

The role of salient beliefs in graduates' intention to apply

Authors:

Samantha Adams¹
François de Kock²

Affiliations:

¹Department of Industrial Psychology, Stellenbosch University, South Africa

²School of Commerce, Faculty of Management Studies, University of Cape Town, South Africa

Correspondence to:

Samantha Adams

Email:

adamss@sun.ac.za

Postal address:

Private Bag X1, Matieland 7602, South Africa

Dates:

Received: 04 Apr. 2014

Accepted: 09 Feb. 2015

Published: 02 July 2015

How to cite this article:

Adams, S., & De Kock, F.S. (2015). The role of salient beliefs in graduates' intention to apply. *SA Journal of Industrial Psychology/SA Tydskrif vir Bedryfsielkunde*, 41(1), Art. #1223, 11 pages. <http://dx.doi.org/10.4102/sajip.v41i1.1223>

Copyright:

© 2015. The Authors.
Licensee: AOSIS OpenJournals. This work is licensed under the Creative Commons Attribution License.

Read online:



Scan this QR code with your smart phone or mobile device to read online.

Orientation: Organisations compete fiercely to recruit the best graduates, because they consider them a rich source of future talent. In the recruitment literature, it has become increasingly important to understand the factors that influence graduate applicant intentions.

Research purpose: Drawing on the theory of planned behaviour (TPB), we tested a model proposing that applicant intention is a function of their attitude towards applying, beliefs about referent other's expectations (subjective norms) and perceived behavioural control with respect to this behaviour.

Motivation for the study: The study was motivated by the need to shed light on graduate applicants' decisions to apply to an organisation of their choice.

Research approach, design and method: The study used a quantitative design to test hypotheses that attitudes towards behaviour, norms and control beliefs would influence intention to apply. We surveyed prospective job seekers ($N = 854$) studying at a South African university about their beliefs regarding the job application process.

Main findings: Structural equation modelling showed reasonable fit of the proposed model to the survey data. Latent variable analysis demonstrated that perceived behavioural control and subjective norm explained intention to apply. With the combination of all three variables, only attitude towards applying did not play a significant role in the prediction of intention to apply, which is contrary to previous research.

Practical/managerial implications: The findings highlight the role of salient control beliefs in the application process. Efforts by universities and organisations to affect intentions to apply may potentially benefit from focusing on support services that could enhance feelings of control and minimise perceived obstacles. Recruiters could focus on control to increase potential recruitment pools.

Contribution/value-add: The study contributes to the recruitment literature in three ways. Firstly, TPB is shown to be a useful framework to explain graduate applicants' intention to apply, as this theoretical model found empirical support. In doing so, the present study advances our understanding of how graduates' intentions to apply are formed. Secondly, the results showed that applicants' control and normative beliefs dominate when considering applying. Lastly, the study results open up interesting avenues for future research on applicant intentions.

Introduction

Key focus of the study

Graduate talent is an increasingly sought-after commodity in the war for talent. As a result, investment in and development of graduates is punted as a strategic imperative. The rise in the popularity of graduate recruitment programmes is testament to the value of tapping into this target group (CEB, 2013). In order to ensure the success of this investment an understanding of the needs, preferences and decision-making processes of these potential job applicants is required (Konrad, Ritchie, Lieb & Corrigan, 2000; Terjesen, Vinnicombe & Freeman, 2007).

Background to the study

In the recruitment literature there is greater awareness of the need to adopt an applicant perspective to enhance graduate recruitment efforts (Terjesen *et al.*, 2007; Tomlinson, 2007). For example, prior research (Chapman, Uggerslev, Carroll, Piasentin & Jones, 2005; Collins & Stevens, 2002; Uggerslev, Fassina & Kraichy, 2012) has highlighted various predictors of applicant attraction to organisations, including organisational attractiveness (Highhouse, Lievens & Sinar, 2003) and word-of-mouth communication (Van Hove & Lievens, 2007). However, the focus of

these studies remains on characteristics of the organisation or external environment, rather than on understanding applicant variables. Indeed, given the importance of applicant variables, 'it is surprising that they have not played a central role in most recruitment studies' (Breugh, 2013, p. 395).

Trends from the research literature

Applicant intention to apply is defined as the:

person's desire to submit an application, attend a site visit or second interview, or otherwise indicate a willingness to enter or stay in the applicant pool without committing to a job choice. (Chapman *et al.*, 2005, p. 929)

A few recent studies have explored the factors that shape graduate applicants' intention to apply. For example, perceived job and organisational characteristics (Gomes & Neves, 2011) and recruitment information sources (Jaidi, Van Hooft & Arends, 2011) have been found to support the formation of intentions toward applying or job pursuit. Whilst these studies have shed light on how applicants' intentions to apply are formed, they have addressed the role of the theory of planned behaviour (TPB) variables cursorily (Jaidi *et al.*, 2011; Van Hooft, Born, Taris & Van der Flier, 2004, 2005), or within non-graduate applicant populations such as health workers (Arnold *et al.*, 2006) or military applicants (Schreurs, Druart, Proost & De Witte, 2009). As such, we do not yet understand how behavioural beliefs, normative beliefs and control beliefs about applying would affect the intentions of graduates specifically.

Objectives of the study

Drawing on the TPB (Ajzen, 1991), the present study will take an in-depth look at the role of graduate applicant's attitudes towards the behaviour, subjective norm and behavioural control beliefs on the formation of their intentions to apply to an organisation. To this end, we surveyed prospective graduate applicants (final-year university students) and tested a theoretical model of applicant intentions using structural equation modelling (SEM).

The potential value-add of the study

Our study contributes to existing literature in two ways. Firstly, as compared to earlier studies, we delve deeper into how applicant beliefs explain intentions to apply in combination. Secondly, our results extend the literature to the graduate applicant population specifically.

Literature review

The attraction of high-potential graduates is the central focus in the war for talent. Graduates are believed to possess 'drive, enthusiasm and fresh ideas' as well as having a proven return on investment, higher flexibility, eagerness to learn, new ideas and solutions and good business skills (as compared to non-graduates) (Graduates for Growth, 2012). The selection of high-potential graduates can consequently

contribute to the improvement of an organisation's performance and promotion of its brand (CEB, 2013). Furthermore, organisations can make themselves stand out from the competition by seeking new ways to attract potential applicants (Highhouse & Lievens, 2003). The key to effectively accessing and sourcing high-potential graduates may lie in the knowledge of how their intentions to apply are formed.

Measures of intention to perform a particular behaviour (e.g. applying for a position or accepting an appointment to an organisation) are often employed as alternatives to direct behavioural measures. Moreover, when behavioural intentions are correctly measured, they can explain a significant proportion of variance in actual behaviour (Sheeran, Trafimow, Finlay & Norman, 2002). The predictive validity of behavioural intentions has also been convincingly demonstrated (Armitage & Conner, 2001). Therefore, if we know how applicants process recruitment information and how it may affect aspects of their decision-making, it may be possible to improve recruitment strategies, tools and methods.

A theory of planned behaviour perspective on intention to apply

An investigation of graduates' intentions may best be examined through the lens of TPB. From the TPB perspective, behavioural intentions are viewed as the direct antecedents to behaviour, influenced by the presence of salient beliefs or information about the probability that performing a particular behaviour will lead to a specific outcome (Ajzen & Fishbein, 1980). The TPB rests on two assumptions: (1) human beings are rational and make systematic use of information available to them and (2) people consider the repercussions of their actions before they decide whether to engage in certain behaviours. Moreover, the theory proposes that beliefs about performing a particular behaviour generate a favourable or unfavourable *attitude towards the behaviour*, normative beliefs result in perceived social pressure or *subjective norm* and control beliefs give rise to *perceived behavioural control* (Ajzen, 1991). The combination of attitude toward the behaviour, subjective norm, and perception of behavioural control will result in the development of a behavioural intention that may lead to the enactment of a particular behaviour.

TPB studies that have focused on the investigation of graduate students remain limited. One study, by Jaidi *et al.* (2011), investigated the effects of different recruitment-related information sources on intentions and actual job pursuit behaviour in a sample of master's graduates. Their study highlighted the role of information sources in the job pursuit process. Another study, by Gomes and Neves (2011), examined the process that leads potential applicants to apply for a position when one is under consideration. They used a mixed sample of marketing professionals and undergraduates and found that organisational attractiveness mediated the relationship between job characteristics and organisational attributes on the one hand and intention to

apply for a job vacancy on the other. In sum, these studies shed light on the experience of potential job seekers. What they do not reveal is how relatively inexperienced job seekers such as graduating or graduate applicants form intentions to apply.

The TPB provides a multifaceted framework for the description of the behaviour of interest, that is, the engagement in and completion of the application procedure. With this in mind, the application of the TPB is discussed in order to explore the variables associated with intention to apply.

Attitude towards behaviour

Attitude is the first antecedent of behavioural intention. Simplistically stated, it is the aggregate of an individual's positive or negative beliefs about the consequence of performing a specific behaviour (Ajzen & Fishbein, 1980). An attitude towards the behaviour is acquired through an automatic and simultaneous internal association and evaluation process (Ajzen, 1991). Moreover, if an individual evaluates the outcomes of a particular behaviour positively, the likelihood of intending to perform that behaviour will be higher. Therefore, the subjective value placed on the outcomes contributes to the attitude and is thus directly proportional to the strength of the beliefs held by the individual (Ajzen, 1991). Attractive organisational offerings are reflected in an individual's affective and attitudinal thoughts about particular companies as potential places for employment (Highhouse *et al.*, 2003). Attitude towards applying would therefore include the evaluation of the attractiveness of applying to a chosen organisation based on the beliefs formed from the subjective evaluation of the organisation of interest.

Previous studies argue that, even though an individual may feel attracted to an employer, they may not want to apply for a job or desire employment there (Van Hooft, Born & Taxis, 2006). An individual can also be attracted to many companies' offerings at the same time (Highhouse *et al.*, 2003). Actions associated with an attraction towards an employer may include recommending it to friends, paying particular attention to its advertisements and campaigns and attempting to gain employment there. However, only attitudes associated with trying to gain employment are likely to predict behaviour, such as filing job applications and ultimately accepting employment (Van Hooft, Born & Taxis, 2006). For this reason, the immediate antecedent of any behaviour is the intention to perform. The stronger the intention is, the more likely an individual is to attempt it, thus increasing the likelihood that the behaviour will be performed (Ajzen & Madden, 1986). In other words, if an applicant holds positive beliefs about applying for a particular job offering, they are more likely to engage in the application process. In sum, we posit:

Hypothesis 1: Attitude towards applying will have a significant positive effect on the prospective applicant's intention to apply.

Subjective norm

Subjective norm is the function of one's normative beliefs that specific individuals approve or disapprove of performing a particular behaviour. An individual will intend to perform a particular behaviour when they perceive that important others think they should. The degree to which important others approve or disapprove of performing a given behaviour also influences intention. Important others might be a person's parents, close friends, lecturers, and so on. Normative beliefs are thereby influenced by beliefs about the expectations of relevant others and the extent to which the individual is motivated to conform to these expectations (Ajzen, 1991).

Normative beliefs are further reliant on interpersonal influences (e.g. word-of-mouth information from family, friends and colleagues or peers for an individual to perform the behaviour) and external influence (e.g. mass media reports, government promotion and other non-personal information affecting whether the individual performs the behaviour) (Bhattacharjee as cited in Lin, 2010). The social pressure exerted on an individual thus influences their normative beliefs. Normative sources may serve as social influences that provide information about various aspects of the organisation of interest (Turban & Greening, 1997). In one study, positive word-of-mouth was associated with positive organisational attractiveness and word-of-mouth had a significant impact on participants' perception of organisational attractiveness ($b = -0.68$; $p < 0.01$; $R^2 = 0.47$) (Van Hooft & Lievens, 2007). Similarly, in an empirical examination of factors affecting job seeker intentions to use job-search websites, using an extended TPB model, persuasion by significant others was found to influence job seeker intentions to conduct online job applications (Lin, 2010).

These studies suggest that when graduates believe that their close family and friends would think it is the right thing to do, they would be more likely to apply. On the other hand, when they believe it is not important to those close to them, they would be less likely to apply. Based on the theoretical arguments and empirical literature, we propose the following:

Hypothesis 2: Subjective norm will have a significant positive effect on the prospective applicant's intention to apply.

Perceived behavioural control

Perceived behavioural control is associated with the volitional control an individual possesses when enacting behaviour. Perceived behavioural control refers to the degree to which an individual feels that the decision to perform or not perform behaviour is under their volitional control (Ajzen, 1991). Control factors encompass both internal and external factors. Internal factors include skills, abilities, information, emotions such as stress and other characteristics. External factors are associated with situational or environmental factors. Volitional control comprises both internal and external control factors that interact to affect one's perception of perceived behavioural control.

The level of perceived behaviour control an applicant experiences is based on the beliefs held about their own ability and suitability for the position that is applied for, as well as the possibility of being selected for consideration. Outcome expectations and efficacy expectations are both strong contributors to these harboured control beliefs (Liebert & Spiegler, 1994). Efficacy expectations are an individual's personal forecast of the level of success they will achieve should they choose to perform a particular behaviour. On the other hand, outcome expectations are the individual's belief that participation in a task will result in a specific outcome.

A measure of perceived behavioural control would assess the extent to which respondents believe they have the ability to perform the behaviour and how much the behaviour is under their control (Ajzen, 2002). As such, individuals are not likely to form a strong intention to perform behaviour if they believe they do not possess sufficient resources or opportunities to do so, even if they hold positive attitudes towards the behaviour and believe that important others would approve of the behaviour (i.e. subjective norm) (Ajzen, 1991).

Perceived behavioural control can influence behaviour directly or indirectly through behavioural intentions. A direct path from perceived behavioural control to behaviour emerges when there is some agreement between perceptions of control and the person's actual control over the behaviour (Lin, 2010; Saks & Ashforth, 1997). An increase in the individual's intention indirectly affects behaviour, resulting in an increase in effort and perseverance towards the behaviour (Ajzen, 2002). For example, intention to use job-search websites can depend on respondents' perceived behavioural control (Lin, 2010). When job seekers perceive that it is easier to get job information and display more self-efficacy associated with adoption, they feel more control, which makes them more confident in using job-search websites. Similarly, perceived alternatives, perceptions of hiring expectancies and perceptions about one's performance during an application process can influence recruitment-related outcomes (e.g. attraction, intentions to apply) (Chapman *et al.*, 2005). Furthermore, the realistic evaluation of a behaviour's difficulty will also directly influence whether or not the individual will engage in the behaviour (Ajzen, 1991). For these reasons, we postulate that perceived behavioural control is an immediate antecedent of intention to apply. Therefore:

Hypothesis 3: Perceived behavioural control will have a significant positive effect on the prospective applicant's intention to apply.

Proposed model of intention to apply

The theory of planned behaviour suggests that the act of applying may depend on applicant intentions. A prospective applicant's submission of an application to an organisation precedes the formation of an intention. Intention to apply is, in turn, predicted by (1) attitude towards applying, (2) subjective norm and (3) perceived behavioural control.

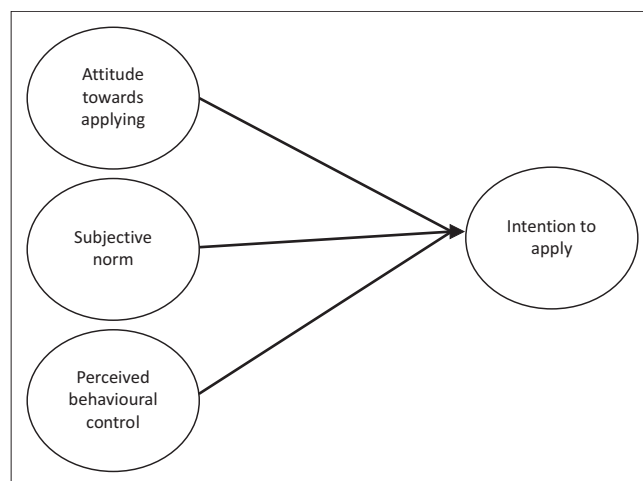


FIGURE 1: Proposed model of graduate intention to apply.

The TPB has been successfully employed in many studies to predict different types of behaviours including the prediction of job pursuit intentions (Jaidi *et al.*, 2011; Schreurs *et al.*, 2009; Van Hooft, Born, Taris & Van der Flier, 2006). For this reason, we also expect each of the TPB variables to predict applicant intentions. By implication, we also propose a model that examines the formation of graduate applicants' intention to apply (see Figure 1). Therefore, the present study will examine the following hypothesis:

Hypothesis 4: The structural model that posits that (1) attitude towards applying, (2) subjective norm and (3) perceived behavioural control will, in combination, predict intention to apply and will show satisfactory fit.

Research design

Research approach

The study used a quantitative approach to gather data for analysis. A retrospective correlational design was employed to gather empirical evidence for testing the hypotheses.

Research method

Research participants

The study was conducted at a South African university situated in the Western Cape. A convenience sample of 854 participants who were anticipating entering the job market soon was invited to complete the online survey questionnaire. We contacted senior students (i.e. final-year, honours, master's and PhD students, drawn from nine faculties) via email following an on-campus career fair, a time when most would be seeking and considering employment. The majority of respondents were final-year (third or fourth year) students (47%) from the faculty of Economic Management Sciences (30%), Engineering (17%), Arts and Social Science (17%) and Science (16%). Sixty percent had started searching for employment and 50% had applied for a position as part of their current job-search. The sample contained relatively inexperienced job seekers, as only 22% were previously employed. Just more than half (56%) of the respondents were women. The ethnic breakdown included 80% white,

10% mixed-race, 9% African and 1% Asian respondents. The average age of the prospective job seekers was 24 years ($SD = 4.93$ years).

Measuring instrument

TPB scale construction: To measure the TPB variables, namely attitude towards behaviour, subjective norm, perceived behavioural control and intention, we constructed a questionnaire according to Ajzen's (2002) guidelines. We conducted a small pilot study ($n = 32$)¹ to identify the accessible outcomes related to applying, referent groups and possible control beliefs that were used in the construction of the items. We then formulated belief-based items to evaluate participants' salient beliefs about applying for a job (Ajzen, 2002). An expert with extensive experience in the development and use of TPB measures reviewed the final items for content validity. We followed an empirical keying approach for the selection of items to be included in the final questionnaire. The final measure comprised of four scales, namely those measuring attitudes, subjective norms, control beliefs and intentions (see Appendix A for example items).

Beliefs: *Attitude towards applying:* Items for attitude towards applying elicited belief strengths and outcome evaluations associated with applying for a job (Hankins, French & Horne, 2000). Ten items, with two questions each, measured the accessible outcomes identified in the pilot study. Firstly, respondents had to select the likelihood of the outcome on a scale of 1 (*extremely unlikely*) to 7 (*extremely likely*). Following which they were then asked to rate the importance of the outcome on a seven-point (*not very important – very important*) scale. The internal consistency reliability (Cronbach's alpha) for the current scale was 0.83.

Subjective norm: Subjective norm items elicited normative belief strengths regarding referent others and the respondent's motivation to comply (Hankins *et al.*, 2000). Five referent groups were identified and two items assessed each referent group. Firstly, the degree to which the respondent believed the referent group expected them to apply was indicated on a seven-point Likert scale ranging from 1 (*extremely unlikely*) to 7 (*extremely likely*). This was followed by an item measuring motivation to comply with the referent on a scale from 1 (*not at all*) to 7 (*very much*). The internal consistency reliability (Cronbach's alpha) for the current scale was 0.87.

Perceived behavioural control: The perceived behavioural control scale consisted of 14 items, each assessed by two questions. Perceived behaviour control items elicited the strength and power (e.g. degree of difficulty) of different control beliefs that may facilitate or impede the respondent's decision to apply for a job (Hankins *et al.*, 2000). The strength

of possible control factors were indicated on a seven-point Likert scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). Next, the influence of the control factor on the respondent's decision to apply was indicated on a scale from 1 (*it will make it more difficult*) to 7 (*it will make it much easier*). The internal consistency reliability (Cronbach's alpha) for the current scale was 0.84.

Direct measures: *Intention to apply:* was assessed by four items that we adapted from an earlier instrument (Jaidi *et al.*, 2011). A seven-point Likert scale, with response options ranging from 1 (*strongly disagree*) to 7 (*strongly agree*), indicated to what extent the respondents intended to apply. The Jaidi *et al.* (2011) scale showed good internal consistency reliability ($\alpha = 0.87$). The internal consistency reliability of the current scale (Cronbach's alpha) was 0.87.

Demographic variables: The final questionnaire also included measures of demographic characteristics (e.g. race, gender and age).

Scoring the TPB measure: According to Ajzen's (2002) guidelines, indirect belief-based measures required the computation of a product term. The product of the belief strength and outcome evaluation items for each of the beliefs was calculated. Preliminary analysis of the data was conducted and a total score for each subscale (except intention to apply) was calculated by multiplying the two responses requested for each item (using the SPSS compute variable procedure).

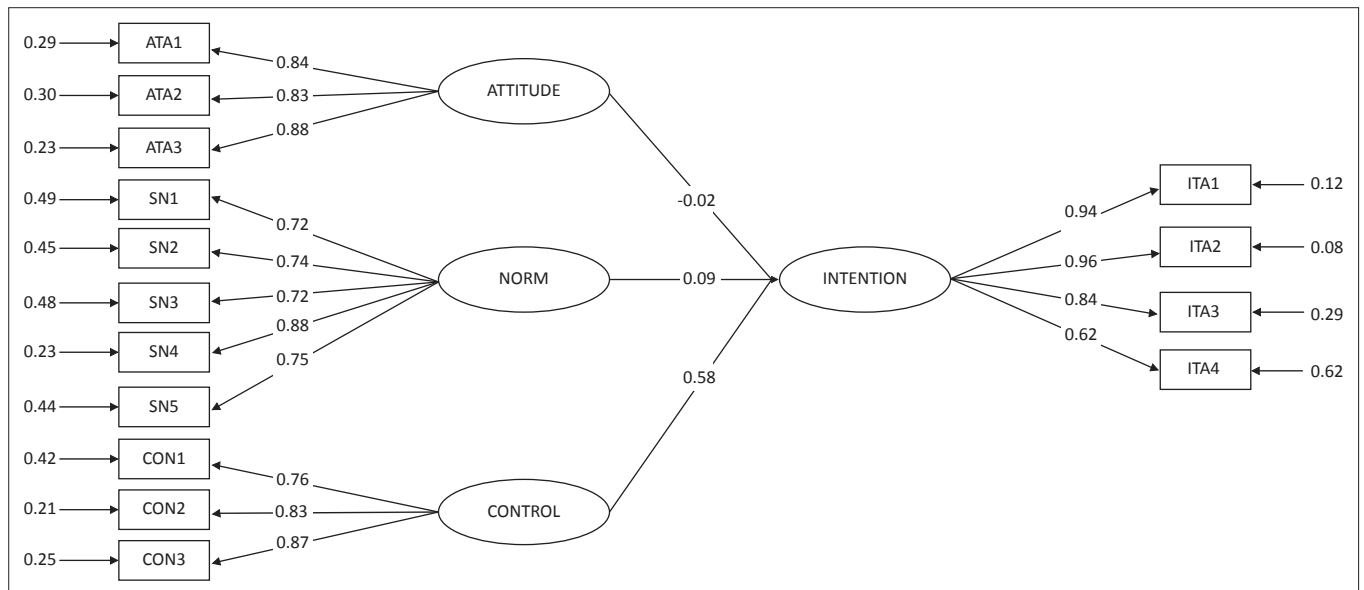
Research procedure and ethics

Participants were invited via email to complete an online survey. The aim and nature of the study and pertinent ethical considerations were communicated, including the right to informed consent, privacy and confidentiality. The participants were not required to provide their names or any other form of identification. Although they could opt out of the study at any time, the electronic survey required a response on every item in order to ensure complete responses. The data file was password-protected on the e-survey platform and only accessible to the primary researcher.

Statistical analysis

In order to assess the measurement properties of the scales, we used SPSS version 20 to conduct item analysis and dimensionality analysis. The internal factor structure of the measure was evaluated with confirmatory factor analysis (CFA) using LISREL 8.80 (Du Toit & Du Toit, 2001). To this end, item parcels were created for the Attitude, Control and Intention scales. The subjective norm scale consisted of five items and was thus not parcelled. Finally, structural equation modelling (SEM) was employed to assess the fit of the proposed structural model (see Figure 2). The proposed model hypothesised that (1) attitude towards applying, (2) subjective norm and (3) perceived behavioural control would positively predict intention to apply.

1. The pilot study was qualitative in nature with a sample of 32 students drawn from two universities (one historically black and the other historically white). A thematic content analysis of the interview data was conducted to identify participants' salient beliefs towards applying for a job. The majority of the sample was female (68.8%) with an average age of 23. The demographic breakdown of the total qualitative sample was 21 mixed-race students, nine white and two black.



ATA, attitude towards applying item parcel; ATTITUDE, attitude towards applying; NORM, subjective norm; SN, subjective norm item; CON, perceived behavioural control item parcel; CONTROL, perceived behavioural control.

FIGURE 2: The standardised factor loadings of the intention to apply structural model.

Results

Preliminary analysis

Item analysis

Item analysis was performed on the item responses using the SPSS Reliability procedure. The results showed high ($0.82 < \alpha < 0.93$) coefficient alpha values for all the scales (see Table 1). The unidimensionality of each subscale was also evaluated by performing unrestricted principal axis factoring (PAF) factor analysis with oblique rotation. The Kaiser criterion (i.e. eigenvalue-greater-than-unity rule of thumb) served to identify the number of factors to extract (Tabachnick & Fidell, 2007). The items loaded satisfactorily ($\lambda > 0.40$) on single dimensions within their respective subscales, serving as support for unidimensionality of measures (Hair, Black, Babin, Anderson & Tatham, 2006).

Measurement validity

Next, CFA was conducted on the combined measurement model, showing good fit: Sattora Bentler $\chi^2 = 49.36$ ($p < 0.01$), RMSEA = 0.07 [90% CI: [0.06; 0.07], goodness-of-fit index (GFI) = 0.94, normed fit index (NFI) = 0.97, comparative fit index (CFI) = 0.98. All parameter estimates were within acceptable range (Tabachnick & Fidell, 2007). In addition, t values for all variables were significant and the standardised factor loadings ranged from 0.72 to 0.96 and were deemed satisfactory.

Multivariate assumptions

Next, we tested the assumptions of multivariate analysis using SPSS version 20. The assumptions diagnostics resulted in 31 cases (3.63% of total cases) being deleted, comprising 13 cases with missing data and 18 significant univariate or multivariate outliers ($p < 0.001$) (Field, 2005; Tabachnick & Fidell, 2007). We conducted the final analysis on a sample of 823 cases.

Descriptive statistics

The descriptive statistics are presented in Table 1 and latent variable intercorrelations of the study variables are presented in Table 2 and Table 3.

Tests of hypotheses²

Hypothesis 1 proposed that attitude towards applying would have a significant positive effect on applicant intention to apply. The path coefficient was not statistically significant: $\gamma = -0.03$, $t = -0.53$, $p = 0.60$ (see Table 2). Therefore, Hypothesis 1 was not supported. Attitude towards applying was not a significant contributor to applicants' intention to apply, when including the effects of the other independent variables, subjective norm and control beliefs, on intentions. Stated otherwise, applicants who had positive attitudes about applying were not more likely to apply than applicants who had negative attitudes about applying.

Hypothesis 2 proposed that applicants' subjective norm beliefs would have a significant positive effect on their intention to apply. The path coefficient was significant: $\gamma = 0.09$, $t = 2.67$, $p = 0.009$. Subjective norm contributed significantly and positively to applicants' intention to apply, when including the effects of subjective norm and control beliefs on intentions. Therefore, applicants who valued normative influences were more likely to apply to a particular organisation than applicants who did not perceive normative influences.

Hypothesis 3 proposed that perceived behavioural control would have a significant positive effect on the prospective

²Structural model path coefficients were used to test the hypotheses and not bivariate correlations, as the former is presently the dominant practice (Farrell, 2010). The path coefficients are essentially unstandardised regression coefficients and reflect the unique effects of the independent variable on the dependent variable, that is, discounting the effect of the other independent variables (IVs). As such, it is a much stricter test of the hypotheses as the focus falls on unique effects of the IVs.

TABLE 1: Analysis of univariate descriptives for all variables ($N = 823$).

Variable	Number of items	α	M	SD	Skewness		Kurtosis	
					Statistic	SE	Statistic	SE
Intention to apply	4	0.87	5.9	1.1	-0.980	0.085	0.403	0.169
Attitude towards applying	10	0.83	36.1	6.3	-0.352	0.085	-0.090	0.169
Subjective norm	5	0.87	22.1	9.9	0.296	0.085	-0.284	0.169
Perceived behavioural control	14	0.84	33.3	7.3	-0.149	0.085	-0.279	0.169

α , alpha; M, mean; SD, standard deviation; SE, standard error.

Note: Descriptive statistics represent unweighted linear composite total values calculated for each of the variable subscales.

TABLE 2: Latent variable path coefficients between intention to apply and the three TPB variables (unstandardised gamma matrix) ($N = 823$).

Factor	γ	SE	t^{\dagger}
Attitude	-0.03	0.05	-0.53
Norm	0.09	0.04	2.67*
Control	0.58	0.05	11.48*

γ , completely standardised path coefficients; SE, standard error estimates.

\dagger , $t \geq |1.96|$ indicates significant parameter estimates

Table 3: Intercorrelations γ (gamma) of the latent variables in the TPB structural model ($N = 823$).

Variables	α	1	2	3	4
1. Intention to apply	0.87	-			
2. Perceived behavioural control	0.84	0.59	-		
3. Subjective norm	0.87	0.26	0.29	-	
4. Attitude towards applying	0.83	0.38	0.64	0.29	-

Note: The correlations reported are latent variables correlations and have been disattenuated for measurement error.

\dagger , factor loadings are completely standardised (λX).

applicant's intention to apply. The path coefficient was significant: $\gamma = 0.58$, $t = 11.48$, $p = 0.0001$. Perceived behavioural control was therefore a highly significant predictor of intention to apply, when including the effects of subjective norm and control beliefs on intentions. Applicants who perceived control of their application behaviour were more likely to apply than applicants with low control beliefs.

Supplementary analysis

In addition to these tests of unique effects of each predictor on intentions to apply, we also determined the individual latent bivariate correlations (see Table 3). These correlations were disattenuated for measurement error and do not take into account the effects of the other predictors on intention to apply, nor the shared variance amongst the predictors. Listed in order of magnitude, all three variables correlated significantly and positively with intention to apply (control, 0.59; attitude, 0.38; norm, 0.26; all $p < 0.01$). Therefore, whilst all three predictors significantly correlated with applicant intentions to apply, only normative and control beliefs showed statistically significant unique effects on intentions to apply.

Finally, Hypothesis 4 proposed that a model that combines attitude towards applying, subjective norm and perceived behavioural control would significantly explain applicant intention to apply. Structural equations modelling showed reasonable fit: Sattora Bentler $\chi^2 = 49.36$ ($p < 0.01$), RMSEA = 0.07 [90% CI: [0.06; 0.07], GFI = 0.94, NFI = 0.97, CFI = 0.98. In other words, applicants' intention to apply can therefore be explained as a function of the attitude towards applying,

TABLE 4: Goodness-of-fit indices obtained for the structural models.

Variable	RMSEA	$p_{\text{close fit}}$	SRMR	GFI	AGFI	NNFI	NFI	CFI
Structural model CFA	0.06	0.00	0.05	0.94	0.91	0.98	0.97	0.98

RMSEA, root mean square error of approximation; $p_{\text{close fit}}$, p -value for test of close fit (H0: RMSEA < 0.05); SRMR, standardised root mean residual; GFI, goodness-of-fit index; AGFI, adjusted goodness-of-fit index; NNFI, non-normed fit index; CFI, comparative fit index.

subjective norm and perceived behavioural control (see Table 4).

Discriminant validity

We also tested the discriminant validity to ensure that the relationships in the structural model were not caused by statistical discrepancies (Farrell, 2010). We ran discriminant validity analysis by examining the variance extracted estimates and the squared correlation estimates between the constructs (Hair *et al.*, 2006). Results showed that average variance extracted (AVE) between constructs was good ($0.58 < AVE < 0.72$) and the average squared correlation between constructs was relatively low ($0.07 < R^2 < 0.41$). This provides good evidence of discriminant validity and suggests that the constructs are distinct (Hair *et al.*, 2006).

Discussion

The objective of the present study was to examine, within a graduate sample, the role of attitude towards applying, subjective norm and perceived behavioural control in the formation of intentions to apply to an organisation.

Outline of the results

The present study examined the relationships between graduate applicants' salient beliefs about applying for a job and their intentions to apply. Drawing on the TPB (Ajzen, 1991) we surveyed graduate applicants and used SEM to test our theoretical model. The results indicated reasonable model fit. However, graduates' intention to apply was primarily a function of their beliefs about subjective norms and their perceived behavioural control. Apparently, their attitude towards the organisation and beliefs about the likely outcome of applying to an organisation did not contribute as strongly as expected to the formation of intentions to apply. This may indicate that applicants' intentions are not influenced by the outcomes linked to applying to the same extent as they are by their beliefs of whether they have control over applying and the compliance with the inputs their peers and family provide.

The prominent role that perceived behavioural control played (in this sample) in the formation of intentions is contrary to what has been previously reported (Lin, 2010). Perceived behavioural control had a stronger influence on the formation of intentions than attitude towards applying and subjective norm. This would imply that graduates who held positive control beliefs were more likely to apply. This result may be attributed to the degree of confidence in one's skills, abilities or quality of education and the ability to mitigate anxiety associated with applying (Van Hooft *et al.*, 2004). Moreover, the need or desire to find employment would serve as a relatively powerful motivational force for most graduating students (Notani, 1998). The career support services offered by the university and the use thereof may also influence the perceived degree of control over the application process and graduates' ability to apply successfully. Therefore, it may be assumed that the influence of outcome and efficacy expectations may be emphasised in a graduating sample, as compared to other samples of job seekers.

Our results similarly show that subjective norm was also a significant indicator of graduates intention to apply albeit smaller than control. The evidence suggests that graduates ascribe value to the perceptions of their peers and family and are more likely to apply when they believe that applying to an organisation of their choice is important to these referent others (Arnold *et al.*, 2006; Sheeran, Webb & Gollwitzer, 2005; Sparks, Ajzen & Hall-box, 2002).

Whilst earlier studies show that attitudes are strong predictors of intentions (Notani, 1998; Schreurs *et al.*, 2009), applicants who had positive behavioural beliefs towards applying were not more likely to apply than applicants who had negative beliefs. A possible explanation for the lack of support for such a relationship could be attributed to uncertainty regarding the extent to which organisational offerings or selection information would assist them in achieving the desired outcome (i.e. receiving a job offer). The applicant may value the outcomes associated with applying to the organisation at the outset but these outcomes may not provide sufficient motivation in the formation of an intention to apply.

To conclude, the results did not completely correspond with findings from previous literature on the TPB model. We confirmed that subjective norm and perceived behavioural control were significant predictors of intention to apply. However, the hypothesis for attitude towards applying and its relationship with intention to apply was not supported. This finding highlights the need to further explore these relationships in the graduating student population.

Practical implications

The study contributes to practice by highlighting the importance of applicants' salient beliefs in the job application process. Both tertiary institutions and government value the uptake of graduates in the labour market. It is therefore important to be aware of individuals who perceive low

control in or obstacles to the application process and to ascertain whether it is located in specific samples or groups. Organisations should be aware that application procedures that are accessible and provide relevant selection information could serve to enhance applicants' control beliefs. Applicants who feel they meet the requirements and have the resources to succeed in the application and selection process may be more likely to apply. Partnership between organisations and graduate career services, offered at tertiary institutions, has the potential to leverage recruitment drives through efficient applicant sourcing. Moreover, the applicant pool can be widened by drawing in applicants who have low control beliefs. Career counselling services could also be offered to graduates who intend to apply in order to overcome feelings of low control over the application process and evaluate whether their beliefs are valid (or supported by fact or evidence). Facilitating applicant efficacy beliefs may encourage graduates to engage in the application process.

Findings also show that peer norms or referent others play an important role in applicant intentions to apply. The respondents indicated that they were motivated to comply with expectations of them to apply to an organisation of their choice. Targeting graduates referent groups could provide alternative avenues for influencing graduate perceptions and decisions to apply. Applicants may turn to referent others for approval or information that may influence the probability of a prospective applicant submitting an application (Van Hoya & Lievens, 2007). If so, then word-of-mouth reports could be an effective graduate recruitment aid. Organisations therefore need to monitor applicant perceptions held about their organisation and avoid or counter negative word-of-mouth that may be present (Van Hoya & Lievens, 2007). In addition, social media presence and social networking may also be an important contributor to perceptions about the organisation and should be managed. This includes the content, amount and quality of information communicated to the applicant and others about the organisation and the job. The influence of referent others can be leveraged to inform applicants of the organisations offerings and thereby motivate the applicant to submit an application.

Limitations of the study

This research study had limitations that must be considered. Firstly, convenience sampling limits the generalisability of the results. However, a wide range of students, from the large sample drawn ($N = 854$), with differing academic interest areas, years of study, ages and races were included. Future research should replicate the present research to investigate the generalisability of the results to other graduate applicant samples.

A second limitation relates to our use of the same source of data for all study variables. Common-method bias could have affected the results. The effect of common-method bias can be limited by the use of different groups of people when collecting data (Krause, 2006). However, the nature of the study variables (e.g. beliefs and intentions) limited the

researchers to use self-report data only, as is common in studies using the TPB.

Despite these limitations, we took several steps to increase the internal and external validity of the present study. The survey was directed at final-year graduates who intended to seek employment in the near future. In addition, we collected the data at a time when final-year students were searching for employment.

Recommendations

We see exciting opportunities to extend our research. Firstly, more complex dynamics between the TPB variables and intention to apply to an organisation may underlie the formation of applicant intentions (Ajzen, 1991). Beliefs about applying to an organisation may mediate the relationship with intention to apply. Alternatively, individual differences or environmental influences may moderate this relationship (Sheeran *et al.*, 2002; Van Hooft, Born & Taris, 2006). Future studies should seek to explore the mediating and moderating mechanisms of socio-demographic differences that may be present in the South African context.

Secondly, this study sampled university students from one tertiary institution in the Western Cape. Future research should endeavour to replicate these results at other tertiary institutions. Factors such as race, gender and institution (historically black or historically white university) differences may provide important insights to graduates' intentions and decisions.

Finally, the present investigation highlighted the role of beliefs in the application process and the relation to the formation of intentions to apply to an organisation. However, these beliefs, and their resultant outcomes, are highly contextualised within a socio-demographic context (Moleke, 2005). We are not sure if graduates from disadvantaged backgrounds would share the same beliefs as graduates from privileged backgrounds (Van Hooft, Born & Taris, 2006). Also, would these beliefs affect intentions in the same way for applicants from these two groups? If supported, applicant market segmentation approaches could benefit from this information based on the differentiation of recruitment efforts. Recruiters who want to segment the graduate applicant market would benefit from future studies that test the effect of socio-demographic group differences on intention to apply to an organisation, using multi-group CFA.

Conclusion

The present study showed that behavioural beliefs matter in graduate applicants' intentions to apply. The TPB thus provided a useful framework from the examination of graduates' beliefs in the job application process. These results are an opening attempt to establish a foundation for future research in the recruitment context, particularly the graduate population. By developing an understanding of prospective applicants' decisions, organisations can use these insights when planning and developing their recruitment efforts.

Proficient recruitment activities ensure the attraction of high-quality applicants, increasing the utility of the selection process and limiting the number of applicants that could potentially pull out (Gomes & Neves, 2011). Hence, the road to high-quality candidates is possibly paved with application intentions.

Acknowledgements

The authors would like to thank Prof. Gert Huysamen (Stellenbosch University) and Prof. Johan Malan (Stellenbosch University) for inputs on earlier versions of this article. We would also like to acknowledge the support of the Industrial Psychology Niche Area Bursary at Stellenbosch University for this study.

Competing interests

The authors declare that they have no financial or personal relationships that may have inappropriately influenced them in writing this article.

Authors' contributions

S.A. (Stellenbosch University) was responsible for the conceptualisation of the study, data collection, data analysis and write-up of the article. F.D.K. (University of Cape Town) contributed to conceptualisation of the study and revision of the manuscript.

References

- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50, 179–211. [http://dx.doi.org/10.1016/0749-5978\(91\)90020-T](http://dx.doi.org/10.1016/0749-5978(91)90020-T)
- Ajzen, I. (2002). *Constructing a TPB questionnaire: Conceptual and methodological considerations*. (Adobe Digital Editions version). Retrieved November 25, 2012, from <http://www.socgeo.ruhosting.nl/html/files/spatbeh/tpb.measurement.pdf>
- Ajzen, I., & Fishbein, M. (1980). *Understanding attitudes and predicting social behavior*. Englewood Cliffs, NJ: Prentice-Hall.
- Ajzen, I., & Madden, T. (1986). Prediction of goal-directed behavior: Attitudes, intentions, and perceived behavioral control. *Journal of Experimental Social Psychology*, 22, 453–474. [http://dx.doi.org/10.1016/0022-1031\(86\)90045-4](http://dx.doi.org/10.1016/0022-1031(86)90045-4)
- Armitage, C.J., & Conner, M. (2001). Efficacy of the theory of planned behaviour: A meta-analytic review. *The British Journal of Social Psychology*, 40, 471–499. <http://dx.doi.org/10.1348/014466601164939>
- Arnold, J., Loan-Clarke, J., Coombs, C., Wilkinson, A., Park, J., & Preston, D. (2006). How well can the theory of planned behavior account for occupational intentions? *Journal of Vocational Behavior*, 69, 374–390. <http://dx.doi.org/10.1016/j.jvb.2006.07.006>
- Breaugh, J. (2013). Employee recruitment. *Annual Review of Psychology*, 64, 389–416. <http://dx.doi.org/10.1146/annurev-psych-113011-143757>
- CEB. (2013). *Graduate recruitment: Finding leaders of the future*. (Adobe Digital Editions version). Retrieved October 23, 2013, from http://www.shl.com/assets/ss_A4_GraduateHire.pdf
- Chapman, D.S., Uggerslev, K.L., Carroll, S.A., Piasentin, K.A., & Jones, D.A. (2005). Applicant attraction to organizations and job choice: A meta-analytic review of the correlates of recruiting outcomes. *Journal of Applied Psychology*, 90, 928–944. <http://dx.doi.org/10.1037/0021-9010.90.5.928>
- Collins, C.J., & Stevens, C.K. (2002). The relationship between early recruitment-related activities and the application decisions of new labor-market entrants: A brand equity approach to recruitment. *Journal of Applied Psychology*, 97, 1121–1133. <http://dx.doi.org/10.1037/0021-9010.87.6.1121>
- Du Toit, M., & Du Toit, S. (2001). *Interactive LISREL: User's guide*. Lincolnwood, IL: Scientific Software International.
- Farrell, A. (2010). Insufficient discriminant validity: A comment on Bove, Pervan, Beatty, and Shiu. *Journal of Business Research*, 63, 324–327. <http://dx.doi.org/10.1016/j.jbusres.2009.05.003>
- Field, A. (2005). *Discovering statistics using SPSS*. London, UK: Sage Publications.
- Gomes, D., & Neves, J. (2011). Organizational attractiveness and prospective applicants' intentions to apply. *Personnel Review*, 40, 684–699. <http://dx.doi.org/10.1108/00483481111169634>

- Graduates for Growth. (2012). *How to attract graduates if you run a small or medium sized firm*. Retrieved October 23, 2013, from <http://www.graduatesforgrowth.org.uk/how-to-attract-graduates-if-you-run-a-small-or-medium-sized-firm.html>
- Hair, J., Black, W., Babin, B., Anderson, R., & Tatham, R. (2006). *Multivariate data analysis*. (7th edn.). Upper Saddle River, NJ: Pearson Education Inc.
- Hankins, M., French, D., & Horne, R. (2000). Statistical guidelines for studies of the theory of reasoned action and the theory of planned behaviour. *Psychology and Health, 15*, 151–161. <http://dx.doi.org/10.1080/08870440008400297>
- Highhouse, S., & Lievens, F. (2003). The relation of instrumental and symbolic attributes to a company's attractiveness as an employer. *Personnel Psychology, 56*, 75–102. <http://dx.doi.org/10.1111/j.1744-6570.2003.tb00144.x>
- Highhouse, S., Lievens, F., & Sinar, E. F. (2003). Measuring attraction to organizations. *Educational and Psychological Measurement, 63*, 986–1001. <http://dx.doi.org/10.1177/0013164403258403>
- IBM SPSS Statistics for Windows (Version 20.0) [Computer software]. (2011). New York, NY: IBM Corporation.
- Jaidi, Y., Van Hooft, E., & Arends, L.R. (2011). Recruiting highly educated graduates: A study on the relationship between recruitment information sources, the theory of planned behavior, and actual job pursuit. *Human Performance, 24*, 135–157. <http://dx.doi.org/10.1080/08959285.2011.554468>
- Konrad, A., Ritchie, J., Lieb, P., & Corrigan, E. (2000). Sex differences and similarities in job attribute preferences: A meta-analysis. *Psychological Bulletin, 126*, 593–625. <http://dx.doi.org/10.1037/0033-2909.126.4.593>
- Krause, D. (2006). Power and influence in the context of organizational innovation: Empirical findings. In C.S. Neider (Ed.), *Power and influence in organizations: New empirical and theoretical perspectives* (pp. 21–50). USA: Information Age Publishing Inc.
- Liebert, R., & Spiegler, M. (1994). Social learning theories. In R.M. Liebert & M.D. Spiegler (Eds.), *Personality: Strategies and issues* (pp. 421–437). California: Wadsworth.
- Lin, H. (2010). Applicability of the extended theory of planned behavior in predicting job seeker intentions to use job-search websites. *International Journal of Selection and Assessment, 18*, 64–74. <http://dx.doi.org/10.1111/j.1468-2389.2010.00489.x>
- Moleke, P. (2005). *Finding work: Employment experiences of South African graduates*. Compiled by the Employment and Economic Policy Research Programme. Cape Town, South Africa: HSRP Press.
- Notani, A. (1998). Moderators of perceived behavioral control's predictiveness in the theory of planned behavior: A meta-analysis. *Journal of Consumer Psychology, 7*, 247–271. http://dx.doi.org/10.1207/s15327663jcp0703_02
- Saks, A., & Ashforth, B. (1997). A longitudinal investigation of the relationships between job information sources, applicant perceptions of fit, and work outcomes. *Personnel Psychology, 50*, 395–426. <http://dx.doi.org/10.1111/j.1744-6570.1997.tb00913.x>
- Schreurs, B., Druart, C., Proost, K., & De Witte, K. (2009). Symbolic attributes and organizational attractiveness: The moderating effects of applicant personality. *International Journal of Selection and Assessment, 17*, 35–46. <http://dx.doi.org/10.1111/j.1468-2389.2009.00449.x>
- Sheeran, P., Trafimow, D., Finlay, K.A., & Norman, P. (2002). Evidence that the type of person affects the strength of the perceived behavioural control-intention relationship. *British Journal of Social Psychology, 41*, 253–270. <http://dx.doi.org/10.1348/014466602760060129>
- Sheeran, P., Webb, T.L., & Gollwitzer, P. (2005). The interplay between goal intentions and implementation intentions. *Personality & Social Psychology Bulletin, 31*, 87–98. <http://dx.doi.org/10.1177/0146167204271308>
- Sparks, P., Ajzen, I., & Hall-box, T. (2002). Perceived behavioral control, self-efficacy, locus of control, and the theory of planned behavior. *Journal of Applied Social Psychology, 32*, 665–683. <http://dx.doi.org/10.1111/j.1559-1816.2002.tb00236.x>
- Tabachnick, B., & Fidell, L. (2013). *Using multivariate statistics*. (6th edn.). Boston, MA: Allyn and Bacon.
- Terjesen, S., Vinnicombe, S., & Freeman, C. (2007). Attracting generation Y graduates: Organisational attributes, likelihood to apply and sex differences. *Career Development International, 12*, 504–522. <http://dx.doi.org/10.1108/13620430710821994>
- Tomlinson, M. (2007). Graduate employability and student attitudes and orientations to the labour market. *Journal of Education and Work, 20*, 285–304. <http://dx.doi.org/10.1080/13639080701650164>
- Turban, D.B., & Greening, D. (1997). Corporate social performance and organizational attractiveness to prospective employees. *Academy of Management Journal, 40*(3), 658–672. <http://dx.doi.org/10.2307/257057>
- Uggerslev, K.L., Fassina, N.E., & Kraichy, D. (2012). Recruiting through the stages: A meta-analytic test of predictors of applicant attraction at different stages of the recruiting process. *Personnel Psychology, 65*, 597–660. <http://dx.doi.org/10.1111/j.1744-6570.2012.01254.x>
- Van Hooft, E., Born, M., & Taris, T. (2006). Ethnic and gender differences in applicants' decision-making processes: An application of the theory of reasoned action. *Journal of Selection and Assessment, 14*, 156–167. <http://dx.doi.org/10.1111/j.1468-2389.2006.00341.x>
- Van Hooft, E., Born, M., Taris, T., & Van der Flier, H. (2004). Job search and the theory of planned behavior: Minority–majority group differences in the Netherlands. *Journal of Vocational Behavior, 65*, 366–390. <http://dx.doi.org/10.1016/j.jvb.2003.09.001>
- Van Hooft, E., Born, M.P., Taris, T.W., & Van der Flier, H. (2005). Predictors and outcomes of job search behavior: The moderating effects of gender and family situation. *Journal of Vocational Behavior, 67*, 133–152. <http://dx.doi.org/10.1016/j.jvb.2004.11.005>
- Van Hooft, E., Born, M., Taris, T., & Van der Flier, H. (2006). The cross-cultural generalizability of the theory of planned behavior: A study on job seeking in the Netherlands. *Journal of Cross-Cultural Psychology, 127*–135. <http://dx.doi.org/10.1177/0022022105284491>
- Van Hove, G., & Lievens, F. (2007). Social influences on organizational attractiveness: Investigating if and when word of mouth matters. *Journal of Applied Social Psychology, 37*, 2024–2047. <http://dx.doi.org/10.1111/j.1559-1816.2007.00249.x>

Appendix starts on the next page →

Appendix A

The following items are examples of questions presented in the survey and do not reflect the full questionnaire.

Instruction: Think of a company you want to work for. Keep this company in mind when answering the following questions

1. ATTITUDE TOWARDS APPLYING

I will be afforded opportunities for growth (e.g. training and promotions) if I apply to this organisation.

Extremely unlikely

1	2	3	4	5	6	7
---	---	---	---	---	---	---

 Extremely likely

Opportunities for growth are...

Not very important

1	2	3	4	5	6	7
---	---	---	---	---	---	---

 Very important

2. SUBJECTIVE NORM

Most people who are important to me think that I should pursue a job in this organisation.

Extremely unlikely

1	2	3	4	5	6	7
---	---	---	---	---	---	---

 Extremely likely

Note: Full measure is available on request from the first author.

Generally speaking, how much do you want to do what the following people think you should do?

Not at all

1	2	3	4	5	6	7
---	---	---	---	---	---	---

 Very much

3. PERCEIVED BEHAVIOURAL CONTROL

Whether or not I submit an application to this organisation is entirely up to me.

Strongly disagree

1	2	3	4	5	6	7
---	---	---	---	---	---	---

 Strongly agree

To what extent will your personal control over this behaviour enable you to successfully submit an application to this organisation? It will make it ...

Much more difficult

1	2	3	4	5	6	7
---	---	---	---	---	---	---

 Much easier

4. JOB APPLICATION INTENTION

I intend applying for a job at this preferred organisation

Strongly disagree

1	2	3	4	5	6	7
---	---	---	---	---	---	---

 Strongly agree