



Predicting job seeking for temporary employment using the theory of planned behaviour: The moderating role of individualism and collectivism

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Using the theory of planned behaviour (TPB), the role of behavioural, normative, and control beliefs and individualism/collectivism was examined in the context of job seeking for temporary employment. Data were collected in a two-wave longitudinal design, using a culturally diverse sample of 138 temporary workers in The Netherlands. Results supported the TPB-relationships, with the exception of the role of perceived behavioural control (PBC). Of the behavioural beliefs, sense of security, work-life balance, and status were most strongly related to intentions to seek temporary employment. Further, hypothesized moderating effects of collectivism were confirmed such that people low on collectivism were more strongly motivated by their personal attitudes about job seeking and less by perceptions of social pressure than people high on collectivism. Thus, the TPB was demonstrated to work somewhat differently depending on people's cultural value orientations.

Non-standard work arrangements such as temporary employment have experienced explosive growth since the 1970s, both in Europe and the US (Kalleberg, 2000; Theodore & Peck, 2002). An increasing number of organizations make use of temporary workers in order to deal with uncertainty and fluctuations in demand, to solve immediate staffing problems, and to replace expensive selection procedures (Brewster, Mayne, & Tregaskis, 1997). Temporary workers may be hired directly by the organization or via intermediaries such as temporary staffing agencies (Connelly & Gallagher, 2004). However, because the vast majority of job seekers prefer permanent employment (Brewster *et al.*, 1997), recruiting temporary workers can be difficult, especially in booming economies. In order to improve recruitment practices targeting temporary workers, it is important to know why people search

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for temporary employment. Therefore the present study was designed to examine the factors that predict job seeking for temporary employment.

Ajzen's (1991) theory of planned behaviour (TPB) was used to model the predictors of job seeking for temporary employment. The TPB states that human behaviour is best predicted by people's intentions to perform (or not to perform) the behaviour in question. Intentions in turn, are determined by people's personal attitudes towards the behaviour and by the perceived social pressure to perform the behaviour (i.e. subjective norm). That is, the more favourable individuals view the behaviour, and the more social pressure from significant others they perceive, the more likely they will form intentions to perform the behaviour. In addition to attitudes and subjective norms, the TPB identifies a third determinant of intention, that is, the perceived ease or difficulty to perform the behaviour (i.e. perceived behavioural control (PBC)). Furthermore, as a proxy for actual control, PBC directly contributes to the prediction of behaviour (Ajzen, 1991).

Although the TPB is a widely used and well-supported theoretical framework (see for a meta-analysis: Armitage & Conner, 2001), comparatively little research has examined the validity of the TPB in the vocational domain (Arnold *et al.*, 2006). A few studies have applied the TPB to career decision-making (e.g. Arnold *et al.*, 2006; Giles & Rea, 1999) and job seeking (Song, Wanberg, Niu, & Xie, 2006; Van Hooft, Born, Taris, & Van der Flier, 2004a, 2006; Van Hooft, Born, Taris, Van der Flier, & Blonk, 2004b; Van Ryn & Vinokur, 1992; Wanberg, Glomb, Song, & Sorenson, 2005), but as far as we know, no study has applied the TPB to job seeking for temporary employment. More generally, most theory and frameworks in the area of work and employment are grounded in the dominant paradigm of 'standard' (i.e. full-time and permanent) employee relations (Connelly & Gallagher, 2004). Because the workforce increasingly consists of temporary workers, it is important to test the generalizability of our models to 'non-standard' employees, such as temporary workers. Therefore, as a first purpose the present study tested the efficacy of the TPB in predicting job seeking for temporary employment, using a sample of job seekers in The Netherlands.

As a second purpose, the present study investigated whether the TPB works differently for job seekers with different cultural value orientations. Among temporary workers in The Netherlands the proportion of ethnic minorities is substantially larger than in the total workforce (SCP, 2005; Zeytinoglu & Muteshi, 2000), resulting in a relatively large ethnic and cultural diversity. Although the TPB is viewed as a complete model of predictors of intention and behaviour (Conner & Armitage, 1998), variables external to the model such as demographics, personality, or culture can have an influence in two ways. Firstly, external variables may influence intention and behaviour indirectly, as mediated by attitude, subjective norm, and PBC (Conner & Armitage, 1998; Fishbein, 1980). Secondly, external variables may influence the relative weights that individuals place on the attitudinal and normative components as determinants of their intentions (Fishbein, 1980). As Ajzen (1991, p. 188) noted: 'the relative importance of attitude, subjective norm, and PBC in the prediction of intention is expected to vary across behaviours and situations'. Whereas many studies have examined to what extent the TPB-variables mediate the role of a broad range of external variables (see for a review: Conner & Armitage, 1998), less attention has been paid to identifying and testing possible moderators of the TPB-relationships. In the present study we sought to extend the literature by investigating whether individual differences in job seekers' cultural value orientations affect the TPB-relationships.

Job seeking and the TPB

Figure 1 displays Ajzen's (1991) TPB as applied to job seeking for temporary employment. Specifically, job search behaviour is predicted by people's intentions to engage in job seeking (*job search intention*) and by people's perceptions of the ease or difficulty of performing job search activities (PBC). Job search intentions are predicted by people's attitudes towards job seeking (*job search attitude*), by the perceived social pressure to engage in job seeking (*subjective norm*), and by PBC. In the present study, we tested the efficacy of the TPB in the context of job seeking for temporary employment. Based on previous research on the TPB in general (Armitage & Conner, 2001), and on the TPB in the job search context specifically (Song *et al.*, 2006; Van Hooft *et al.*, 2004a, 2004b, 2006; Van Ryn & Vinokur, 1992; Wanberg *et al.*, 2005) we expected that the TPB-relations would hold for the prediction of job search intention and behaviour among individuals who are looking for temporary employment.

Furthermore, we investigated whether searching for temporary employment actually results in finding temporary employment. In 2001, Kanfer, Wanberg, and Kantrowitz published a meta-analysis, summarizing research on job seeking. This meta-analysis demonstrated that job search behaviour significantly and positively relates to finding employment, and that job search behaviour is the strongest predictor of employment success. Based on this meta-analysis we expected that job search behaviour among individuals who are looking for temporary employment relates positively to finding temporary employment.

In addition to the antecedents of job search behaviour and job search intention, the TPB also deals with the antecedents of attitude, subjective norm, and PBC. According to the TPB, attitude, subjective norm, and PBC should be a function of underlying salient beliefs about the behaviour in question (i.e. job seeking for temporary employment) and the outcomes of the behaviour (i.e. finding temporary employment) (cf. Ajzen, 1991). Beliefs about a behaviour or an outcome are formed by associations of the behaviour/outcome with certain attributes such as other outcomes, events, or characteristics. As displayed in Figure 1, according to the TPB, job search attitude is assumed to be predicted by behavioural beliefs about having a temporary job (e.g. 'Having a temporary job gives me a feeling of freedom'), weighted in a multiplicative fashion by its subjective value (e.g. 'A feeling of freedom is important for me'). Similarly, subjective norm is determined by the product of normative beliefs about job seeking

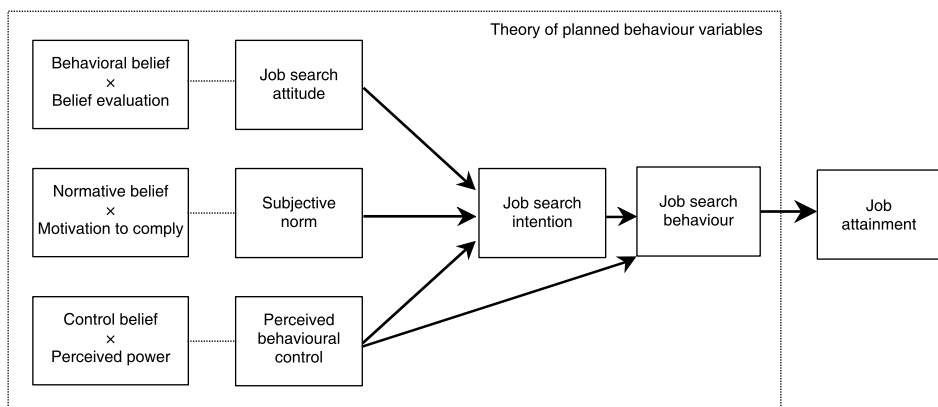


Figure 1. The theory of planned behaviour applied to job seeking.

(e.g. 'My family thinks that I should look for temporary employment') and the individual's motivation to comply with the different referents (e.g. 'In general, I want to meet my family's expectations'). PBC is assumed to be a function of the product of control beliefs about the perceived presence of facilitating or impeding factors (e.g. 'I have limited transportation available') and the perceived power of each control belief to actually facilitate or impede performing the behaviour (e.g. 'Having limited transportation would likely impede my search for temporary employment').

However, several scholars have raised methodological concerns regarding this multiplicative belief-based model that is held to underpin attitude, subjective norm, and PBC (e.g. Evans, 1991; French & Hankins, 2003). As demonstrated by Gagné and Godin (2000), correlations between belief-based products and their corresponding global TPB-variable depend on the scaling (e.g. bipolar or unipolar) of the individual beliefs (see also Ajzen, 1991). Evans (1991) and French and Hankins (2003) further noted that bivariate correlations of product or interaction variables with other variables are uninterpretable because of their scaling-issues, and recommended the use of hierarchical regression analysis to test the contribution of the belief-based products to the TPB. In the present study, we therefore examined the relationship between beliefs and their corresponding global TPB-variable and job search intention using hierarchical regression analysis (cf. Armitage, Conner, Loach, & Willetts, 1999; Elliott, Armitage, & Baughan, 2005). This way of analysing not only allows for testing the added value of an interactive model of beliefs over a simple additive model, but also allows for testing the added value of individual beliefs underlying the global job search attitude, subjective norm, and PBC constructs. Understanding the specific beliefs driving people to look for temporary employment may increase our insight in the basic explanatory determinants of the attitudes, perceptions, and intentions related to job search. Furthermore, it may help both organizations and temporary employment agencies in developing more effective materials for recruiting temporary employees. For example, if the specific belief of 'freedom' is found to relate to searching for temporary employment, temporary employment agencies could pay attention in their recruiting campaigns to the advantage of having more freedom when working as a temp.

Cultural differences in the TPB

As a second purpose, the present study was designed to investigate whether the TPB-relationships depend on individual differences in job seekers' cultural value orientations. Previous cross-cultural research has identified many dimensions on which cultures can be distinguished (e.g. individualism–collectivism, power distance, masculinity, future orientation, uncertainty avoidance; Hofstede, 1980; Javidan & House, 2001). Previous research, both theoretical and empirical, suggests that of these dimensions especially differences in individualism–collectivism (INDCOL) likely affect the TPB-relationships.

Previous theoretical work on INCOL and self-construal (e.g. Markus & Kitayama, 1991; Triandis, 1995) suggests that individualism and collectivism should differentially moderate the attitude–intention and subjective norm–intention relations. Specifically, as Oyserman, Coon, and Kemmelmeier (2002) noted in their extensive review of the INCOL literature, the core element of *individualism* is the assumption that individuals are independent of one another. Markus and Kitayama (1991) describe individualists as having an independent construal of the self. Individualists tend to prioritize personal goals over collective goals, and their behaviour is therefore guided more by personal attitudes than by social norms. Applied to the TPB, this reasoning suggests stronger

attitude–intention and weaker subjective norm–intention relationships. Conversely, the core element of *collectivism* is the assumption that groups bind and mutually obligate the individual group members (Oyserman *et al.*, 2002). Markus and Kitayama (1991) relate collectivism to an interdependent self-construal. Collectivists tend to prioritize goals of the in-group over their personal goals. Therefore, their behaviour is guided more by anticipated expectations of others or social norms of the in-group than by internal dispositions such as personality traits and personal attitudes (see also, Triandis, 1995). Applied to the TPB, this reasoning suggests weaker attitude–intention and stronger subjective norm–intention relationships.

From an empirical point of view, several studies have reported differences in attitude–intention and subjective norm–intention relationships between different cultural groups. Lee and Green (1991), for example, found that attitude was the strongest predictor of purchase intentions in a US sample, whereas subjective norm was the strongest predictor in a Korean sample. Similarly, Abrams, Ando, and Hinkle (1998) found that subjective norm was a stronger predictor of turnover intentions in a Japanese sample than in a British sample. In the area of job seeking, Van Hooft *et al.* (2004a) reported that as compared to the Dutch majority, non-Western ethnic minorities in The Netherlands were motivated more by subjective norms, and less by personal job search attitudes. In all of these studies the contrasting results were explained by cultural differences in INDCOL between the two samples that were compared.

Although these empirical findings may suggest that INDCOL affects the TPB-relationships, this conclusion cannot be firmly drawn because in these studies cross-group differences on INDCOL were not measured but only assumed based on previous cross-cultural research (Gelfand, Bhawuk, Nishii, & Bechtold, 2004; Hofstede, 1980). This practice has been criticized as meta-analytic results did not demonstrate unequivocal support for commonly assumed differences in INDCOL across various nations or cultural groups (Oyserman *et al.*, 2002). Furthermore, this approach is based on cultural homogeneity, ignoring within-group cultural differences (Fiske, 2002). An alternative method that may overcome these issues is direct assessment of INDCOL with rating scales and using an individual-level instead of country-level of analysis. In the present study, we therefore directly assessed INDCOL at the individual-level, and examined its impact on the TPB-relations.

While early research (e.g. Hofstede, 1980) conceptualized INDCOL as a single bipolar dimension, more recent studies suggested that individualism and collectivism are better understood as two separate constructs (Oyserman *et al.*, 2002; Triandis, Bontempo, Villareal, Asai, & Lucca, 1988). Based on these studies, we assessed INDCOL using two separate dimensions: one for individualism and one for collectivism. Guided by the theory on self-construal and INDCOL (Markus & Kitayama, 1991; Oyserman *et al.*, 2002; Triandis, 1995), and the empirical findings discussed (Abrams *et al.*, 1998; Lee & Green, 1991; Van Hooft *et al.*, 2004a), we expected that individual-level individualism (a) positively moderates the attitude–intention relation such that it is stronger (weaker) under conditions of high (low) individualism and (b) negatively moderates the subjective norm–intention relation such that it is weaker (stronger) under conditions of high (low) individualism. Furthermore, we expected that individual-level collectivism (a) negatively moderates the attitude–intention relation such that it is weaker (stronger) under conditions of high (low) collectivism and (b) positively moderates the subjective norm–intention relation such that it is stronger (weaker) under conditions of high (low) collectivism.

Method

Participants and procedures

The data were collected in a two-wave longitudinal design. Job search intention and the predictor variables were assessed at Time 1 of the study (April–June 2005). Job search behaviour and job attainment were assessed 2 months later at Time 2 (June–August 2005). Consistent with the purpose of our study, we sampled individuals who were looking for temporary employment. Specifically, the Time 1 survey was sent by mail to all individuals who were registered at a large temporary employment agency in Rotterdam, The Netherlands as interested in working as a temporary worker via this agency. In addition, all individuals who newly registered as interested in working as temporary worker between April and June 2005 were given a questionnaire. Confidentiality was guaranteed by emphasizing that the study was conducted by the university and that the responses of the participants would be treated anonymously and would not be made public to the temporary employment agency.

Of the 429 questionnaires that were distributed, 138 usable questionnaires were received (response rate of 32.2%). Of the respondents in the resulting sample, 77.5% were female ($N = 107$), age ranged from 16 to 60 ($M = 29.0$, $SD = 10.1$), and level of education varied between primary school/lower vocational training (38.4%), secondary school/intermediate vocational training (42.0%), and college/university (19.6%). A total of 61 respondents (44.2%) considered themselves as belonging to one or more non-Western ethnic minority groups (23.2% Surinamese, 6.5% Antillean, 4.3% Moroccan, 1.4% Turkish, and 8.7% other). Thirty-seven participants (26.8%) indicated that they were unemployed ($M_{\text{time unemployed}} = 6.0$ months, $SD = 6.2$), 13 participants (9.4%) were students, 25 participants (18.1%) were part-time entrepreneurs, and 74 participants (53.6%) indicated that they had (part-time) temporary employment (note that respondents could tick more than one answer).

In the Time 1 survey 99 respondents (71.7%) indicated that they were willing to participate in a short telephone follow-up interview 2 months later, of which 86 participated (86.9% response rate). The respondents were interviewed using a structured questionnaire with closed format questions. Comparison of those who did, and who did not participate at Time 2 revealed no significant differences in gender, age, education, and ethnicity, $F(4, 132) = 1.04$, $p = .39$. Also individualism, collectivism, and the Time 1 TPB-variables did not differ significantly, $F(9, 128) = 0.90$, $p = .53$.

Measures

Job search attitude, subjective norm, PBC, job search intention, beliefs, individualism, collectivism, and the demographics were measured in the questionnaire at Time 1. Job search behaviour and job attainment were measured in the phone survey at Time 2. All items are listed in the Appendix. Table 1 presents the internal consistency reliabilities.

Global TPB-variables

Consistent with previous research on job seeking and the TPB (Van Hooft *et al.*, 2004b; Vinokur & Caplan, 1987), global *job search attitude* was measured by asking respondents to indicate the extent to which they regarded it wise, interesting, and useful to seek temporary employment in the next 2 months, and global *subjective norm* was measured by asking respondents to indicate the extent to which the person most important to them and most people who are important to them think they should search

Table 1. Internal consistency reliabilities, means, standard deviations, and correlations among the study variables

Variable	α	M	SD	1	2	3	4	5	6	7	8	9	10	11	12
Time 1 variables															
1. Gender ^a		0.78	0.42												
2. Age		28.95	10.15	.16											
3. Ethnicity ^b		0.44	0.50	.08	.08										
4. Education		1.81	0.74	-.16	-.13	-.21*									
5. Individualism	.57	3.18	0.53	-.05	-.05	.05	-.05								
6. Collectivism	.57	3.31	0.54	.08	.27**	.25**	-.11	.24**							
7. Job search attitude	.74	3.57	0.81	.00	-.03	.13	-.02	.01	.06						
8. Subjective norm	.81	2.86	1.05	.00	.08	.16	-.17	.10	.19*	.53**					
9. Perceived behavioural control	.76	3.80	0.59	.10	.01	.16	.03	.11	.21*	.57**	.19*				
10. Job search intention	.69	3.47	0.76	-.04	-.12	.13	.03	-.09	.11	.72**	.52**	.48**			
Time 2 variables															
11. Job search behaviour	.93	2.46	1.16	-.02	.06	.25*	-.12	-.06	.18	.21	.34**	.11	.42**		
12. General job attainment		0.55	0.50	-.11	-.29**	-.09	.00	-.07	.01	.05	.09	.06	.17	.26*	
13. Temporary job attainment		0.33	0.47	-.07	-.23**	.10	-.20	.00	.06	.20	.23*	.14	.24*	.35**	.63**

Note. N = 138 for correlations between Time 1 variables (except for correlations with gender, for which N = 137) and N = 86 for correlations with Time 2 variables. * $p < .05$; ** $p < .01$.

^a 0 = male, 1 = female.

^b 0 = native-Dutch, 1 = ethnic minority.

for temporary employment in the next 2 months. Global *PBC* was assessed with five items based on previous research (Davis, Ajzen, Saunders, & Williams, 2002; Van der Zee, Bakker, & Bakker, 2002; Van Ryn & Vinokur, 1992), combining control perceptions over both internal and external resources.

Job search intention

Ajzen (1991) described intentions as the extent to which people are willing to try hard to perform the behaviour, or the effort they are planning to exert in order to perform the behaviour. Consistent with this definition, job search intention was measured with two items asking how much time and effort people intend to invest in looking for temporary employment in the next 2 months (cf. Vinokur & Caplan, 1987), and a third item asking whether people expected that they were going to search for temporary employment in the next 2 months (based on Van der Zee *et al.*, 2002).

Job search behaviour

Fishbein and Ajzen (1975) stressed the importance of correspondence in specificity, target, situation, and time between intention and behaviour measures. We therefore assessed job search behaviour at Time 2 with three items that were similar to the Time 1 job search intention items. The participants were asked how much time and effort they had spent on looking for temporary employment in the last 2 months, and how hard they had tried to find temporary employment. Previous research (see Kanfer, Wanberg, & Kantrowitz, 2001) usually assessed job search behaviour with either a job search effort measure, including items highly similar to our items, or a job search index measure based on Blau's (1994) behavioural scale. Blau's scale presents participants with a list of specific job search activities (e.g. preparing a resume, networking, making inquiries to prospective employers, sending out application letters), asking them to indicate the amount of time they spent on each activity. Some validity evidence for our job search behaviour measure was found, as it correlated strongly with a job search index measure consisting of nine job search activities based on Blau's (1994) measure ($r = .48, p < .001$).

Job attainment

Job attainment was measured by asking the participants whether they had found a new job in the last 2 months. If so, participants were asked to indicate the status of their newfound job (i.e. permanent, fixed-term, self-employed, temporary worker, or stand-by employee). Two outcome variables were coded from these data. First, we coded general job attainment as 1 = *found a new job* and 0 = *found no new job*. Second, because of the focus of the present study on temporary job search behaviour, we coded temporary job attainment as a separate variable (1 = *found a new job as temporary worker/stand-by employee*, 0 = *did not find a new job as temporary worker/stand-by employee*).

Behavioural beliefs

In order to develop the belief-based job search attitude measure, we first conducted a literature review directed to advantages and disadvantages of temporary employment. Ellingson, Gruys, and Sackett (1998) raised flexibility, sense of freedom, and variation as

major advantages. In addition to flexibility, Polivka and Nardone (1989) noted that workers choose temporary employment to explore their interests and opportunities, or align work responsibilities with care taking. Brewster *et al.* (1997) and Marler, Barringer, and Milkovich (2002) also mentioned a better matching of career and family as an advantage of temporary employment. Marler *et al.* (2002) further noted that temporary employment may result in broader skill development. Kalleberg (2000) stated that the opportunity to acquire skills and experience is the primary motivation of temporary workers. As major disadvantages of temporary employment several authors mentioned lack of security, lack of development possibilities, and lack of loyalty (Marler *et al.*, 2002; Polivka & Nardone, 1989). In addition to this literature review, interviews were conducted with six subject matter experts (SME), that is, employees of the temporary employment agency. The SMEs were chosen because they have daily contact with a broad variety of temporary workers. Additional (dis)advantages of temporary employment that resulted from these interviews were social contacts and appreciation/status. Based on the literature review and interviews, a list of 10 behavioural outcomes was generated (i.e. sense of security, work-life balance, status, social contacts, sense of freedom, exploration of opportunities, enhancing KSAs, sense of loyalty, variety in life, and flexibility). *Behavioural belief strength* was assessed by asking the respondents to what extent they felt that having a temporary job would provide each of the 10 outcomes. *Outcome evaluation* was assessed by asking the respondents to what extent they attached importance to each of the 10 outcomes in their lives.

Normative beliefs

Normative belief strength was assessed for three referent groups: close family; partner/friends; and the community the respondent lives in. Respondents were asked to indicate to what extent they felt that each referent group thought they should look for temporary employment. *Motivation to comply* was assessed by asking the respondents to indicate to what extent they tend to comply with the opinions and norms of each referent group.

Control beliefs

In order to develop the belief-based PBC measure, six *control beliefs*, reflecting factors that may impede individuals from looking for temporary employment, were generated based on the job seeking literature (Wanberg, Kanfer, & Rotundo, 1999) and the interviews with the six employees of the temporary employment agency (i.e. care responsibilities, little job search experience, lack of transportation, health problems, lack of working experience, and language problems). Respondents were asked to indicate to what extent each factor was present in their lives (i.e. *control belief strength*). *Perceived power* was assessed by asking respondents to what extent they felt that each factor would hinder their search for temporary employment. Both the control belief strength and the perceived power items were reverse coded such that high scores reflected high levels of control.

INDCOL

In their meta-analysis, Oyserman *et al.* (2002) noticed a large heterogeneity in construct definition and scale content regarding INDCOL, which may have obscured their findings (Fiske, 2002). Nevertheless, a thorough review and content analysis of existing INDCOL

scales revealed a number of core domains covering the vast majority of INDCOL items in existing scales (see Oyserman *et al.*, 2002). IND-scales, for example, usually include items on personal independence, achievement, uniqueness, privacy, and competition. COL-scales usually include items on sense of duty to the group, relatedness to others, consulting others, harmony, sense of belonging to a group, and contextual self. Based on these core domains as identified by Oyserman *et al.*'s (2002) content analysis and the corresponding sample items they provided, we used seven items for both individualism and collectivism.

Control variables

Gender, age, ethnicity, and level of education were used as control variables because previous research reported that these demographics may relate to job search behaviour and job search outcomes (Kanfer *et al.*, 2001). Gender was coded 0 = *male* and 1 = *female*. Age was coded in years. Ethnicity was measured by asking the participants to which ethnic group(s) they considered themselves to belong. Response options included *Dutch*, *Surinamese*, *Antillean*, *Turkish*, *Moroccan*, and *Other*. Respondents could tick one or more options. Ethnicity was then coded as 0 = *Dutch majority* (i.e. respondents who indicated they considered themselves Dutch only) and 1 = *ethnic minority* (i.e. respondents who considered themselves as belonging to one or more ethnic minority groups). Based on an item asking respondents to indicate the highest education type they had completed, level of education was coded as 1 = *primary education/lower vocational training*, 2 = *secondary school/intermediate vocational training*, 3 = *college/university*.

Analyses

Despite our request on the questionnaire cover to answer all items, missing values occurred. The items in the Time 1 questionnaire had on average 1.63% responses missing, with none of the items being missed by more than 4.35% of the participants ($N = 6$). The missing data were imputed using the expectation maximization (EM) algorithm (Roth, 1994). Of the demographic variables only gender had a missing value. Because we could not use EM for this variable, analyses including gender and using Time 1 participants are missing one observation. On the Time 2 items, no missing values occurred.

To test the TPB-relationships, we conducted path analysis using LISREL 8.54 (Jöreskog & Sörbom, 1993). Sample covariances were analysed and maximum likelihood was used as method of estimation. Only the participants who completed both the Time 1 and the Time 2 measurement were included ($N = 86$). Following the recommendations by Hu and Bentler (1999) we evaluated model fit using a two-index strategy, including the standardized root mean squared residual (SRMR) and because of our small sample size the comparative fit index (CFI) with cut-off values .08 for SRMR and .95 for CFI.

Following Evans' (1991) recommendation, hierarchical regression analysis was used to examine the belief-based interactions as proposed by the TPB, and to identify the beliefs that significantly predict the corresponding global TPB-measures and job search intention. For each set of beliefs two analyses were conducted: one with the corresponding global TPB-measure as dependent variable (i.e. job search attitude, subjective norm, or PBC), and one with job search intention as dependent variable. In all analyses, the separate beliefs (e.g. the normative belief strength scores for the three referent groups and the three motivation to comply scores) were entered in Step 1 of the regression. The product terms were entered in Step 2. The increase in explained

variance between Step 1 and 2 indicates whether the multiplicative modelling of beliefs is preferred over an additive model (Evans, 1991). In order to avoid problems of multicollinearity, all belief variables were mean-centred before calculating the corresponding interaction terms (cf. Aiken & West, 1991). Because some degree of multicollinearity was still present, and because of power issues, belief items that were not statistically significant predictors of the dependent variables were systematically removed according to the procedures as described by Elliot *et al.* (2005). That is, items were removed only when neither the main effect relationships nor the interaction term was significant. In total 3 of the 10 behavioural beliefs, all three normative beliefs, and five of the six control beliefs were retained in the analyses. As these analyses pertain to Time 1 variables only, all participants were used for these analyses.

Lastly, to test the hypothesized moderating effects of individualism and collectivism on the attitude-intention and subjective norm-intention relations, we also used hierarchical regression analysis, with job search intention as the dependent variable. Again, all independent variables were mean-centred, and only Time 1 participants were used.

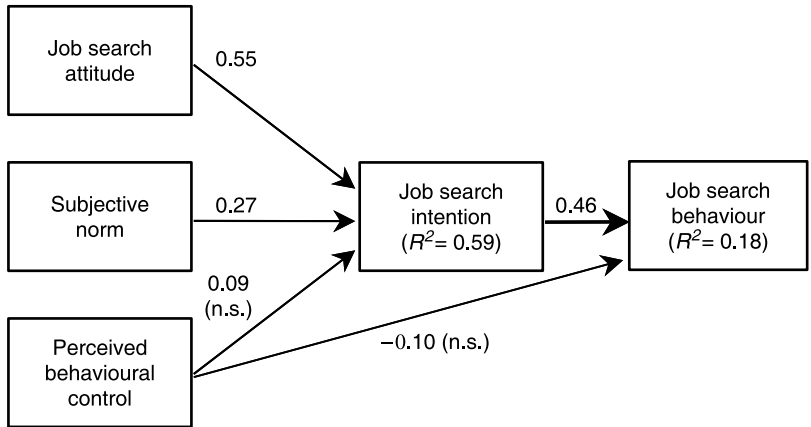
Results

Table 1 presents means, standard deviations, and correlations among the study variables. Consistent with the TPB, job search attitude, subjective norm, and PBC were positively correlated with job search intention, and job search intention was positively correlated with job search behaviour. PBC was not significantly related to job search behaviour. Consistent with the predictions, job search behaviour was positively related to job attainment. Table 1 shows a correlation of .26 ($p < .05$) with general job attainment and of .35 ($p < .001$) with temporary job attainment.

Figure 2 presents the results of the path analysis testing the TPB in the prediction of job search intention and behaviour, using the global measures of attitude, subjective norm, and PBC. Path coefficients between attitude, subjective norm, intention, and behaviour were significantly positive. Contrary to the predictions, path coefficients between PBC and both job search intention and behaviour were not significant. As none of the control variables predicted unique variance in job search intention and job search behaviour, we decided to delete them from the analysis. Total model fit was good, $\chi^2(2) = 3.55$, $p = .17$, CFI = .99, SRMR = .033, with no large modification indices. The model explained 59% of the variance in intention and 18% of the variance in behaviour. Partial mediation models with added direct paths of attitude and subjective norm with behaviour, respectively, showed no significant improvement in model fit, $\chi^2(1) = 2.38$, $p = .12$, $\chi^2_{\text{diff.}}(1) = 1.17$, $p > .10$, and $\chi^2(1) = 1.79$, $p = .18$, $\chi^2_{\text{diff.}}(1) = 1.76$, $p > .10$, respectively. Thus, in support of the TPB, intention fully mediated the relationship of attitude and subjective norm with behaviour.

Hierarchical regression analyses were conducted to test the multiplicative belief-based model underlying the TPB and to identify the beliefs that were significantly related to the corresponding global TPB-measure and job search intention.¹ The results demonstrate weak support for the multiplicative belief-based model underlying job search attitude. The addition of the interaction terms resulted only in a marginally

¹ For the sake of brevity, we only report the main conclusions from these analyses here. Full results of the hierarchical regression analyses can be obtained from the first author.



Note. $N = 86$. n.s. indicates that the path coefficient is not significant at the 5% level.

Figure 2. Standardized path coefficients for the model predicting job search behaviour.

significant improvement of the explained variance in both attitude, $\Delta R^2 = .04$, $F_{\text{change}}(3, 128) = 2.19$, $p = .09$, and intention, $\Delta R^2 = .05$, $F_{\text{change}}(3, 128) = 2.63$, $p = .05$, with only one of three individual interaction terms being significant. More support was found for the multiplicative model explaining subjective norm. Addition of the interaction terms significantly improved the proportion of explained variance in subjective norm, $\Delta R^2 = .07$, $F_{\text{change}}(3, 128) = 9.55$, $p < .001$, with all individual interaction terms being significant. In the prediction of job search intention, no support was found for the added value of the multiplicative model over the additive model, $\Delta R^2 = .01$, $F_{\text{change}}(3, 128) = 0.87$, $p = .46$. Also for PBC, no support was found for the added value of the multiplicative model of control beliefs in the prediction of global PBC, $\Delta R^2 = .05$, $F_{\text{change}}(5, 122) = 1.49$, $p = .20$, and intention, $\Delta R^2 = .05$, $F_{\text{change}}(5, 122) = 1.60$, $p = .16$.

Inspection of the individual beliefs in the regression analyses shows that beliefs regarding 'sense of security', 'status', and 'work-life balance' were related to attitudes and intentions to search for temporary employment. Furthermore, norms of close family, of one's partner/friends, and of the community were all related to global subjective norm and job search intentions. Lastly, of the control beliefs especially 'care responsibilities', 'health problems', and 'lack of working experience' were found to relate to global PBC, and 'little job search experience' and 'lack of transportation' to job search intention.

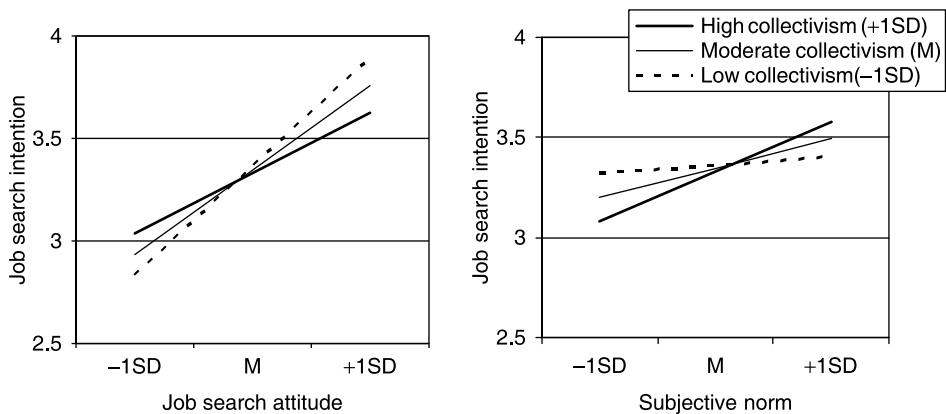
The results of the moderated regression analyses testing the moderating role of individualism and collectivism are presented in Table 2. For reasons of power, separate regression analyses were conducted for individualism and collectivism. The regressions were firstly performed with gender, age, education, and ethnicity as control variables. But because gender, education, and ethnicity were not significant, we decided to exclude them from the analyses. Contrary to our hypothesis, the interaction terms of individualism did not significantly add to the prediction of intention. The job search attitude-collectivism and the subjective norm-collectivism interactions, however, were significant with beta-weights of -0.18 and 0.17 , respectively. The form of the interaction was further analysed following procedures recommended by Aiken and West (1991). Figure 3 displays the slopes of the attitude-intention and subjective

Table 2. Moderated regression analyses of job search intention on individualism, collectivism, the TPB-variables, and their interactions

	Job search intention (β)		
		Step 2	
Predictor	Step 1	Individualism	Collectivism
Step 1: Main effects			
Age	-.15**	-.14*	-.14*
Individualism	-.16**	-.17**	-.18**
Collectivism	.08	.09	-.02
Job search attitude	.49**	.44**	.54**
Subjective norm	.25**	.21*	.19**
Perceived behavioural control	.16*	.14†	.17*
Step 2: Interaction terms			
Job search attitude \times individualism		-.08	
Subjective norm \times individualism		-.05	
Job search attitude \times collectivism			-.18*
Subjective norm \times collectivism			.17*
Multiple R	.77**	.78**	.78**
ΔR^2		.01	.02*
Adjusted R^2	.58**	.58**	.59**

Note. $N = 138$. † $p < .10$; * $p < .05$; ** $p < .01$.

norm-intention relationships at three levels of collectivism (i.e. 1 *SD* above the mean, the mean, and 1 *SD* below the mean). Consistent with our hypothesis, the attitude-intention relationship was significantly weaker at high levels of collectivism ($B = 0.36$), than at low levels of collectivism ($B = 0.65$), $t(134) = -2.37$, $p < .05$, although both simple slopes were significantly different from zero, $t(134) = 4.12$, $p < .001$, and $t(134) = 5.85$, $p < .001$, respectively. Also consistent with our hypothesis, the subjective norm-intention relationship was significantly stronger at high levels of collectivism ($B = 0.24$), than at low levels of collectivism ($B = 0.04$), $t(134) = 2.19$,

**Figure 3.** Simple regression slopes of attitude and subjective norm on intention for low ($M - 1SD$), moderate (M), and high ($M + 1SD$) levels of collectivism.

$p < .05$, with only the simple slope at high levels of collectivism being significantly different from zero, $t(134) = 4.26$, $p < .001$.

Discussion

Temporary employment has increased substantially during the last decades (Kalleberg, 2000; Theodore & Peck, 2002), however, research on temporary workers has lagged behind. The present study firstly contributes to the literature by testing the generalizability of the TPB to job search among temporary workers. An increased understanding of job search for temporary employment may help to improve recruitment practices aimed at temporary workers. Secondly, the present study contributes to the literature by examining the impact of individual differences in individualism/collectivism on the TPB-relationships. Although previous research has reported cross-cultural group differences in the attitude-intention and subjective norm-intention relations (e.g. Abrams *et al.*, 1998; Lee & Green, 1991; Van Hooft *et al.*, 2004a), none of these studies directly tested the assumption that these differences may be caused by underlying individual differences in INDCOL.

The TPB and job seeking for temporary employment

Support was found for the TPB in predicting job seeking. Job search intention was positively related to job search behaviour assessed 2 months later, and completely mediated the effects of job search attitude and subjective norm. Furthermore, global job search attitude and global subjective norm both predicted a significant portion of the variance in job search intention. These results are consistent with previous studies on job seeking and the TPB (Caska, 1998; Song *et al.*, 2006; Van Hooft *et al.*, 2004a, 2004b; Van Ryn & Vinokur, 1992; Wanberg *et al.*, 2005), and with TPB research in general (Armitage & Conner, 2001).

Less support was found for global PBC. Although PBC was positively correlated with intention ($r = .48$), it only predicted a small or non-significant portion of unique variance in intention, and was not related to behaviour. Although these results may be surprising as meta-analytic findings have demonstrated a positive, medium-sized correlation between self-efficacy (a proxy for PBC) and job search behaviour (Kanfer *et al.*, 2001), null-findings for PBC are not exceptional in job search studies (e.g. Caska, 1998; Song *et al.*, 2006; Van Hooft *et al.*, 2004a, 2004b; Wanberg *et al.*, 2005). In predicting job seeking, Fishbein and Ajzen's (1975) theory of reasoned action might therefore possibly be more applicable than its successor, the TPB.

As noted before, the TPB is held to be a complete theory of behaviour in the sense that external variables such as demographics are supposed to influence intention and behaviour only indirectly. In the present study, however, age significantly related to job search intention, also after the inclusion of the other TPB-variables. This finding indicates that in the context of job seeking the TPB-variables may not be sufficient predictors of intentions. Previous research on TPB and vocational behaviour (Arnold *et al.*, 2006; Song *et al.*, 2006; Van Hooft *et al.*, 2004b; Wanberg *et al.*, 2005) and on the TPB in general (Conner & Armitage, 1998) has also demonstrated that the TPB-variables are not always sufficient predictors of intentions. The proportions of explained variances in the present study (i.e. 59% for intention and 18% for behaviour) provide additional evidence for the possible insufficiency of the TPB. Although these proportions are comparable with other TPB-research, it seems that some room is left for additional predictors. As noted by Ajzen

(1991, 2001), a measure of past behaviour can be used to formally test the sufficiency of the TPB (e.g. Beck & Ajzen, 1991; Conner, Warren, Close, & Sparks, 1999; Norman & Conner, 2006; Verplanken, Aarts, Van Knippenberg, & Moonen, 1998). In the present study we could not formally test for sufficiency, as past job search behaviour was not measured. Although this may be a study limitation, past behaviour seems especially relevant for behaviours with some habitual or automatic component (e.g. lying and cheating, Beck & Ajzen, 1991; alcohol consumption, Conner *et al.*, 1999; Norman & Conner, 2006; or car use, Verplanken *et al.*, 1998). Job search, in contrast, is a goal-directed behaviour that is highly complex (cf. Kanfer *et al.*, 2001), making it unlikely to involve a habitual component or automatic processing. That is, people purposefully engage in job search to attain the goal of finding employment, and not because they have a habit of job seeking or have searched for employment before. Therefore, theoretically, past behaviour seems to be less important in the context of job seeking.

Job search behaviour was found to relate positively to job attainment, which corresponds to previous meta-analytic results (Kanfer *et al.*, 2001). The correlation of job search behaviour with finding *temporary* employment was a little higher than with finding employment *in general*. As our measure of job search behaviour explicitly referred to looking for temporary jobs, this result is not surprising. That is, the job search measure corresponded more closely to the outcome of temporary job attainment than to general job attainment.

Belief-based underpinnings of the TPB

In addition to relationships between global TPB-variables, the present study examined the role of behavioural, normative, and control beliefs. Partial support was found for the multiplicative belief-based model that is proposed to underlie the global TPB-variables. Incremental variances of the multiplicative belief terms were small, ranging from 1 to 7%, and were (marginally) significant in half of the regression analyses (i.e. for behavioural beliefs-attitude, behavioural beliefs-intention, and normative beliefs-subjective norm). These small effect sizes correspond with previous research using hierarchical regression analysis to explore the belief-based underpinnings of the TPB (Armitage *et al.*, 1999; Elliott *et al.*, 2005; Trafimow & Finlay, 2002). No support was found for the control beliefs. This may have been caused by our relatively small sample size, which was sufficient to detect large and moderate, but not small interaction effects (Aiken & West, 1991), or a failure to identify the most salient control beliefs.

The study of beliefs as the most basic antecedents of attitudes and subjective norms may give insight in what specific beliefs make up people's attitudes and subjective norms concerning seeking temporary employment. The results showed that people have a positive attitude and intention towards seeking temporary employment especially when they consider temporary employment as a means to provide a sense of security, secure a good work-life balance, and provide status. Additionally, beliefs related to viewing temporary employment as a means to provide a sense of freedom, enhance KSAs, and provide a sense of loyalty were also positively correlated with job search attitude and intention. Regarding normative beliefs, close family, partner/friends, and the community that participants lived in were all found to be important in forming subjective norms and intentions to engage in job seeking for temporary employment. Regarding the control beliefs, lowered global PBC was related to beliefs about having health problems, care responsibilities and lack of working experience. Lowered intentions were related to beliefs about having little job search experience and lack of transportation. Organizations

recruiting for temporary employees may benefit from these results, for example by referring to these specific behavioural, normative, and control beliefs in their recruitment advertising. Especially the beliefs related to intention should be used, as intention is the most proximal determinant of actually searching for temporary employment.

Future research should further investigate the beliefs underlying job search, for example by comparing the beliefs underlying search for temporary with search for permanent employment. Also, examining ethnic and cultural differences in beliefs underpinning the TPB-variables may be a fruitful avenue for future research.

The role of INDCOL in the TPB

The present study examined whether individual differences in INDCOL affected the strength of the TPB-relations. INDCOL was assessed with two separate scales, based on Oyserman *et al.*'s (2002) review. The scales showed a moderate *positive* correlation ($r = .23$), supporting the idea that individualism and collectivism are two separate constructs rather than opposite ends of a single continuum.

Regarding the moderating effects of INDCOL, collectivism (but not individualism) differentially moderated the attitude-intention and subjective norm-intention relation. These results illustrate Fishbein's (1980) notion that external variables (e.g. cultural value orientations) may influence the relative weights that people place on attitudinal and normative components as determinants of intention, and Ajzen's (1991) notion that the relative importance of attitude and subjective norm may vary across situations. Further, our results support Markus and Kitayama's (1991) and Triandis' (1995) characterization of collectivists as having an interdependent self-construal causing their behaviour to be guided by social norms more than by personal attitudes.

Previous laboratory research has demonstrated that priming people's collective self increases the subjective norm-intention relation and decreases the attitude-intention relation (Ybarra & Trafimow, 1998), and that whereas most people are under attitudinal control (i.e. intentions are explained by attitudes), a minority of people are under normative control (i.e. intentions are explained by subjective norms; Trafimow & Finlay, 1996). The current study extends these findings to a field setting, and demonstrates that individual differences in collectivism may help to explain why some people are under attitudinal and others under normative control. Furthermore, the number of people that are under attitudinal versus normative control supposedly varies between countries, depending on INDCOL. Future research should verify this prediction. Future research should also examine the generalizability of our findings to other countries, other behaviours, and other theoretical frameworks. Some evidence for the generalizability of the moderating effects of INDCOL is provided by Wasti (2003), who found that normative commitment was a stronger (negative) predictor of turnover intentions among Turkish employees low on individualism than among those high on individualism.

Limitations and conclusion

In addition to the omission of past behaviour, other limitations of the present study include the sample type and size, the use of self-report data, and the assessment of INDCOL. Firstly, regarding sample type and size, only job seekers registered with a specific temporary employment agency were sampled. Furthermore, unlike previous job search studies we did not specifically focus on employed job seekers or unemployed job seekers or new entrants at the labour market. Our sample was fairly heterogeneous, including individuals from all of these groups. On the one hand this may limit the

comparability to previous job search studies. On the other hand, our study extends the literature by showing that results found in previous studies can be generalized to a variety of job seekers looking for temporary employment. Furthermore, the rather low response rate and resulting small sample size might limit the generalizability. It should be noted that our sample included a large proportion of less educated individuals and low response rates are not uncommon in such samples (e.g. Schmit, Amel, & Ryan, 1993; Van Hooft *et al.*, 2004b). Although we were not able to compare the Time 1-respondents with the non-respondents, comparison of Time 2-respondents with respondents who participated in the Time 1 measurement only did not reveal any significant differences regarding our study variables. Nevertheless, because of these sampling issues, some caution is warranted in generalizing our findings.

Secondly, all measures were obtained by self-report, which may cause strategic or socially desirable responding and common method variance. In designing our study, however, we made an effort to minimize strategic or socially desirable responding by emphasizing that the study was conducted by the university, and by guaranteeing the confidentiality of the participants' responses. The use of a two-wave longitudinal design, with different data collection methods at Time 1 and Time 2 may attenuate the concern of common method variance. Nonetheless, future research on job seeking should make an effort to include other than self-reports to assess job search behaviour and its predictors.

Thirdly, we examined the impact on the TPB-relationships of only INDCOL, thereby omitting several other cultural dimensions. Future research should investigate whether individual differences on other cultural dimensions such as power distance, masculinity, future orientation, or uncertainty avoidance may influence the TPB-relationships. Furthermore, our INDCOL-scales showed relatively low internal consistency. It should be mentioned, however, that our measures were highly content valid as the items were based on a comprehensive review of all existing INDCOL-scales (Oyserman *et al.*, 2002), using one item for each major domain. Future research should use more items per domain to come to a more reliable measurement.

In the present study individual differences in INDCOL were assessed within a single country, The Netherlands. Although variations on cultural differences dimensions do occur both within and between nations (Oyserman *et al.*, 2002), and our sample included individuals with a variety of ethnic identities, studying only one country may have reduced the variance on the INDCOL-measures. Future research should therefore examine the influence of INDCOL on the TPB-relationships in other, for example more collectivistic, cultures.

More fundamentally, several authors have raised conceptual concerns regarding the measurement of culture using self-report attitudinal questionnaires. First, it has been questioned whether culture can be assessed using self-report measures, because this assumes that culture is a form of declarative knowledge rather than something tacit and implicit (Kitayama, 2002; Oyserman *et al.*, 2002). As Kitayama noted, people may not be able to notice, categorize, and evaluate specific distinct behaviours of their culture because they themselves and their referent others are part of the culture. Second, lack of conceptual and measurement equivalence might obscure cross-cultural comparisons (Kitayama, 2002; Oyserman *et al.*, 2002). Third, Fiske (2002) postulates that individual-level rating scales for INDCOL measure individual rather than cultural differences. In response to these criticisms, it should be noted that our results demonstrate that *individual differences* in INDCOL (sometimes specifically referred to as *idiocentrism-allocentrism*; Triandis, Leung, Villareal, & Clack, 1985) impact the TPB-relationships. Future cross-cultural research is needed to verify whether these patterns

generalize to *cultural differences* in INDCOL. Furthermore, consistent with what could be expected based on previous cross-cultural research, our findings (see Table 1) showed that on average ethnic minority respondents had higher scores on collectivism than native-Dutch respondents. This corroborates the validity of our collectivism measure, and may suggest that, in contrast to Kitayama's criticisms, our respondents were aware of distinct behavioural patterns as related to their culture. This is not at all unlikely, as The Netherlands is characterized by cultural diversity (19% of the population has a non-Dutch cultural background; Statistics Netherlands, 2004), and cultural differences have attracted much attention in politics, the media, and everyday life. Nevertheless, several alternatives to direct assessment of INDCOL have been suggested (Fiske, 2002; Oyserman *et al.*, 2002), such as priming INDCOL-values or independent-interdependent self-definitions, and qualitative data collection techniques (e.g. participant observation, depth interviewing). Although each of these techniques has its own limitations (see Fiske, 2002; Kitayama, 2002; Oyserman *et al.*, 2002), future research should further examine the role of INDCOL in the TPB using different conceptual and measurement approaches towards INDCOL.

In conclusion, the present study demonstrates that Ajzen's (1991) TPB including belief-based measures is useful to predict people's intentions and behaviour to search for temporary employment. Furthermore, the TPB is shown to work somewhat differently depending on collectivism. These findings may have important implications for recruitment and counselling. Temporary employment agencies, for example, could emphasize the possibilities to gain a better work-life balance in their recruitment advertising for temporary workers. Employment counsellors should especially focus their guidance strategies on raising those beliefs that are strongly related to intention, as the most proximal determinant of actually searching for temporary employment. Furthermore, one standard guidance strategy (e.g. based on personal attitudes and values) might not be optimally suited for everyone. Therefore, employment counsellors could adapt their guidance strategies to the cultural value orientations of their client job seekers. Low collectivistic job seekers would benefit from a strong focus on personal beliefs and attitudes, whereas highly collectivistic job seekers would benefit from a counselling style that incorporates normative pressure.

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Appendix

Below an overview of the survey scales and corresponding items. Unless stated otherwise, response options were 1 = *strongly disagree*, 2 = *disagree*, 3 = *agree*, 4 = *neither disagree*, 5 = *strongly agree*. Please note that the original items and response options were in Dutch.

Individualism

- (1) I tend to do my own thing, and others in my family do the same.
- (2) It is important to me that I perform better than others on a task.
- (3) I am unique, different from others in many respects.
- (4) I like my privacy.
- (5) I would rather work alone than do a group task.
- (6) I like to live my life independent of others.
- (7) If I have a difficult personal problem, I rather decide by myself than consult with others.

Collectivism

- (1) To me, pleasure is spending time with others.
- (2) I make an effort to avoid disagreements with my group members.
- (3) How I behave depends on who I am with, where I am, or both.
- (4) I would help, within my means, if a relative were in financial difficulty.
- (5) I would rather do a task in a group than do one alone.
- (6) Before making a decision, I always consult with others.
- (7) To understand who I am, you must see me with members of my group.

Global job search attitude

- (1) It is wise for me to search for temporary employment in the next 2 months.
- (2) It is useful for me to search for temporary employment in the next 2 months.
- (3) I think it is interesting to search for temporary employment in the next 2 months.

Global subjective norm

- (1) The person most important to me thinks that I should search for temporary employment in the next 2 months.
- (2) Most people who are important to them think that I should search for temporary employment in the next 2 months.

Global perceived behavioural control

- (1) Overall I feel confident in being able to search for temporary employment.
- (2) I can overcome any obstacles or problems that could prevent me from searching for temporary employment.
- (3) My job search for temporary employment is within my personal control.
- (4) I think searching for temporary employment is easy.
- (5) I think that I possess the abilities that are needed to be able to find temporary employment.

Job search intention

- (1) How much time do you intend to spend on searching for temporary employment in the next 2 months? (Response options: 1 = *no time at all*, 2 = *a little time*, 3 = *a fair amount of time*, 4 = *much time*, 5 = *very much time*).
- (2) I really intend to make an effort to search for temporary employment in the next 2 months.
- (3) I expect that I am going to search for temporary employment in the next 2 months.

Job search behaviour

- (1) How hard did you try to find temporary employment in the previous 2 months? (Response options: 1 = *not at all*, 2 = *a little bit*, 3 = *fairly hard*, 4 = *hard*, 5 = *very hard*).
- (2) How much effort did you spend on searching for temporary employment in the previous 2 months? (Response options: 1 = *no effort*, 2 = *a little effort*, 3 = *a fair amount of effort*, 4 = *much effort*, 5 = *very much effort*).
- (3) How much time did you spend on searching for temporary employment in the previous 2 months? (Response options: 1 = *no time at all*, 2 = *a little time*, 3 = *some time*, 4 = *much time*, 5 = *very much time*).