion, do ask for insight among both clients and their consultants.

As described above, individuals in the JOBS condition were more satisfied with the intervention than individuals in the other two conditions. Satisfaction may be an important variable that may help consolidate behavior changes and promote a ‘transfer of change’ of
acquired abilities to situations outside the JOBS training. However, it should be noted that satisfaction is not necessarily linked to effects on employment status (Brenninkmeijer et al., 2004). In a study among clients of rehabilitation companies, Brenninkmeijer et al. found no relationship between satisfaction of counseling and later employment status. Rather, satisfaction appeared to be related to more general outcomes, such as the feeling to be engaged in a meaningful manner, social contacts and being valued by others.

Contrary to our expectations, we found no differential effects on job search self-efficacy, a central component of the JOBS training. Perhaps the sample size of our groups is responsible for these non-significant findings. Or it could be that participants in the JOBS program did become more aware of their strengths, but at the same time realized what obstacles they might encounter in their search for a job. This may have leveled out the effect on job-search self-efficacy. This issue could be further explored in future research, using a larger sample and conducting qualitative research with respect to the mechanisms of the training.

We did not find effects on job search intention and job search behavior either. Maybe these variables do not necessarily have to increase to find a job. Research by Kanfer et al. shows that the relationship between job search behavior and job obtainment is not very strong ($r = 0.20$) (Kanfer et al., 2001). Hence, job search behavior and job search intention may not be the key variables in finding employment. Other factors, such as the quality of job search behavior, may be much more important (Caplan et al., 1997). Furthermore, individuals who soon expect to have a job may actually reduce their job search activities.

It should be noted that after 6 months, individuals were given the opportunity to choose for another intervention than the one they were originally assigned to. A total of 22 participants chose to switch to the JOBS intervention. This underlines the attractiveness of the JOBS program for the long-term unemployed, but also indicates that we should interpret the long-term effects with caution. Moreover, it should be noted that our sample consisted to a large extent of women on welfare.

With respect to our randomization procedure, the JOBS group appeared to report more job search behavior and a shorter duration of unemployment at Time 0. When corrected for these initial differences, the significance of the effects of condition diminished. We do not know to what extent these initial differences reflect actual differences in background characteristics. Perhaps individuals were looking forward so much to participate in our JOBS program, that it motivated them to look for work before the start of the intervention. For future studies, we would recommend researchers to randomize individuals after the first measurement, if circumstances allow.

Despite these critical remarks, it can be concluded that the JOBS intervention appears to be a promising intervention for the long-term unemployed. Effects of JOBS did not only appear on satisfaction, but also on finding employment. As such, JOBS may be a useful tool in the combat against unemployment and exclusion from society, and may in this way promote the (mental) health of the unemployed.

REFERENCES


