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PREDICTORS OF JOB SEARCH BEHAVIOR AMONG EMPLOYED AND UNEMPLOYED PEOPLE

EDWIN A. J. VAN HOOFT

Department of Work and Organizational Psychology
Free University Amsterdam, the Netherlands

MARISE PH. BORN

Institute of Psychology
Free University Amsterdam, the Netherlands

TOON W. TARIS

Department of Work and Organizational Psychology
University of Nijmegen, the Netherlands

HENK VAN DER FLIER

Department of Work and Organizational Psychology
Free University Amsterdam, the Netherlands

ROLAND W. B. BLONK

TNO Work and Employment

This study investigated job search behavior and its predictors among employed and unemployed people. Ajzen's (1985) theory of planned behavior (TPB) was used to predict job search intention and behavior in both groups. In addition, we examined the indirect effects of several other variables (i.e., job satisfaction, organizational commitment, work valence, expectancy, and financial need). Data were collected in a 2-wave longitudinal design, using a sample of employed individuals ($N = 989$) and a sample of unemployed individuals ($N = 317$). Results supported the applicability of the TPB in the 2 groups. The attitude-intention-behavior relationship was stronger in the unemployed group than in the employed group. The TPB variables partially mediated the effects of the additional variables studied.

A considerable body of research has demonstrated the importance of job search behavior as an antecedent of voluntary turnover among employed individuals and of reemployment among unemployed individuals (see for meta-analytic reviews: Griffeth, Hom, & Gaertner, 2000; Kanfer, Wanberg, & Kantrowitz, 2001). Several studies have investigated the predictors of job search behavior in samples of unemployed

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Correspondence and requests for reprints should be addressed to Edwin A. J. Van Hooft, Department of Work and Organizational Psychology, Free University Amsterdam, Van der Boechorstraat 1, 1081 BT Amsterdam, The Netherlands; eaj.van.hooft@psy.vu.nl.

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people (e.g., Feather & O'Brien, 1987; Kanfer & Hulin, 1985; Kulik, 2000; Lay & Brokenshire, 1997; Taris, Heesink, & Feij, 1995; Van Ryn & Vinokur, 1992; Vinokur & Caplan, 1987; Wanberg, 1997; Wanberg, Hough, & Song, 2002; Wanberg, Kanfer, & Banas, 2000; Wanberg, Kanfer, & Rotundo, 1999; Wanberg, Watt, & Rumsey, 1996). Only a limited number of studies, however, investigated the predictors of job search behavior in employed samples (i.e., Blau, 1994; Boudreau, Boswell, Judge, & Bretz, 2001; Bretz, Boudreau, & Judge, 1994). Moreover, these two lines of research have developed rather independently. They have used different underlying theoretical models and have studied the influence of different sets of predictors on job search behavior. This study extends the existing literature by examining job search behavior and its predictors among both employed and unemployed job seekers, using the same conceptual framework.

Job Search Among Employed Individuals

Previous research studied job search behavior and its predictors in employed samples because of its important role as an antecedent of voluntary turnover. Recent meta-analyses indeed showed strong support for the positive relationship between job search behavior and voluntary turnover ($r_{corrected}$ ranged from .23 to .47 depending on the operationalization of job search, Griffeth et al., 2000; $r_{corrected} = .38$, Kanfer et al., 2001). One of the earliest models that incorporated job search in the turnover process was Mobley's (1977) model of employee turnover. This model described the turnover process as a succession of states initiated by job dissatisfaction, which causes thoughts of quitting, resulting in an evaluation of the expected utility of search, job search intention, job search behavior, evaluation of the alternatives, intentions to quit, and, finally, actual turnover. Several other studies presented similar models to explain the turnover process (e.g., Dalessio, Silverman, & Schuck, 1986; Hom, Griffeth, & Sellaro, 1984). Meta-analytical results indeed seem to support such a succession of states leading to turnover (Hom, Caranikas-Walker, Prussia, & Griffeth, 1992). Hom and Griffeth (1991) however, mentioned the existence of other routes to turnover than via job search and intentions to quit alone. Lee and Mitchell (1994) found support for their unfolding model of voluntary employee turnover, which also states that voluntary turnover is not always preceded by job dissatisfaction and job search (Lee, Mitchell, Holtom, McDaniel, & Hill, 1999; Lee, Mitchell, Wise, & Fireman, 1996). However, it should be noted that the routes to turnover via job dissatisfaction and job search applied to the majority of cases (Lee et al., 1999; Lee et al., 1996).

Whereas a considerable body of research investigated job search as an antecedent of turnover (see Griffeth et al., 2000), only a few studies have specifically focused on the predictors of employed job search (Blau, 1994; Boudreau et al., 2001; Bretz et al., 1994). These studies, which mostly focused on employed managers, confirmed the influence of job dissatisfaction on job search but distinguished additional predictors as well. Bretz et al. (1994) studied the effects of several factors "pushing" or "pulling" the employed manager to engage in job seeking. "Push" factors (e.g., perceived organizational success, compensation level, and individual ambition) appeared to be linked more strongly to search than did "pull" factors (e.g., the individual's market value and the perceived costs of search). Blau (1994) used a sample of hospital employees and pharmaceutical managers to test Schwab, Rynes, and Aldag's (1987) model, which holds that job search is influenced by financial need and self-esteem. Blau (1994) found support for the positive effects of financial need and the task specific component of self-esteem (i.e., job search self-efficacy). Furthermore, organizational commitment and job security were found to contribute negatively to the prediction of job search behavior. Boudreau et al. (2001) investigated the influence of personality traits and cognitive ability on executive job search and found positive effects of agreeableness, extraversion, neuroticism, openness, and cognitive ability. In each of these studies, however, job satisfaction appeared to be one of the most important predictors of employed people's job search.

Job Search Among Unemployed Individuals

Previous research examined job search behavior and its predictors in unemployed samples because of its positive relationship with reemployment. Kanfer et al. (2001) found meta-analytical support for this relationship ($r_{corrected} = .20$). Studies of the predictors of job search among unemployed people have often used attitude-behavior models, such as Fishbein and Ajzen's (1975) theory of reasoned action (TRA), Ajzen's (1985) theory of planned behavior (TPB), or Feather's (1982) expectancy-value theory (EVT). Applied to job search behavior, the TRA states that the immediate antecedent of job search behavior is the intention to look for a job. Job search intention, in turn, is predicted by the extent to which a person has a positive or negative evaluation of job search behavior (i.e., job search attitude) and the perception of social pressure to look for a (new) job (i.e., subjective norm).

The TRA only applies to behaviors that are under the individual's complete volitional control (Ajzen & Madden, 1986). Therefore, Ajzen

(1985) proposed the TPB, which extends the TRA by including the concept of perceived behavioral control. Applied to job search, perceived behavioral control pertains to people's confidence in their ability to perform various job search activities. Perceived behavioral control is supposed to influence behavior both indirectly (through intention) and directly. That is, people will be more likely to form job search intentions if they are more confident about their ability to perform job search activities. In addition, holding job search intention constant, individuals with high levels of perceived behavioral control will be more likely to actually carry out job search activities than others (cf. Ajzen, 1991). A few studies have applied the TRA and TPB to job search behavior. In their study of job search behavior among people who had recently become unemployed, Vinokur and Caplan (1987) found support for the TRA. Van Ryn and Vinokur (1992) and Caska (1998) found support for the TPB to predict job search behavior among unemployed people and graduating students, respectively.

Another attitude-behavior model that has often been used in the job search literature is the expectancy-value theory. This theory states that job search behavior is predicted by people's subjective values of having a job (work valence) and people's expectations about the chance to find a job (expectancy; Feather, 1992; Feather & O'Brien, 1987). The EVT constructs work valence and expectancy differ from the TPB constructs job search attitude and perceived behavioral control, respectively, in that the EVT constructs refer to the *outcomes of the behavior* in question, whereas the TPB constructs refer to the *behavior itself*. In the context of job seeking, perceived behavioral control for example, concerns the perceptions of control over the behavior of job seeking (e.g., "Will I be able to write a proper application letter?"), and expectancy concerns the expectations regarding the outcome of job attainment (e.g., "Will I be able to find a [new] job if I want to?"). Feather and O'Brien (1987) found partial support for the EVT, in that work valence did contribute to the prediction of job search behavior of young unemployed people but expectancy did not. In a study among unemployed young adults, Taris et al. (1995) found support for the hypothesized effects of both work valence and expectancy.

Several other job search studies among unemployed people seeking for reemployment have been conducted that do not use either of the theoretical frameworks discussed above. For example, Kanfer and Hulin (1985) found a significant relationship between job search self-efficacy and job seeking among hospital employees who had recently become unemployed. Lay and Brokenshire (1997) found support for the hypothesized positive relationships of job search importance, pleasantness, and competence with job search intentions and behavior in a sample of

unemployed individuals. Several studies among unemployed people by Wanberg and colleagues showed positive effects on job search behavior of the TPB variables subjective norm and job search self-efficacy, the EVT variables work valence (employment commitment) and expectancy (situational control), the Big Five personality factors Extraversion and Conscientiousness, and financial need and motivation control (Wanberg, 1997; Wanberg et al., 2000; Wanberg et al., 1999; Wanberg et al., 1996).

The Present Study

Clearly, job search behavior has attracted a substantial amount of research attention. As noted before, research on the predictors of job search behavior among employed individuals has developed rather independently from research among unemployed individuals. On the one hand, this independent development is understandable because as a result of the difference between these two groups in the situation from which they start their job search (e.g., with a job vs. without a job), the antecedents of job search behavior are different for employed and unemployed people. For example, job dissatisfaction and lack of organizational commitment can be interpreted as antecedents of job search behavior among employed individuals only. On the other hand, however, several other variables (e.g., financial need, job search self-efficacy) have been shown to be valid predictors of job search behavior among both employed and unemployed job seekers. In addition, the variables of Ajzen's (1985) theory of planned behavior seem to apply to both groups of job seekers. However, previous research has investigated the TPB in the context of job seeking in unemployed and student samples only (e.g., Caska, 1998; Van Ryn & Vinokur, 1992). Recognizing that the fundamental antecedents of job search behavior differ between employed and unemployed job seekers, the main purpose of this study was to examine whether the TPB can be used to describe the processes connecting these fundamental antecedents to job search behavior in a comparable way for both employed and unemployed people.

Specifically, using a 2-wave longitudinal design, we firstly investigated the validity of the TPB as a model for describing the more proximal antecedents of job search behavior among unemployed as well as employed individuals. Second, we investigated for both groups separately the extent to which the TPB variables mediated the effects of several more fundamental antecedents of job search behavior that have been identified in previous research as discussed above.

An additional purpose of this study was to examine the predictors of job search behavior in a more diverse sample of employed individuals. As noted above, previous research has investigated job search behavior

and its predictors in managerial and hospital samples only. Research related to job search behavior of employed individuals with little education is sparse (cf. Schmit, Amel, & Ryan, 1993). The current study extends the existing literature by studying job search behavior in a sample of employed individuals representing an intersection of the total workforce in The Netherlands, and, therefore, includes job seekers with a broad range of vocational and educational backgrounds.

Research Model and Hypotheses

In accordance with the TPB, we expect job search intention to predict actual job search behavior. The individual's job search intention is a central factor in the prediction of job search behavior, because it comprises the motivation necessary to engage in job seeking. The more an individual intends to engage in job seeking, the more likely it is that actual job search activities are performed (Ajzen, 1991). Indeed, prior research has found strong support for the intention-behavior relationship in general (Armitage & Conner, 2001; Sutton, 1998), as well as in the context of job search among unemployed (Taris et al., 1995; Van Ryn & Vinokur, 1992; Vinokur & Caplan, 1987) and employed individuals (Hom et al., 1984).

Job search attitude and subjective norm are expected to predict job search intention. That is, people who regard job seeking as more beneficial and more pleasurable are more likely to intend to search for a (new) job than people with less positive attitudes towards job seeking. In addition, individuals are more likely to form job search intentions as they perceive more social pressure from important others to do so. These positive relationships of job search attitude and subjective norm with job search intention have been supported by previous research among both unemployed (Van Ryn & Vinokur, 1992; Vinokur & Caplan, 1987; Wanberg et al., 1996) and employed individuals (Hom & Griffeth, 1991; Hom et al., 1984).

Job search behavior is a complex behavior, depending not only on the individual's skills and abilities, but also on resources and opportunities outside the individual's personal control. Consistent with the TPB as discussed above, we therefore expect perceived behavioral control to predict both job search intention and job search behavior. Ajzen (1991) noted that the concept of perceived behavioral control is similar to Bandura's (1982) concept of self-efficacy (see also Caska, 1998; Van Ryn & Vinokur, 1992). Several authors, however, have criticized this notion and have argued that perceived behavioral control not only refers to perceptions of control over internal resources (i.e., self-efficacy), but comprises an external component as well, which refers to perceptions

of control over environmental constraints on behavior (Conner & Armitage, 1998; Terry & O'Leary, 1995). A recent meta-analytic study of the TPB has demonstrated that whereas the internal "self-efficacy" component was a strong predictor of intention and behavior, the external component showed weak and unreliable effects (Armitage & Conner, 2001). Therefore, the present study focused on self-efficacy as predictor of intention and behavior. Prior theory has suggested that self-efficacy is an important predictor of human motivation (Bandura, 1989). Indeed, meta-analytic results showed a positive relationship between self-efficacy and performance (Stajkovic & Luthans, 1998). Furthermore, meta-analytic findings identified job search self-efficacy as an important predictor of job search behavior among unemployed individuals (Kanfer et al., 2001). In addition, among employed individuals, some support has been found for the relationship between job search self-efficacy and job search behavior (Blau, 1994).

As mentioned above, prior research has found support for the TPB to predict job search behavior in unemployed samples, but the theory has never been used to investigate job search behavior in an employed sample. The research discussed above revealed some support for several of the relationships between the TPB variables in employed samples. Based on this research, we expect the TPB to be a valid model for the prediction of job search behavior among unemployed as well as employed people.

Hypothesis 1: Unemployed as well as employed people's job search behavior can be predicted with the theory of planned behavior.

The theory of planned behavior is held to be a complete theory of behavior (Conner & Armitage, 1998; see also Fishbein & Ajzen, 1975). The influence of other variables on behavior is supposed to be indirect, in that the TPB variables mediate their effects. In this study, we therefore examined for employed and unemployed people separately the extent to which the TPB variables mediate the effects of several more fundamental antecedents of job search behavior. The antecedents were chosen based on previous research on job seeking in employed and unemployed samples. Among employed individuals, we examined the extent to which the TPB variables mediate the effects of job satisfaction, organizational commitment, expectancy, and financial need on job search behavior. Among unemployed individuals, we examined the extent to which the TPB variables mediate the effects of work valence, expectancy, and financial need on job search behavior. The specific hypotheses and their rationales are discussed below.

As reviewed above, past research has demonstrated that job satisfaction is an important predictor of job search intention and behavior

among employed people. That is, low levels of job satisfaction stimulate employees to consider alternative jobs (Blau, 1994; Bretz et al., 1994), whereas employees who are satisfied with their current jobs are less inclined to search for alternatives. Thus, we expect a negative effect of job satisfaction on job search behavior among employed people. We hypothesize, however, that job search attitude and intention mediates this effect of job satisfaction on job search behavior. That is, people who are satisfied with their jobs are less inclined to have a positive attitude toward seeking a new job. As a result, they are less inclined to form a job search intention and are less inclined to actually engage in job seeking.

Organizational commitment has been found to be an important correlate of employee turnover (Tett & Meyer, 1993). That is, the more employees are attached to and involved in the organization, the more likely they are to continue employment with the organization (Meyer & Allen, 1991), and the less likely they are to search for alternative jobs (Blau, 1994). Consistent with this rationale, Blau (1994) found a negative relationship between organizational commitment and job search behavior among hospital employees and pharmaceutical managers. We expect that job search attitude and intention mediate this negative relationship. That is, the more employees feel committed to their organization, the less beneficial they regard it to search for an alternative job. Because of these less positive attitudes towards job seeking, they are less likely to form job search intentions and are less likely to exhibit job search behavior. On the basis of the theory and research discussed above, we formulated the following hypotheses:

Hypothesis 2: Among employed people, job search attitude and job search intention mediate the negative relationship between job satisfaction and job search behavior.

Hypothesis 3: Among employed people, job search attitude and job search intention mediate the negative relationship between organizational commitment and job search behavior.

As mentioned before, previous research has supported Feather's (1982) expectancy-value theory in explaining job search behavior of unemployed people (Taris et al., 1995). Caska (1998) notes that the EVT variables work valence and expectancy are conceptually similar to the TPB variables outcome evaluations and behavioral beliefs, respectively. Outcome evaluations and behavioral beliefs are the two antecedents of job search attitude in the TRA and TPB (e.g., Ajzen, 1991; Fishbein & Ajzen, 1975). Whereas the conceptual similarity between expectancy and behavioral beliefs holds true for unemployed as well as employed individuals, the conceptual similarity between work valence and outcome evaluations holds true for unemployed people only.

Outcome evaluations in the TPB are described as the positive or negative evaluation of the behavior's consequences. For students and unemployed people who seek a job, outcome evaluations therefore relate to the evaluation of finding employment in general, which indeed is similar for them to the EVT variable subjective value of having a job (or work valence). For employed people seeking a new job, however, outcome evaluations in the TPB relate to the evaluation of finding this specific new job and not to finding employment in general. Therefore, among employed individuals, the concept of outcome evaluations differs from the concept of work valence. Thus, the conceptual similarity between outcome evaluations in the TRA and TPB, and work valence in the EVT, only holds true for people seeking a job from a position without a job (e.g., students or unemployed people).

Behavioral beliefs in the TPB are described as the subjective probability that performing the behavior will lead to certain consequences. Applied to job search, behavioral beliefs relate to the subjective probability that job search behavior will result in finding a (new) job. Thus, behavioral beliefs are conceptually similar to the EVT variable expectancy for both employed and unemployed individuals. Based on theory and research discussed above, we formulated the following hypotheses:

Hypothesis 4a: Among unemployed people, job search attitude and job search intention mediate the positive relationship between work valence and job search behavior.

Hypothesis 4b: Among both employed and unemployed people, job search attitude and job search intention mediate the positive relationship between expectancy and job search behavior.

Lastly, past theory has identified the individual's financial situation as an important antecedent of job search behavior (Schwab et al., 1987). In Schwab et al.'s (1987) model, it was assumed that individuals experiencing economic hardship, more than others, have a need to find a (new) job (see also Kanfer et al., 2001). Previous research indeed found a positive relationship between financial need and job search behavior, both among unemployed (Vinokur & Caplan, 1987; Wanberg et al., 1999; Wanberg et al., 1996) and employed individuals (Blau, 1994). However, we propose that the influence of financial need on job search behavior is indirect. That is, job search attitude, subjective norm, and job search intention mediate the relationship of financial need with job search behavior. In other words, both employed and unemployed people who perceive their financial situation as poor are more inclined to have a positive attitude towards seeking a (new) job, and, therefore, have higher scores on intention and subsequent behavior. A poor financial situation often affects not only individuals themselves but their significant others as well.

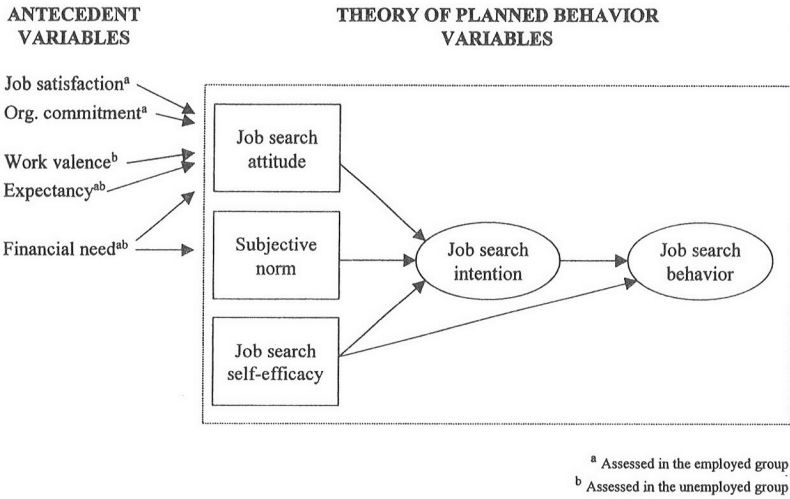


Figure 1: Overview of the Research Model

Therefore, people with high levels of financial need are more likely to perceive social pressure of their significant others to look for a (new) job, resulting in higher scores on job search intention and subsequent behavior. Specifically, we propose the following:

Hypothesis 5: Among both employed and unemployed people, job search attitude, subjective norm, and job search intention mediate the positive relationship between financial need and job search behavior.

In sum, we expect that job search behavior among both employed and unemployed individuals can accurately be predicted with the theory of planned behavior. In addition, we expect indirect effects of job satisfaction and organizational commitment on job search behavior among employed people, and indirect effects of work valence on job search behavior among unemployed people. Expectancy and financial need are expected to influence job search behavior indirectly in both groups. Figure 1 presents the research model.

Method

Sample and Procedure

The data were collected in a 2-wave longitudinal design in The Netherlands, using two separate samples. The one sample consisted of employed individuals, and the other consisted of unemployed individuals. The TPB variables job search intention, job search attitude, subjective norm, and job search self-efficacy were assessed at Time 1

of the study in both the employed and the unemployed sample. The antecedent variables job satisfaction (employed sample only), organizational commitment (employed sample only), work valence (unemployed sample only), expectancy (both samples), and financial need (both samples) were also assessed at Time 1. Job search behavior was assessed 4 months later at Time 2 in both samples.

At the time of the data collection the Dutch economy was booming, with high levels of economic growth and tight labor markets. The net labor force participation rate amounted to 61.7%, that is, 61.7% of the Dutch population aged 16 to 65 was employed (Statistics Netherlands, 2002). The majority of people were employed in trade, hotels, restaurants, and repair (20.6%), care and other service activities (20.4%), financial and business activities (19.4%), manufacturing (13.1%), and general government (10.7%; Statistics Netherlands, 2002). Unemployment levels in The Netherlands were very low when this study was conducted (2.4% in 2001; Statistics Netherlands, 2001). In case of unemployment, people receive a salary-related unemployment benefit (70% of their last salary) if they have been employed for at least half a year. The duration of this benefit depends on the individual's employment record. Other unemployed individuals receive a basic unemployment benefit, which is 70% of the national minimum wage. Unemployed individuals receiving benefits must be available for work, are required to actively search for employment, and must accept suitable employment once offered (see also Social Security Administration, 2002; Social Security Information Center, 2000).

Employed group. The employed individuals were selected from a telepanel of 2,000 Dutch households. This telepanel is operated by a Dutch research institute (CentERdata) and is available for research purposes. The panel is representative for the Dutch population with regard to age, sex, religion, level of education, and geographical distribution (CentERdata, 2002). CentERdata approaches random households for this panel by telephone, with the question whether they are willing to participate in research. Households that are willing to participate in the panel are included in a database. Panel members are selected from this database, based on their biographical characteristics, as to make up a panel representative for the Dutch population. On a regular basis, the panel members receive questionnaires about a variety of topics. Questionnaires are administered electronically via the Internet.¹ Panel members' expenses (e.g., costs to use the Internet) are being covered by

¹Panel members that did not have a computer with Internet access received a special device (i.e., Net.Box) with which they were able to complete the questionnaires via their television. Households that did not have a television received both a Net.Box and a television.

Cen-tERdata. Every weekend the panel members log in on a special Website to check whether they are selected to complete a questionnaire.

For the present study, only the panel members belonging to the (potential) labor force, that is, all panel members aged 16 to 65, were selected to fill in the questionnaire. As such, 3,170 individuals out of the 2,000 households (in total 4,821 individuals) were selected for the Time 1 measurement in February 2001. A total of 1,854 individuals completed the Time 1 questionnaire, resulting in a response rate of 58.5%. Because this sample is an intersection of the Dutch population aged 16 to 65, it contained employed individuals, unemployed individuals, and non-participants at the labor market (e.g., students, fulltime homemakers, individuals who retired early, and [partially] disabled people). Because the purpose of this part of the data collection was to obtain a broad sample of employed individuals, only those respondents with a paid job were selected for the present study ($N = 1,405$). Of these, 998 participants also completed the Time 2 questionnaire 4 months later (June 2001). Listwise deletion of the respondents with one or more missing values on the study variables resulted in an N of 989 (i.e., 31.2% of the 3,170 individuals selected initially).

In this final sample of 989 respondents, 588 respondents were men (59.5%). The average age was 39.8 ($SD = 10.6$). Education level varied between primary school or lower vocational training (15.0%), secondary school or high school or intermediate vocational training (45.6%), and college or university (39.4%). Of the participants, 81.3% held a permanent job and 11.3% held a temporary job. The remaining 7.4% were freelancers or self-employed. The majority (62.2%) had a full-time job. About 50% had spent less than 5 years in their current jobs.

To check for selective nonresponse, the respondents in the final sample ($N = 989$) were compared with the nonrespondents (individuals who responded to the Time 1 survey only and the individuals who had one or more missing values). Multivariate analysis of variance including gender, age, and education level showed that the respondents differed significantly from the nonrespondents, $F(3,1400) = 13.40$, $p < .001$. Separate t -tests showed no significant differences ($p < .05$) on gender and education level, but the respondents in the final sample were older ($M = 39.8$ vs. $M = 35.8$), $t(1402) = 6.26$, $p < .001$, than the non-respondents.

Unemployed group. As noted above, unemployment levels were very low in The Netherlands at the time of the study. Consequently, only 61 respondents from the panel described above were unemployed. This number was too small for the purposes of this study. A separate sample of unemployed individuals therefore was collected as follows. All individuals registered as unemployed at the local welfare centers of two mid-

sized cities in The Netherlands (i.e., Lelystad & Emmen) at Time 1 of the study (November 2000) were sent a questionnaire by mail ($N = 3,508$). In the cover letter, we emphasized that participation was voluntary and that individual data were not provided to the local welfare centers. Individuals were asked to return the survey in a preaddressed and stamped envelope. A total of 677 usable questionnaires were returned, for a response rate of 19.3%. Of these, 38 respondents were reemployed and were, therefore, deleted from the sample. Four months later (March 2001) the Time 2 questionnaire was sent to the Time 1 respondents who had agreed to participate in a follow-up measurement ($N = 530$). A total of 378 usable questionnaires were returned. Listwise deletion of the respondents with one or more missing values on the study variables resulted in a final sample size of 317 (i.e., 9.0% of the 3,508 individuals initially selected). Individuals who completed both the Time 1 and the Time 2 questionnaire received a coupon, worth the equivalent of about \$10.

In the final sample, 27.8% of the participants were men. The average age was 39.0 ($SD = 10.0$). Education level varied between primary school or lower vocational training (47.6%), secondary school or high school or intermediate vocational training (46.7%), and college or university (5.7%). Regarding unemployment duration, 50.2% of the respondents had been unemployed for more than 5 years ($n = 159$).

To check for selective nonresponse, the respondents in the final sample ($N = 317$) were compared with the nonrespondents (individuals who responded to the Time 1 survey only and the individuals who had one or more missing values). Multivariate analysis of variance including gender, age, and education level showed no significant differences between respondents and nonrespondents, $F(3,616) = 2.02, p = .11$.

Measures

Table 1 provides the internal consistency reliabilities of the measures for the employed and unemployed group separately. Unless indicated otherwise, items were completed by using 5-point Likert scales ranging from 1 = *strongly disagree* to 5 = *strongly agree*.

Job search behavior. Job search behavior was assessed at Time 2 by an 11-item index based on the behavioral scales of Blau (1993; 1994) and Kopelman, Rovenpor, and Millsap (1992). Participants were asked to indicate how much time they had spent on preparatory and active job search activities in the *last 4 months*. The activities included: making inquiries/reading about getting a job, preparing/revising resume, reading classified/help wanted advertisements, talking with friends or relatives about possible job leads, speaking with previous employers or business

TABLE 1

Internal Consistency Reliabilities, Means, Standard Deviations, and Correlations Among all Variables for Employed and Unemployed Individuals

Variable	Employed group			Unemployed group			t^c	1
	α	M	SD	α	M	SD		
<u>Time 1 variables:</u>								
1. Gender ^a	—	0.41	0.49	—	0.72	0.45	10.69**	
2. Age	—	39.80	10.63	—	39.04	10.01	−1.11	−.22**
3. Education ^b	—	2.24	0.70	—	1.58	0.60	−16.50**	.00
4. Instrumental job search attitude	.69	2.35	0.94	.81	2.74	1.08	5.81**	−.08
5. Affective job search attitude	.80	2.77	0.78	.84	2.85	0.85	1.39	−.05
6. Subjective norm	.88	1.71	0.90	.85	2.10	1.04	6.03**	−.09
7. Job search self-efficacy	.82	3.61	0.59	.83	3.35	0.77	−5.40**	−.00
8. Job satisfaction	—	3.98	0.96	—	—	—	—	—
9. Organizational commitment	.89	3.39	0.98	—	—	—	—	—
10. Work valence	—	—	—	.87	3.56	0.85	—	−.05
11. Expectancy	.85	4.13	0.63	.81	3.11	0.90	−18.74**	.16**
12. Financial need	—	2.11	0.85	—	3.66	1.12	22.75**	−.12*
13. Job search intention	.92	1.38	0.53	.94	2.00	0.88	11.96**	−.07
<u>Time 2 variables:</u>								
14. Job search behavior	.89	1.27	0.43	.93	1.79	0.78	11.23**	−.12*

acquaintances about possible job leads, visiting job fairs, contacting employment agencies, looking for jobs on the internet, making inquiries to prospective employers, sending out application letters, and going on a job interview. Response options ranged from 1 = *no time at all* to 5 = *very much time*.

Job search intention. In many job search studies that used the TRA or TPB, job search intention was assessed with only one or two general items (e.g., Caska, 1998; Van Ryn & Vinokur, 1992; Vinokur & Caplan, 1987). Fishbein and Ajzen (1975), however, stressed the importance of correspondence in specificity, target, situation, and time between the behavior and intention measure (see also Ajzen, 1991; Sutton, 1998). We therefore assessed job search intention with the same 11-item index as job search behavior. At Time 1, participants were asked to indicate how much time they *intend to spend* on the various job search activities in the *next 4 months*. Response options were identical to the behavior measure.

Job search attitude. Respondents were asked to indicate the extent to which they regarded it *sensible*, *wise*, and *useless* (reverse scored) to seek a (new) job in the next 4 months (Vinokur & Caplan, 1987). In addition to this more instrumental attitudinal measure, we distinguished a second, more affective component (cf. Ajzen & Driver, 1992). Based

TABLE 1 (continued)

2	3	4	5	6	7	8	9	10	11	12	13	14
-.18**	.02	.02	-.00	.03	-.08*	-.03	.08**	-	.08*	.04	.03	.06
	.00	-.17**	-.09**	-.05	.05	.04	.07*	-	-.28**	-.13**	-.15**	-.16**
-.03		.05	.12**	-.03	.16**	.00	.03	-	.14**	-.14**	.04	.08**
-.03	.07		.10**	.58**	-.15**	-.47**	-.29**	-	-.07*	.14**	.58**	.40**
-.13*	-.01	.34**		.01	.45**	-.04	-.06	-	.22**	-.03	.18**	.17**
-.02	.06	.52**	.16**		-.20**	-.49**	-.28**	-	-.24**	.13**	.46**	.34**
-.04	.17**	.14*	.52**	.04		.15**	.13**	-	.36**	-.14**	-.06	.03
-	-	-	-	-	-	-	.54**	-	.16**	-.15**	-.40**	-.34**
-	-	-	-	-	-	-	-	-	.13**	-.09**	-.25**	-.20**
-.03	.04	.26**	.37**	.15**	.27**	-	-	-	-	-	-	-
-.32**	.02	.15**	.32**	.04	.32**	-	-	.20**	-	-.20**	-.05	-.05
.08	-.10	-.01	.04	.07	-.02	-	-	.00	-.08		.07*	.02
-.08	.08	.65**	.32**	.44**	.19**	-	-	.33**	.07	.06		.52**
-.12*	.03	.50**	.23**	.23**	.16**	-	-	.24**	-.05	.12*	.66**	

Notes: Correlations for unemployed individuals below diagonal, correlations for employed individuals above diagonal. *N* is 989 in the employed group and 317 in the unemployed group.

^a 0 = male, 1 = female

^b 1 = primary school/lower vocational training, 2 = secondary school/high school/intermediate vocational training, 3 = college/university

^c Positive (negative) *t*-values indicate means are higher in the unemployed (employed) group.

p* < .05 *p* < .01

on Ajzen and Driver, we asked participants to indicate whether they thought job search to be *interesting*, *enjoyable*, *pleasant*, and *boring* (reverse scored). Confirmatory factor analysis in both samples showed a good fit for a 2-factor model, in which the instrumental items loaded on one factor and the affective items on the other, $\chi^2_{two-factor model, employed group}(13, N = 989) = 126.26, p < .001$, goodness-of-fit index (GFI) = .97, comparative fit index (CFI) = .95, and $\chi^2_{two-factor model, unemployed group}(13, N = 317) = 86.30, p < .001$, GFI = .93, CFI = .93. This 2-factor model fitted the data significantly better than a 1-factor model, in which both instrumental and affective items loaded on a single factor, $\chi^2_{one-factor model, employed group}(14, N = 989) = 935.41, p < .001$, GFI = .81, CFI = .58, $\chi^2_{diff}(1, N = 989) = 809.15, p < .001$, and $\chi^2_{one-factor model, unemployed group}(14, N = 317) = 444.82, p < .001$, GFI = .74, CFI = .59, $\chi^2_{diff}(1, N = 317) = 358.52$,

$p < .001$. Instrumental and affective job search attitudes were therefore regarded as two distinct variables in this study.

Subjective norm. Based on Vinokur and Caplan (1987), subjective norm was assessed with two items, asking the respondents to indicate the extent to which *their significant other* and *most people who are important to them* respectively, thought they should seek a (new) job in the next 4 months.

Perceived behavioral control. In accordance with previous research, perceived behavioral control was measured as self-efficacy for job search behaviors (Ajzen, 1991; Caska, 1998; Van Ryn & Vinokur, 1992; see also Armitage & Conner, 2001). Eight items were selected based on Ellis and Taylor (1983) and Van Ryn and Vinokur (1992). Sample items included: "I have confidence in my abilities to complete a good job-application" and "In general, I'm not very good at impressing potential employers with my qualifications" (reverse scored).

Job satisfaction. Overall job satisfaction was measured in the employed sample only. A single-item measure was used, asking the respondents to indicate the extent to which they agreed with the statement: "I am satisfied with my current job." We chose to use a single-item measure to reduce the length of the questionnaire and to avoid asking too many seemingly repetitious questions. In their meta-analysis, Wanous, Reichers, and Hudy (1997) found a high correlation between single-item and multiple-item measures of overall job satisfaction ($r_{corrected} = .67$), which led them to conclude that single-item job satisfaction measures are acceptable when time or space constraints prevent the use of scales.

Organizational commitment. Organizational commitment was assessed in the employed group only, using a Dutch version of Meyer, Allen, and Smith's (1993) commitment questionnaire (Den Hartog, 1997). To reduce the length of the questionnaire, we measured only the affective component of organizational commitment. The affective component was chosen over the normative and continuance components, because research has indicated that affective commitment is more strongly related to withdrawal cognitions and employee turnover than the other forms of commitment (Meyer, Stanley, Herscovitch, & Topolnysky, 2002). Based on Ten Brink, Den Hartog, Koopman, and Van Muijen's (2001) three items of the affective commitment scale with the highest factor loadings were selected: "I feel like 'part of the family' at the organization I work for," "The organization I work for has a great deal of personal meaning for me," and "I feel emotionally attached to the organization I work for."

Work valence. Work valence was assessed in the unemployed group only, using Vinokur and Caplan's (1987) 3-item scale. Because the internal consistency reliabilities of this scale were rather low in previous

research (.69 in Caska, 1998; .62 in Vinokur & Caplan, 1987), three items were added, based on Wrzesniewski's (1999) job versus calling orientation scale. Sample items included: "Work is an important part of life" and "Work means more to me than just money."

Expectancy. People's expectations about their chances of finding a job were assessed with five items based on Vinokur and Caplan's (1987) perceived instrumentality scale and Feather and O'Brien's (1987) job confidence scale. Sample items included: "It is likely for me that I will get a (new) job if I try hard to find one" and "I am confident about finding a (new) job if I want to."

Financial need. One item ("I can live on my current income reasonably well") measured the individual's subjective financial situation. This item was reverse coded to reflect the individual's financial need. A single-item measure was used to assess financial need to reduce the length of the questionnaire, and to avoid asking too many seemingly repetitious questions. We chose to assess financial need with one item, because this construct is not ambiguous or complex, and therefore may be adequately represented by one item (cf. Wanberg et al., 1999; Wanous et al., 1997).

Control variables. Gender, age, and education were used as control variables. Gender was coded 0 = *male* and 1 = *female*. Level of education was assessed by asking the respondents to indicate the highest level of education they completed. Education was then coded as 1 = *primary school or lower vocational training*, 2 = *secondary school or high school or intermediate vocational training*, 3 = *college or university*.

Analyses

The validity of the theory of planned behavior among employed and unemployed individuals, as well as the mediating potential of the TPB variables in the relationships between the various antecedents and job seeking, was assessed using structural equation modeling (SEM) with LISREL 8.30 (Jöreskog & Sörbom, 1993). Sample means and covariances were analyzed and maximum likelihood was used as method of estimation. Gender, age, and level of education were used as control variables in all analyses. Specifically, direct paths of these control variables with job search intention and job search behavior were incorporated in the estimated models. We selected these variables as controls because previous, meta-analytical research demonstrated that men, younger individuals, and individuals with higher levels of education report higher levels of job search behavior as compared to women, older individuals, and individuals with less education, respectively (Kanfer et al., 2001).

In the first series of analyses, the validity of the TPB in the context of job seeking was tested for employed and unemployed individuals (Hypothesis 1). Initially, the model was tested for the employed group and the unemployed group separately. After that, we examined to what extent the model parameters were the same in both groups using a series of two-group LISREL analyses. Five models were estimated, in which subsequently all parameters were assumed to be the same in both groups (Model A), the error variances were allowed to differ between the two groups (Model B), the error variances and the intercepts were allowed to differ between the two groups (Model C), the error variances, intercepts, and path coefficients between the TPB variables were allowed to differ between the two groups (Model D), and the error variances, intercepts, and all path coefficients (between both the TPB variables and the control variables) were allowed to differ between the two groups (Model E). The resulting fit indices were compared across the five models.

In the second series of analyses, we tested the mediating role of the TPB variables in the relationship between the fundamental antecedents and job search behavior in the employed group and the unemployed group separately (Hypotheses 2 to 5). Structural equation modeling was used in these analyses because it is a more powerful technique to determine mediation than the commonly used Baron and Kenny (1986) approach (Bing, Davison, LeBreton, & LeBreton, 2002). Moreover, the Baron and Kenny approach has been shown to suffer from low statistical power (MacKinnon, Lockwood, Hoffman, West, & Sheets, 2002).

Because we identified different sets of antecedent variables for employed and unemployed individuals, the mediating effects of the TPB variables were tested in the two groups separately. In the employed group we estimated a model including the TPB variables, the control variables, and the antecedent variables (e.g., job satisfaction, organizational commitment, expectancy, and financial need). Both the direct and the indirect paths of the antecedents with job search intention and job search behavior were estimated. Based on the significance of the direct paths, the model was stripped and conclusions were drawn about the extent to which the TPB variables completely or partially mediate the effects of the antecedent variables. In the unemployed group the same procedure was used, however, with a different set of antecedent variables (i.e., work valence, expectancy, and financial need).

Results

Table 1 presents the internal consistency reliabilities, means, standard deviations, *t*-statistics for mean differences, and correlations among all measures for employed and unemployed respondents. In the follow-

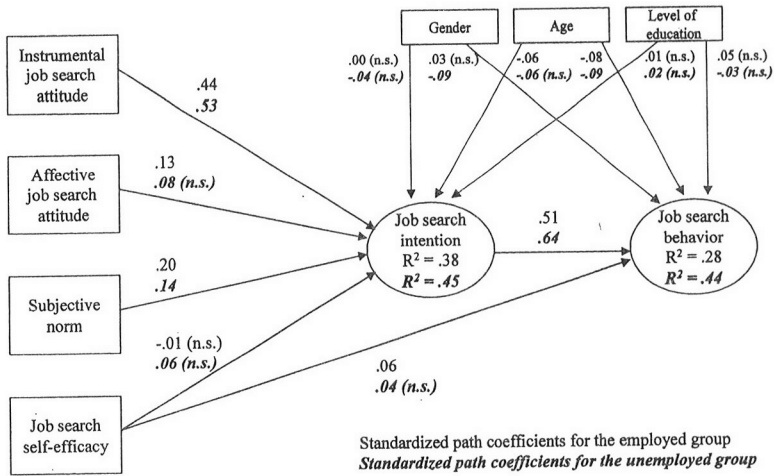


Figure 2: Standardized Path Coefficients for the Employed and Unemployed Group Separately

ing, we first present the results concerning Hypothesis 1 for the employed and the unemployed group separately. Then the results concerning the comparison of the TPB between both groups are presented. The section concludes with the results concerning the hypothesized mediating effects of the TPB variables between the fundamental antecedents and job search behavior (Hypotheses 2 to 5).

Theory of Planned Behavior

Employed group. Hypothesis 1 stated that job search behavior can be predicted accurately with the theory of planned behavior. Figure 2 presents the resulting structural model for the employed group. Overall model fit was good, $\chi^2(3, N = 989) = 33.34, p < .001$, GFI = .99, CFI = .98. Instrumental job search attitude, affective job search attitude, and subjective norm predicted job search intention. Job search self-efficacy, however, did not contribute significantly to the prediction of job search intention. Job search behavior was predicted by job search intention and self-efficacy. Thus, Hypothesis 1 was supported partially in the employed group. In the model, we controlled for the effects of gender, age, and level of education on job search intention and job search behavior. Of the control variables, only age was significantly related to job search intention and job search behavior. The control variables and TPB variables together explained 38% of the variance in intention and 28% of the variance in behavior.

Unemployed group. Figure 2 also presents the results of the model assessed in the unemployed group. The model fitted well in this group, $\chi^2(3, N = 317) = 12.90, p < .01$, GFI = .99, CFI = .98. Instrumental job search attitude and subjective norm significantly predicted job search intention. Affective job search attitude and job search self-efficacy, however, did not. Job search behavior was significantly predicted by job search intention only. Thus, Hypothesis 1 was supported partially in the unemployed group. In the model, we controlled for the effects of gender, age, and level of education on job search intention and job search behavior. Of the control variables, gender and age were significantly negatively related to job search behavior, indicating that men and younger individuals engaged in more job search behavior than women and older individuals, respectively. The control variables and TPB variables together explained 45% of the variance in intention and 44% of the variance in behavior.

Comparison of employed and unemployed individuals. Proceeding with the comparison of job search behavior and its predictors between the employed and unemployed group, we first examined whether differences in means existed between both groups. A multivariate analysis of variance indicated that the means of job search behavior and the predictor variables differed significantly between employed and unemployed individuals, $F(11, 1294) = 144.77, p < .001$. We therefore examined the mean differences for all variables separately. Table 1 shows that the proportion of women was higher in the unemployed group than in the employed group. No significant differences in age were found, but unemployed individuals were lower educated than employed individuals. Furthermore, unemployed individuals showed higher levels of instrumental job search attitude, subjective norm, financial need, job search intention, and job search behavior compared to employed individuals. Job search self-efficacy and expectancy, however, were more positive in the employed group.

Second, we examined to what extent the model parameters of the TPB framework were similar in the employed and the unemployed group. We first estimated the model under the restriction that all parameters had to be equal in the employed and unemployed group (Model A). Instrumental and affective job search attitude and subjective norm predicted job search intention, and job search intention predicted job search behavior. The standardized path coefficients were .47, .13, .18, and .63, respectively. Self-efficacy did not contribute significantly to the prediction of either intention or behavior. The standardized path coefficients were .01 and .04, respectively. Gender and level of education had significant effects on job search intention (.06 and -.08, respectively), and age had a significant effect on job search behavior (-.06). The model

TABLE 2
Fit Indices for Multigroup Models

Model ^a	df	χ^2	GFI	CFI	χ^2_{diff}
Model A	22	543.05**	.96	.77	
Model B	20	241.13**	.99	.90	301.92**
Model C	18	95.45**	.99	.97	145.68**
Model D	12	53.94**	.99	.98	41.51**
- intention \rightarrow behavior	13	67.47**	.99	.98	13.53**
- self-efficacy \rightarrow behavior	13	53.97**	.99	.98	0.03
- instr. attitude \rightarrow intention	13	70.81**	.99	.97	16.87**
- aff. attitude \rightarrow intention	13	53.97**	.99	.98	0.03
- subj. norm \rightarrow intention	13	53.94**	.99	.98	0.00
- self-efficacy \rightarrow intention	13	55.65**	.99	.98	1.71
Model E	6	46.23**	.99	.98	7.71
Null model	72	2,341.85**			

Notes: $N_{employed} = 989$ and $N_{unemployed} = 317$

^a Model A = all parameters equal in both groups. Model B = error variances free. Model C = error variances and intercepts free. Model D = error variances, intercepts, and path coefficients between the TPB-variables free. Model E = error variances, intercepts, and all path coefficients (between both the TPB-variables and the control variables) free. χ^2_{diff} presents the difference in χ^2 compared to the previous model. In the submodels under Model D the error variances, intercepts, and all paths except the path mentioned are set free. For these models χ^2_{diff} presents the difference in χ^2 as compared to Model D.

** $p < .01$

explained 39% of the variance in intention and 41% of the variance in behavior. Table 2 shows a moderate overall fit for this model. We reestimated the model, allowing the error variances to differ between both groups (Model B). As Table 2 shows, this resulted in a significant improvement of overall model fit. Reestimation of the model, allowing the error variances as well as the intercepts to differ between both groups (Model C) resulted in a further significant model improvement. In addition, Model D, in which the error variances, the intercepts, and the path coefficients of the TPB variables (but not the control variables) were allowed to differ between both groups, showed a further significant improvement in the χ^2 . Model E, however, in which the error variances, intercepts, and all path coefficients (between both the TPB variables and the control variables) were allowed to differ between the two groups, did not result in a significant improvement of the model fit. This indicates that the control variables gender, age, and level of education did not differentially predict job search intention and job search behavior between the two groups.

Third, we examined which paths differed between the two groups. Because the previous analyses already showed that the path coefficients of the control variables did not differ significantly between employed and unemployed individuals, Model D was taken as a starting point. We subsequently estimated six models. In each of these models, one path co-

efficient was set invariant over both groups. As Table 2 shows, requiring the path coefficient between job search intention and job search behavior to be the same in both groups resulted in a significant reduction of the model fit. Another significant reduction in model fit resulted from setting the path between instrumental attitude and intention invariant. Thus, the path coefficients of the intention-behavior path and of the instrumental attitude-intention path differed significantly between the two groups. Job search intention appeared to be a stronger predictor of job search behavior in the unemployed group than in the employed group. Furthermore, instrumental attitude was a more important predictor of job search intention in the unemployed group than in the employed group. The other TPB relationships did not differ significantly between the two groups.

Mediation Analyses

Hypotheses 2 to 5 concern the mediating role of the TPB variables in the relationship between several antecedent variables and job search behavior. These hypotheses were tested with a series of SEM analyses for the employed and the unemployed individuals separately.

Employed group. In the employed group, we estimated a model including the control variables, the TPB variables, and the antecedent variables job satisfaction, organizational commitment, expectancy, and financial need. In addition to the hypothesized paths as depicted in Figure 1, we also estimated the direct paths of the antecedent variables with intention and behavior in order to test whether the TPB variables completely or partially mediated the effects of the antecedent variables. The total model showed a reasonable fit, $\chi^2(18, N = 989) = 338.32, p < .001$, GFI = .96, CFI = .88. However, several of the direct paths were not significant. We reestimated the model without these nonsignificant paths, $\chi^2(23, N = 989) = 342.89, p < .001$, GFI = .95, CFI = .88. Because the increase in χ^2 was not significant, $\Delta\chi^2(5, N = 989) = 4.57, p > .05$, the latter model was preferred for reasons of theoretical and empirical parsimony. The path coefficients are presented in Figure 3. Because the path coefficients of the control variables were similar to the ones presented in Figure 2, they were omitted for reasons of clarity.

As demonstrated in Figure 3, job satisfaction affected job search behavior indirectly through instrumental job search attitude and job search intention. In addition, the direct paths of job satisfaction with intention and behavior were significant. Thus, the negative effect of job satisfaction on job search behavior was only partially mediated by the TPB variables instrumental job search attitude and job search intention (Hypothesis 2 not supported). Although negatively correlated with job search behavior, organizational commitment failed to explain any unique vari-

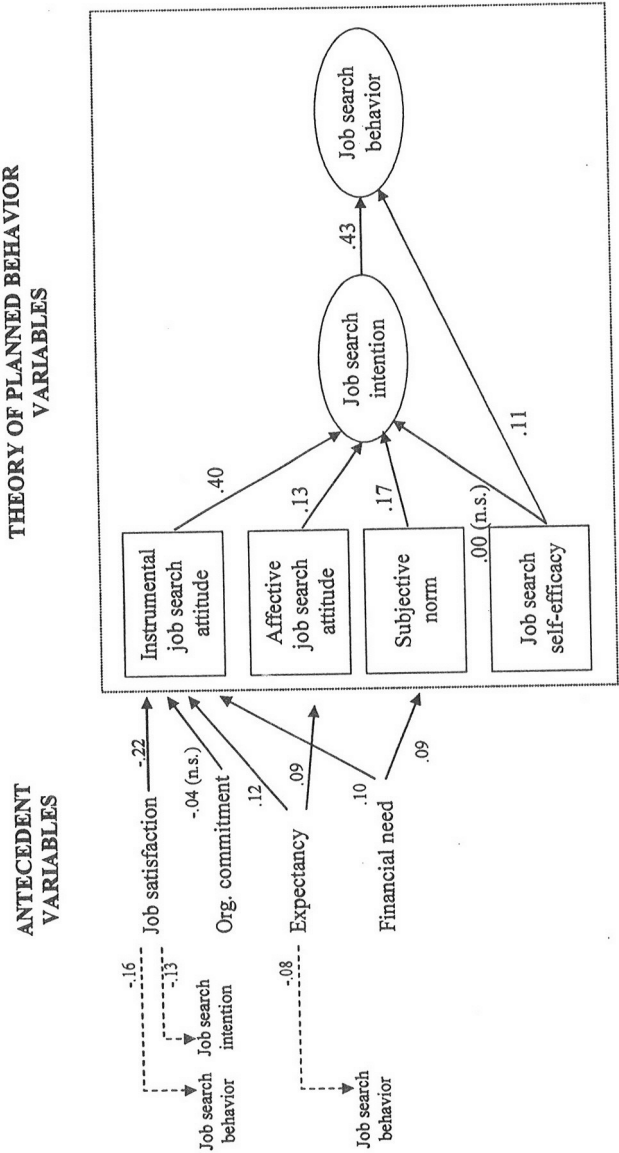


Figure 3: Standardized Path Coefficients for the Mediation Model in the Employed Group

ance in instrumental attitude, intention, and behavior (Hypothesis 3 not supported). Expectancy affected job search behavior indirectly through instrumental and affective job search attitude and job search intention. However, in addition to this positive indirect effect, a direct negative effect of expectancy on job search behavior was found. Thus, the TPB variables only partially mediated the effect of expectancy on job search behavior (Hypothesis 4b not supported in the employed group). Financial need affected job search behavior indirectly through instrumental job search attitude, subjective norm, and job search intention. The direct paths to intention and behavior were not significant (Hypothesis 5 supported in the employed group).

Unemployed group. In the unemployed group, we estimated a model including the control variables, the TPB variables, and the antecedent variables work valence, expectancy, and financial need. In addition to the hypothesized paths as depicted in Figure 1, we also estimated the direct paths of the antecedent variables with intention and behavior in order to determine complete or partial mediation. The total model showed a good fit, $\chi^2(15, N = 317) = 40.51, p < .001$, GFI = .98, CFI = .97. However, several of the direct paths were not significant. We reestimated the model without these nonsignificant paths, $\chi^2(18, N = 317) = 46.13, p < .001$, GFI = .98, CFI = .96. Because the increase in χ^2 was not significant, $\Delta\chi^2(3, N = 317) = 5.62, p > .05$, the latter model was preferred for reasons of theoretical and empirical parsimony (see Figure 4).

As demonstrated in Figure 4, work valence affected job search behavior indirectly through instrumental and affective job search attitude and job search intention. In addition, the direct path to job search intention was significant. Thus, Hypothesis 4a was not supported because job search attitude did not completely mediate the effects of work valence. Expectancy affected job search behavior indirectly through affective job search attitude and intention only. However, in addition to this positive indirect effect, direct negative effects of expectancy on job search intention and behavior were found. Thus, the TPB variables only partially mediated the effect of expectancy on job search behavior (Hypothesis 4b not supported in the unemployed group). Financial need did not affect job search behavior in the unemployed group, neither directly nor indirectly through the TPB variables. Thus, Hypothesis 5 was not supported in the unemployed group.

Discussion

This study investigated the distal and proximal antecedents of job search behavior in a sample of employed and a sample of unemployed individuals. First, the proximal antecedents of job search were exam-

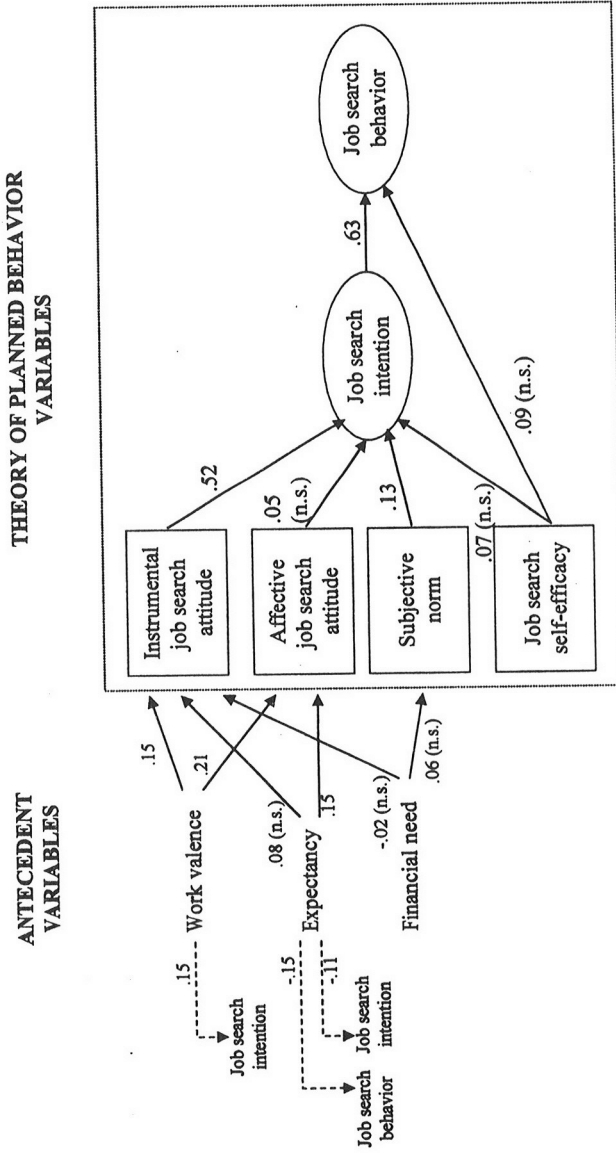


Figure 4: Standardized Path Coefficients for the Mediation Model in the Unemployed Group

ined and compared using the same model in both groups, that is, Ajzen's (1985) theory of planned behavior. The TPB has never before been applied to the prediction of job search among employed individuals, only among graduating students (Caska, 1998) and unemployed individuals (Van Ryn & Vinokur, 1992). Second, the extent to which the TPB mediated the effects of several more distal antecedents of job seeking was examined among employed and unemployed individuals separately.

Theory of Planned Behavior and Group Differences

Generally, we found support for the TPB in the unemployed as well as in the employed sample. In both groups, intentions to engage in job seeking predicted subsequent job search behavior. Furthermore, attitudes toward job seeking and perceptions of social pressure to engage in job seeking predicted job search intentions. The effects of job search self-efficacy, however, were small and mostly nonsignificant. In both groups, a substantial proportion of the variance in job search intention and behavior was explained by the model variables. Thus, the TPB seems to be a useful framework to explain job search behavior, not only among unemployed individuals but among employed individuals as well.

We did, however, find some interesting differences between the two groups. The proportion of explained variance in intention and behavior was larger in the unemployed group as compared to the employed group. The main difference between the two groups related to the instrumental attitude-intention-behavior link, which was stronger in the unemployed group than in the employed group. Unemployed individuals with positive instrumental job search attitudes experience a stronger urge to actually seek for employment than employed individuals with positive instrumental job search attitudes. That is, because employed individuals are more likely than unemployed individuals to have other alternatives available besides seeking for alternative employment (e.g., reconsider their current job; cf. Lee & Mitchell, 1994), they might be less likely than unemployed individuals to convert positive instrumental job search attitudes into intentions and behavior. For example, postponing the performance of job search activities or just waiting for a better job alternative without putting any effort in searching might be plausible options among employed individuals. Unemployed individuals in The Netherlands, however, often can not afford themselves to postpone or just wait, because they might risk their unemployment benefits when they do not engage in active job seeking. In other words, the underlying causal processes might not be of equal length for employed and unemployed individuals. Studying the job seeking process using a longer time frame (e.g., 1 year) and breaking it down into smaller intervals (e.g., periods of

1 month) may help to better understand the way the job seeking process unfolds among employed and unemployed people (cf. Blau, 1994).

Another explanation for the difference in the strength of the intention-behavior relationship between employed and unemployed individuals may relate to the amount of actual control over the behavior. That is, Ajzen (1985) proposed that the amount of actual control relates positively to the strength of the relationship between intentions and subsequent behavioral performance. As compared to unemployed individuals, employed individuals are likely to have lower levels of actual control because being employed may result in limited time and opportunities to engage in the intended job search activities. These lower levels of actual control may have caused the weaker intention-behavior relationship among employed individuals. Because we did not incorporate a measure of the actual level of behavioral control, we could not test this explanation empirically. Therefore, future research should investigate the effects of actual control on the intention-behavior relationship.

The small and mostly nonsignificant effects of job search self-efficacy that we found are inconsistent with previous meta-analytical research, showing a significant moderately strong relationship between self-efficacy and job search (Kanfer et al., 2001). However, individual studies reporting small and nonsignificant results are no exception (e.g., Caska, 1998; Van Ryn & Vinokur, 1992; Wanberg et al., 1996). Closer inspection of the self-efficacy-job search relationship revealed that the zero-order correlations of self-efficacy with job search intention and behavior were nonsignificant in the employed group, but positive and significant in the unemployed group (see Table 1). However, in the SEM-analyses, self-efficacy failed to account for any unique variance in unemployed people's job search intentions, probably because of its strong correlation with affective job search attitude. Indeed, a rerun of our analyses, excluding affective job search attitude, resulted in a significant effect of self-efficacy on job search intention in the unemployed group. These analyses also showed a significant effect of self-efficacy on job search intention in the employed group, though this effect was weaker than it was in the unemployed group.

The Mediating Role of the Theory of Planned Behavior

The TPB is thought to be a complete theory of the proximal determinants of behavior (Conner & Armitage, 1998). This assumption implies that the effects of other variables on behavior are completely mediated by the TPB variables. In the present study, however, we failed to find empirical support for this assumption. Because direct effects of several other antecedents on job search behavior were found to be significant

among both employed and unemployed individuals, we may conclude that the TPB in most cases only partially mediated the effects of other antecedents on job search behavior.

More specifically, in the employed group, instrumental job search attitude and intention partially mediated the effects of job satisfaction on job search behavior. This finding in fact suggests the addition of another state to the traditional models of employee turnover (e.g., Mobley, 1977), that is, the state in which an employed individual develops job search attitudes. In the same vein, previous research investigating these models has often incorporated such a state of forming job search attitudes within the broader construct of "expected utility of searching and costs of quitting" (Hom et al., 1984) or "expected utility of withdrawal" (Hom & Griffeth, 1991). Neither the direct nor the indirect effects of organizational commitment on job search behavior were found to be a significant. This lack of significant findings may be explained by the strong correlation between commitment and job satisfaction. Indeed, reestimation of the model without job satisfaction showed a significant negative path between organizational commitment and instrumental job search attitude. In addition, the direct paths from commitment to intention and behavior were significant, indicating that the negative effect of commitment on job search behavior was only partially mediated by the TPB variables.

A possible explanation for the lack of support for the hypothesized full mediation may relate to the research design used in this study and the dynamic nature of the job search process (cf. Steel, 2002). Employed individuals with low levels of job satisfaction at Time 1, for example, may not have come to the point of forming positive attitudes and intentions towards job seeking at the time of the survey administration. However, these individuals may have formed these attitudes and intentions at some point after the Time 1 measurement but before the Time 2 measurement, and, therefore, may have engaged in job seeking at Time 2. As noted by Steel (2002), a 2-wave longitudinal design may not always be able to adequately assess the value of predictors that change or evolve over time. Future research should therefore make an effort to collect data at more points in time, making a more detailed investigation of the job search process possible.

Consistent with the expectancy-value theory and in accordance with previous research (e.g., Feather & O'Brien, 1987; Vinokur & Caplan, 1987), work valence was a significant predictor of job search behavior in the unemployed group. This relationship was partially mediated by job search attitude and completely mediated by job search intention. The role of expectancy, however, was not as straightforward as hypothesized. Although the zero-order correlations between expectancy and job search

behavior were nonsignificant in both the unemployed and the employed group, we found several significant direct and indirect paths in the estimated models. In both groups, expectancy showed small positive effects on job search behavior through attitude and intention and small negative effects on job search behavior directly.

Previous research has also found mixed results regarding the relationship of expectancy (or related constructs such as situational control, perceived control over finding a job, and perceived job opportunities) with job search behavior. Whereas Feather and O'Brien (1987) failed to find a significant relationship between expectancy and job search behavior, other studies did find support for the hypothesized positive relationship (Taris et al., 1995; Wanberg, 1997). Saks and Ashforth (1999) unexpectedly found a negative relationship between perceived control over finding a job and active job search behavior among recent university graduates. In their study among employed managers, Bretz et al. (1994) also concluded that opportunity variables tend to relate negatively to job search. In our study, we were able to investigate this ambiguous relationship between expectancy and job search behavior more closely and found that it breaks down into a positive indirect effect and a negative direct effect. Thus, on the one hand, higher expectations about the chances to find a (new) job may cause more positive attitudes toward job seeking, which is consistent with the expectancy-value theory. On the other hand, people with higher expectancies also have more human capital, which makes them more marketable. Therefore, there is less need for them to invest much time in job seeking. People with lower expectancies may have less human capital and, therefore, might invest more time in job seeking as a compensatory response (cf. Saks & Ashforth, 1999). Future research should further investigate the effects of expectancy in the context of job seeking.

Consistent with previous research (Blau, 1994; see also Boudreau et al., 2001; Bretz et al., 1994), we found a positive relationship between financial need and job search behavior in the employed group. Instrumental attitude, subjective norm, and job search intention completely mediated this relationship. In the unemployed group, however, financial need was neither directly nor indirectly related to job search behavior. Thus, unlike previous research (e.g., Vinokur & Caplan, 1987), we did not find support for the mediation role of the TPB in the relationship between financial need and job search behavior among unemployed individuals.

Limitations and Implications

In this study, we compared the proximal antecedents of job search behavior between employed and unemployed individuals. Identical items

and scales were used to measure job search behavior and its proximal antecedents in the two groups. However, the different methods of data collection used in the two groups (i.e., paper-and-pencil vs. computer-based) might limit the comparability of the findings. Previous research on the equivalence of responses on paper-and-pencil and computer surveys mitigates this concern. That is, several studies have demonstrated that paper-and-pencil and computer surveys yield the same results on attitudinal and personality measures (e.g., Cronk & West, 2002; King & Miles, 1995; Stanton, 1998).

Other limitations of the study relate to the reliance on self-report measures and the low response rate in the unemployed sample. Regarding the self-report measures, common method variance might be a concern. We do believe, however, that the use of an extensive index to measure job search intention and behavior, including both preparatory and active job search activities (cf. Blau, 1994), and the use of a 2-wave longitudinal design might have improved the accuracy of the respondents' responses. Furthermore, the low response rate in the unemployed sample might limit the generalizability of the findings. It should be noted in this context that the unemployed sample included a large proportion of less educated individuals and low response rates are not uncommon in such samples (e.g., Schmit et al., 1993). Unfortunately, we were not able to compare the Time 1 respondents with the nonrespondents. We were, however, able to compare the Time 2 respondents with the respondents who participated in the Time 1 measurement only. This comparison did not reveal any significant differences regarding gender, age, and level of education.

In this study, we focused on job search behavior of unemployed and employed individuals. A strength of our study is the use of a broad sample of employed individuals, with a large variation on age, education, tenure, and industry. In contrast, a more traditional sample of unemployed individuals was used, that is, a sample of unemployed individuals who were registered as unemployed and received welfare or unemployment benefits. However, other groups of nonworking individuals might be of interest with regard to job search behavior. For example, there is much so-called "hidden unemployment" among full-time homemakers, individuals that are partially disabled, and individuals that retired early (e.g., Tesser, Van Dugteren, & Merens, 1996). That is, people in these groups may be willing to (re)enter the workforce. Job search behavior of those groups of individuals, therefore, is of great interest. Nevertheless, research in these groups is very limited (Kanfer et al., 2001). Future research should investigate the predictors of job search behavior and the validity of the TPB in such other groups of (potential) job seekers.

Furthermore, future research should investigate the effects of the labor market situation on the relationships between job search behavior and its predictors. The relationship between expectancy and job search behavior, for example, might well be moderated by the situation at the labor market. In addition, the level of job search behavior among employed individuals due to dissatisfaction with their current jobs might be affected by the (perception of the) situation at the labor market. Finally, future research may investigate the extent to which the mediating role of the TPB variables applies to other more distal antecedents of job search behavior found in previous studies (e.g., personality variables, cognitive ability, perceived organizational success, and motivation control).

Some important practical implications result from this study. Consistent with previous research, for example, our findings indicate that training or instruction directed at improving the unemployed individual's job search self-efficacy might be helpful in stimulating job seeking among unemployed people (Eden & Aviram, 1993; Van Ryn & Vinokur, 1992). Our findings suggest that, in addition to improving the individual's job search self-efficacy, it may be even more effective to stimulate job search behavior by increasing the individual's job search attitudes. Positively influencing the unemployed individual's expectancy beliefs and work valence is a possible way of achieving this. Furthermore, the significant relationship between subjective norm and job seeking suggests that offering social support is an important means of stimulating job search behavior too (cf. Caplan, Vinokur, Price, & Van Ryn, 1989). With regard to employed individual's job seeking, the present findings suggest that organizations wanting to reduce turnover rates should not only focus on increasing their employees' job satisfaction. In addition, the employees' perceived financial situation and the social pressure from significant others to seek alternative employment are important antecedents of job search behavior and subsequent turnover.

In conclusion, this study shows that although the fundamental antecedents of job search behavior are different for employed and unemployed individuals, a similar framework can be used to describe the way these antecedents translate into the performance of job search activities. That is, job search attitude, subjective norm, and job search intention are important predictors of job search behavior among a wide range of employed and unemployed people. In addition, these proximal predictors at least partially mediated the influence of several more distal antecedents on job search behavior. These results add to a better understanding of the job search process and its motivational factors of different groups at the labor market.

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