Searching Hard versus Searching Smart:

The Role of Search Process Quality in an Internship Context

Jolien Stremersch and Greet van Hoye

Ghent University, Belgium

Jolien Stremersch, Department of Human Resource Management and Organizational Behavior, Ghent University, Belgium.

Greet van Hoye, Department of Human Resource Management and Organizational Behavior, Ghent University, Belgium

Correspondence concerning this article should be addressed to Jolien Stremersch, Department of Human Resource Management and Organizational Behavior, Ghent University, Tweekerkenstraat 2, 9000 Ghent, Belgium. Telephone number: +32477388076. E-mail: jolien.stremersch@ugent.be

Abstract

Based on a self-regulatory approach, we propose that students searching for an internship following a high-quality process will show greater search success. In a sample of 191 Belgian final year students looking for an internship, the quality of students' search process was positively related to both self-reported and objective search outcomes, beyond the mere intensity of their search. Specifically, reflection related positively to students' satisfaction and perceived fit with their internship as well as to organizations' assessment of students' internship performance. Planning related positively to the speed of finding an internship. Furthermore, the four search process quality dimensions explained incremental variance in these outcomes beyond a unidimensional measure of metacognitive activities, supporting the added value of our multidimensional approach.

Keywords: school-to-work, internship, job search, job search process quality, self-regulation, career development, Belgium

Searching Hard versus Searching Smart:

The Role of Search Process Quality in an Internship Context

Searching for a job is often a highly stressful life experience (McKee-Ryan, Song, Wanberg, & Kinicki, 2005). This is particularly the case for young university graduates entering the labor market. They do not have much relevant work experience, which causes difficulties in finding an adequate job (Koen, Klehe, & Van Vianen, 2012). One way to obtain relevant work experience is by means of an internship (Gault, Redington, & Schlager, 2000). Internships are "structured and career relevant work experiences obtained by students prior to graduation from an academic program" (Taylor, 1988, p. 393). Research shows that graduates who participate in an internship land their first full-time job faster, have higher incomes, and report higher levels of overall job satisfaction compared to graduates who did not participate in an internship (Gault et al., 2000; Zhao & Liden, 2011). Thus, an internship could facilitate the school-to-work transition for young graduates (Nunley, Pugh, Romero, & Seals, 2016).

Furthermore, internships provide preparation in job acquisition skills, such as networking, résumé writing, and conducting job interviews (Gault et al., 2000). Similar to job seekers who are looking for a job, students typically have to search for an adequate internship themselves (Dineen, Duffy, Henle, & Lee, 2017). However, not much is known about how students can best conduct this search and what search processes lead to the best possible outcomes (DeRue, Nahrgang, Hollenbeck, & Workman, 2012). Therefore, we rely on recent insights in the job search literature to enhance our understanding of students' search for an internship.

Previous empirical research on job seeking has largely focused on quantitative aspects of people's search behaviors, such as job search intensity or the time spent on specific job search activities (e.g., looking at job ads) (Van Hoye, 2018). However, even though job search intensity is positively related to employment status and speed, the effect sizes of these

meta-analytical correlations are rather modest (Kanfer et al., 2001). Spending much time on job search activities does not necessarily imply that job search is done effectively. Thus, in addition to the intensity (i.e., searching hard) of people's job search behavior, the quality (i.e., searching smart) of their behavior should also be considered (Koen, Klehe, van Vianen, Zikic, & Nauta, 2010). Some empirical evidence suggests that a qualitative approach to job search might provide a valuable expansion of the current quantitative focus (Turban, Stevens, & Lee, 2009; Van Hoye, Van Hooft, & Lievens, 2009).

To advance theory and integrate the scarce and fragmented research on job search quality, Van Hooft, Wanberg, and Van Hoye (2013) conceptualized a self-regulatory model identifying four key dimensions of a high-quality job search process. Job seekers who go through the phases of goal establishment, planning, goal striving, and reflection during their search are proposed to experience more search success. However, given that this multidimensional model was not yet empirically tested, we do not know how these four process dimensions relate to actual job search and employment outcomes. It is important that we learn what the different components of a high-quality search process are so that we can advise job seekers on how to search for a job most effectively.

Therefore, the main aim of our study was to examine how the four components of search process quality relate to multiple key search outcomes beyond search intensity in an internship context. Specifically, search success was evaluated by looking at students' satisfaction and perceived fit with the internship, the speed with which students found an internship (taken from an objective database), and organizations' assessment of students' internship performance. In addition, we examined the incremental variance of our four conceptualized dimensions of search process quality above a unidimensional measure of metacognitive activities used in prior research (Turban et al., 2009).

Our study contributes to the internship and job search literatures by expanding the construct of search process quality. Even though scholars recognize the importance of the content-direction dimension of job search in addition to the intensity-effort dimension (e.g., Kanfer et al., 2001; Koen et al., 2010; Saks, 2005), empirical research is needed to specify this content-direction dimension. We want to test new theoretical developments in this field by examining the different qualitative components of people's search behavior and their outcomes in the context of internship selection. We hereby rely on a conceptual framework developed by Van Hooft et al. (2013). The results of this study will have valuable practical implications for internship seekers and universities, as well as for job seekers and job search counselors in general, as they will shed new light on how a search for an internship or job can be conducted in a high-quality manner. Because this study taps into internship search behavior as a specific kind of job search behavior, we will first delve into the literature on job search behavior.

Job Search Behavior: From Intensity to Quality

So far, most empirical studies focused on the quantitative aspects of job search behavior, or the amount of time and energy that people engage in job search. Job search intensity focusses on the number and intensity of concrete job search behaviors engaged in (Saks, 2006). This quantitative approach to job search implicitly assumes that putting more effort into job search behaviors leads to positive employment outcomes, regardless of the type of behaviors and the quality with which they are conducted (Van Hoye, 2018). However, measures of job search intensity typically explain less than 10% of the variance in employment outcomes (Kanfer et al., 2001, Van Hooft et al., 2013). The results from previous research suggest that other aspects of job search behavior should be taken into account to further improve our prediction of job search success.

Hence, scholars have called for more research focusing on the content and quality of the search behaviors that job seekers are engaging in (Kanfer et al., 2001; Turban et al., 2009; Wanberg, 2012). Because it is not only the amount of job search activities one conducts that is important, but *how* job seekers perform their job search activities. In the next section, we discuss the self-regulatory approach to job search and introduce the multidimensional model of job search process quality.

Self-Regulatory Model of Job Search Process Quality

Self-regulation is defined as processes of "self-generated thoughts, feelings, and actions that are planned and cyclically adapted to the attainment of personal goals" (Zimmerman, 2000, p. 14). Especially in the attainment of distal goals that involve lengthy aversive processes, self-regulation is needed. Individuals usually engage in job search activities because they are needed to obtain a certain goal of finding a job or an internship (i.e., high extrinsic motivation) and not because they are inherently pleasurable (i.e., low intrinsic motivation; Sansone & Thoman, 2006). Because job search is often identified by such a combination of low intrinsic motivation and high extrinsic motivation, people need self-regulation to ensure task persistence and performance (Van Hooft, 2018). It is possible that some job seekers are more intrinsically motivated as compared to others. However, being intrinsically motivated to search for a job or internship does not mean that people do not need self-regulation. In both cases, self-regulation is necessary in order to persist in job search and to alter chosen job search tactics (Wanberg, Zhu, & Van Hooft, 2010). Hence, based on self-regulation theory and combined with the total quality management literature, Van Hooft et al. (2013) propose that a high-quality job search process consists of four phases, in each of which self-regulation is needed: goal establishment, planning, goal striving, and reflection. These key components of job search process quality are proposed to contribute to a successful job search.

First, the job search process begins with identifying and committing to an employment goal (Kanfer et al., 2001). Without a clear and conscious goal, self-regulation cannot take place (Zimmerman, 2000). Therefore, the first dimension is "goal establishment", which reflects the degree to which job seekers have a clear idea of the kind of job they are looking for (e.g., find a job that matches my qualifications), commit to their goal, and translate it into lower-level goals (e.g., tailor my résumé to each job description) (Van Hooft et al., 2013).

In the next dimension of "planning", job seekers need to select a behavioral strategy to tackle their search for a job. This planning should be followed to realize their established goals and to decide on which sources of job information they will rely. Job seekers should develop a coherent plan about how, when, and where they will search for a job, and set deadlines (Van Hooft et al., 2013).

The third dimension of "goal striving" involves the sustained performance of the planned search behaviors. During goal striving, individuals strive to obtain their employment goal (Kanfer et al., 2001). As there are likely to be many obstacles and setbacks during job search, job seekers need to apply self-regulatory techniques that help to implement and persist the planned search activities, such as self-control, self-monitoring, goal shielding, and task-related feedback-seeking (Van Hooft et al., 2013).

In the final dimension of "reflection", job seekers have to evaluate whether their search outcomes correspond with their goals and whether revisions to their goals, planning, or behavior for subsequent performance should be made (Van Hooft et al., 2013). Goals or search strategies might be reconsidered based on self-evaluations or feedback from the environment (Kanfer et al., 2001).

For a high-quality job search process, one must cycle through all four self-regulated phases of goal establishment, planning, goal striving, and reflection. Such a high-quality job search process will then lead to high-quality job search products, such as better résumés and

better job interviews. These high-quality job search products will in turn positively affect job search success (Van Hooft et al., 2013). The latter relationship has already been confirmed in a few prior studies. For example, a study on résumé quality showed that individuals who wrote their résumé with a competency statement were perceived as more suitable for the job, had a higher ranking compared to other interviewees, and had a higher chance of being invited for a job interview (Bright & Hutton, 2000). Furthermore, a study on job interview quality, showed that interview quality and number of job offers were positively related (Crossley & Stanton, 2005).

As the primary determinant of job search product quality and subsequent job search success, the present study focuses on the four dimensions reflecting the quality of the job search process, which have not yet been investigated in empirical research. However, some prior research supports the validity of a self-regulatory approach to job search process quality. For instance, Turban et al. (2009) argued for the importance of metacognitive activities during job search, operationalized as a broad unidimensional measure of the extent to which job seekers set goals, develop plans, and monitor progress toward goal accomplishment. Empirical findings show that engaging in such metacognitive activities relates positively to autonomous job search motivation, the number of submitted job applications and invitations for job interviews, and finding reemployment (da Motta Veiga & Gabriel, 2016; Koen, Van Vianen, Van Hooft, & Klehe, 2016; Turban et al., 2009). Metacognitive activities have similar theoretical underpinnings as Van Hooft et al.'s (2013) model of job search process quality, as they both include aspects of goal setting, planning, and monitoring goal progress. However, metacognitive activities were conceptualized and operationalized as a unidimensional measure of job search self-regulation, reflected in one global score without distinguishing specific dimensions of search quality (Turban et al., 2009). Similarly, prior research has treated metacognitive activities as a unidimensional measure (da Motta Veiga & Gabriel,

2016). Given that the multidimensional conceptualization of search process quality by Van Hooft et al. (2013) was not yet empirically tested, we test this theory and the added value of this multidimensional approach in the current study by also examining the incremental variance of the four dimensions of search process quality in explaining search success beyond metacognitive activities.

In the next section, we discuss the relationship of search process quality with search success in an internship context and develop the hypotheses.

Search Process Quality and Search Success

Overall, we propose that internship seekers who engage in a high-quality internship search process will have more search success. By carefully setting goals, paying attention to planning and carrying out job search activities, and reflecting on one's behavior, an internship seeker can enhance his or her performance in the job search process and try to better meet the expectations of hiring organizations (Van Hooft et al., 2013). We investigate search success by means of four distinctive outcomes: two subjective evaluations from the intern (i.e., satisfaction and perceived fit), an objective outcome from the internship database (i.e., search speed), and finally performance evaluated by the internship supervisor. When testing these relationships, we control for search intensity to offer a stringent test of the added value of considering search process quality. Although it is shown that search intensity pays off, a lot of variance is still left to explain (Kanfer et al., 2001). In other words, while acknowledging that internship seekers may indeed benefit from putting more intensity in their search, investing in search process quality is likely to have added value.

First of all, we propose that individuals who conduct a high-quality search have increased chances of finding an internship that matches their needs. This may result in higher internship satisfaction and perceived fit (i.e., to what extent the internship measures up to the type of internship students were looking for). Individuals who set clear, conscious goals and

make a planning to strive towards these goals, are likely to apply a more focused search strategy when looking for an internship (Koen et al., 2010). They carefully focus their search efforts on a few possible employers and only apply for internships that match their interests and qualifications. In the long run, especially if students persist in their search, this is likely to result in better internship outcomes (Crossley & Highhouse, 2005; Koen et al., 2010). Moreover, the more internship seekers keep their goals in mind during their search and continuously try to improve their search behavior to attain those goals, the more likely they are to find a satisfactory and fitting internship (Van Hooft et al., 2013).

> *Hypothesis 1: Search process quality will be positively related to satisfaction, above search intensity.*

> *Hypothesis 2: Search process quality will be positively related to perceived fit, above search intensity.*

Second, as an objective measure of search success, we included search speed, which refers to how soon students find an internship. We propose that individuals engaging in a high-quality search are likely to find an internship sooner than individuals engaging in a low-quality search. Setting a clear, personal, and conscious goal to which an individual is committed prevents the search from happening in a nonsystematic and haphazard way (Koen et al., 2010), which is likely to speed up the process. In addition, students who engage in better planning, setting deadlines, and a better selection of search strategies are likely to find an internship faster. For example, research has shown that thorough preparation predicted the number of job interviews (Caldwell & Burger, 1998). Moreover, the more internship seekers are able to persist in their search and revise their strategy as needed, the sooner they are likely to obtain their goals (Vancouver & Day, 2005).

> *Hypothesis 3: Search process quality will be positively related to search speed, above search intensity.*

Third, we included a measure of job performance, also taking the organization's perspective into account. An internship is a relatively typical performance setting (Zhao & Liden, 2011), so we wanted to include a measure of on-the-job effectiveness of the interns. Performance has not been studied frequently as a criterion in the job search literature, but it has been used in recruitment research to assess the effectiveness of recruitment activities. For instance, new hires referred by current employees were shown to perform better than hires based on reactions to job advertisements (Zottoli & Wanous, 2000). We hypothesize that individuals who conduct a high-quality search process will eventually perform better in their internship. Internship seekers who set a clear goal for their internship search have a sense of direction and purpose which will induce planning of the search behavior and goal striving. Internship seekers who are committed to their goal and adapt their search behavior accordingly will have increased chances of finding an internship that fits their needs, abilities, and interests. Subsequently, when a fit exists between employees and the job that they are doing, they put more effort in carrying out their duties which leads to better job performance (Kristof-Brown, Zimmerman, & Johnson, 2005). Furthermore, fit leads to higher intrinsic motivation (i.e., satisfaction of the needs for autonomy, relatedness, and competence; Deci & Ryan, 2000) which also contributes to a better performance (Baard, Deci, & Ryan, 2004; Greguras & Diefendorff, 2009). Thus, we propose a positive relationship between search process quality and performance. Furthermore, based on the above reasoning, we expect fit to mediate the relationship between search process quality and performance.

Hypothesis 4: Search process quality will be positively related to performance, above search intensity.

Hypothesis 5: Fit will mediate the relationship of search process quality with performance.

Finally, as already mentioned, we also wanted to examine whether taking into account the multiple dimensions of search process quality explains incremental variance in search success outcomes beyond the unidimensional measure of metacognitive activities from previous research (Turban et al., 2009). It seems likely that individuals do not engage in every dimension of search process quality to the same extent. For instance, one person might score highly on planning, but lowly on reflection; whereas the reverse might be true for someone else. Even though this would result in a similar score on a unidimensional measure, these two people essentially engage in a different search process, which would be more accurately reflected in a multidimensional measure. Hence, we propose:

> *Hypothesis 6: The four dimensions of search process quality (goal setting, planning, goal striving, and reflection) will explain incremental variance in (a) satisfaction, (b) perceived fit, (c) search speed, and (d) performance, above metacognitive activities.*

Method

Participants

Our sample consisted of master students in Business Economics at a Belgian university who were looking for a mandatory internship in their final year of education. The students in this one-year master's program are required to locate and apply for possible internship positions themselves, these are not assigned by the university. This is the first and only internship they conduct as part of their educational program (including the preceding three-year Bachelor program). All students have to seek an internship, as conducting an 11-week internship is a mandatory condition to graduate. After successful completion of this internship, students enter the labor market and seek full-time employment.

Out of 417 contacted participants, 213 filled in the online questionnaire, resulting in a response rate of 51%. Of the 213 surveys started, 22 incomplete surveys were removed. After deletion of these records, the final sample consisted of 191 valid responses. About half of the

participants was female (52%) and age varied between 21 and 26 years ($M = 23$ years, $SD = 1.21$). Respondents had different educational specializations within Business Economics, including Finance Management (33%), Marketing Management (21%), Human Resource Management (HRM; 21%), IT (13%), and Taxation (12%).

Procedure

The data for this study were collected in June 2017 in cooperation with the University Internship Office. We received a list of e-mail addresses of Business Economics students undertaking an internship that year. At the end of their internship but before they received their grade, participants were e-mailed and asked to fill in an online Qualtrics survey. A first and second reminder were sent one and two weeks later respectively. To enhance our response rate, we offered a résumé analysis to the participants who filled in the complete questionnaire. Respondents provided data on internship satisfaction and perceived fit, search intensity, search process quality (i.e., goal establishment, planning, goal striving, and reflection), metacognitive activities, and demographics. It was made clear that all responses would be treated anonymously, that answers would be used for research purposes only, and that participants should answer honestly based on their own experiences. The survey took about 10 minutes to complete on average.

Additionally, we collected objective data (i.e., search speed and performance) from the University Internship Office database. At the end of the survey, we asked the participants for their student number that enabled anonymous yet matched responses to the database from which we retrieved the objective measures. This information was only used when the participant gave explicit consent to link their answers on the questionnaire to the database. After matching, the student numbers were deleted to guarantee full anonymity. Thirteen respondents did not give consent to use their student number. As a result, for some of the analyses (i.e., regarding search speed and performance) the sample was reduced to 178

respondents. The ethics committee of the university approved this study and the procedure followed.

Measures

All items were adapted to the internship-search domain and were formulated as time and situation specific (Noordzij, Van Hooft, Van Mierlo, Van Dam, & Born, 2013). Items were rated on a 5-point scale ranging from 1 = *completely disagree* to 5 = *completely agree*, unless stated otherwise.

Satisfaction. Students' satisfaction with their internship was measured by a three-item scale adapted from Cammann, Fichman, Jenkins, and Klesh (1983). Two items were merely adapted to the internship context, the reverse scored item was replaced by an item that reflects satisfaction with the internship supervision. An example item is "I was satisfied with the content of my internship". The coefficient α for this scale was .79.

Perceived fit. We adapted a two-item measure from Wanberg et al. (2002) that asked respondents to what extent the internship measured up to the type of internship they had hoped to find. Two items were merely adapted to the internship context, and we added one additional item to measure perceived fit in general. A sample item is "My internship measures up to the kind of internship I was seeking". The coefficient α for this scale was .78.

Search speed. This measure was retrieved from the University Internship Office database. All participants were instructed to find an internship and submit a proposal for a host organization at the latest by the deadline predetermined by the Internship Office. Search speed was calculated as the difference in days between the date of handing in the internship proposal and the deadline for submission. The higher this number, the faster the participant found an internship.

Performance. This measure was also retrieved from the University Internship Office database. Every internship was managed by a supervisor of the host organization. This

supervisor was asked to give the student assignments and feedback on a regular basis. After

the completion of the internship, the organization supervisor was e-mailed to evaluate the

performance of the student during the internship. Performance was measured with one item:

"If you had to give the student a final score on 20, how much would it be?". Whereas the

supervisor's score could be any discrete number from 0 to 20, example descriptions of the

student's performance were provided for the score ranges 0-8, 9, 10-11, 12-13, 14-15, 16-17,

18-20. An example of this grading scale is "16-17: Passed with great honors. The level is

above expectations and can almost be called 'professional'. There are barely shortcomings."

Search intensity. Search intensity was measured by a 10-item scale adapted from

Van Hoye, Saks, Lievens, & Weijters (2015). Participants were asked to indicate how much

time they had spent on specific search activities during the period in which they were looking

for an internship on a 5-point rating scale (1 = *no time* to 5 = *a lot of time*). Four items were

removed, because they were more applicable to a more senior sample of job seekers or less

applicable to the internship context (e.g., "Speaking with previous employers or

acquaintances about possible job leads"). We added an item about spontaneous applications

("Applying spontaneously") and three additional items about online search (i.e., "Looking for

a job on social media (e.g., LinkedIn, Facebook)", "Visiting job sites", "Visiting websites

from potential internship organizations"), given the popularity of online internship search. A

sample item is "Looking for an internship on the internet". The coefficient α for this scale was

.72.

Search process quality. Given the lack of prior empirical research, we developed new

scales to assess the extent to which individuals conduct their search process in a qualitative

manner by going through the four dimensions of goal establishment, planning, goal striving,

and reflection (Van Hooft et al., 2013). To generate items for this scale, we followed several

steps. First, we conducted an exhaustive literature review of validated self-report scales for

related constructs in prior research (e.g., strategy development, Crossley & Highhouse, 2005; planning and implementation intentions, Saks & Ashforth, 2002; metacognitive activities, Turban et al., 2009; implementation intentions, Van Hooft, Born, Taris, van der Flier, & Blonk, 2005; job search clarity, Wanberg et al., 2002; motivation and emotion control, Wanberg, Kanfer, & Rotundo, 1999). Next, based on the definitions of each of the search process quality dimensions (Van Hooft et al., 2013) and these related scales from prior research, the first author generated a number of items for each phase, which were then carefully reviewed by the second author. After a few rounds of rewriting and discussion, a final selection of three items for each phase was made (see Table 1).

To test the psychometric properties of the search process quality scales in our sample, we conducted confirmatory factor analyses (CFA) in Lavaan version 0.5 in R 3.2.2 (Rosseel, 2012). We estimated a model of four interrelated latent variables: goal establishment, planning, goal striving, and reflection. The Satorra-Bentler scaled test statistic indicated that the expected four-factor model provided a satisfactory fit with the data, $\chi^2(48) = 79.78$, $p = .003$, CFI = .94, RMSEA = .06, SRMR = .07. Moreover, the four-factor model fit the data significantly better than a model in which all 12 items loaded on one single global search process quality factor, $\Delta\chi^2(6) = 225.10$, $p < .001$, as this one-factor model produced a poor fit, $\chi^2(54) = 304.88$, $p < .001$, CFI = .49, RMSEA = .18, SRMR = .13. The standardized factor loadings for all items from the four-factor model can be found in Table 1. The internal consistency coefficient α was .83 for goal establishment, .55 for goal striving, .75 for planning, and .78 for reflection. The rather low internal consistency of the goal striving scale could not be improved by dropping an item.

To further validate our new search process quality scales, we also tested them in another sample of final year students looking for a job after graduation ($N = 153$; average age $= 22.54$, SD $= 1.77$; 68% women). In this context, the items were slightly reworded to fit a job

search rather than an internship search. Participants were recruited via university databases and social media. The Satorra-Bentler scaled test statistic indicated that the expected four-factor model provided an acceptable fit with the data, $\chi^2(48) = 97.88$, $p < .001$, CFI = .90, RMSEA = .08, SRMR = .09. Importantly, the four-factor model also fit the data significantly better than a one-factor model, $\Delta\chi^2(6) = 256.31$, $p < .001$, as this one-factor model produced a poor fit, $\chi^2(54) = 354.29$, $p < .001$, CFI = .39, RMSEA = .19, SRMR = .14. The internal consistency coefficient α was above .60 for all four dimensions: .77 for goal establishment, .62 for planning, .66 for goal striving, and .72 for reflection.

Metacognitive activities. We measured metacognitive activities using the six-item scale developed by Turban et al. (2009) that we adapted to the internship context. A sample item is "I set personal goals to guide my internship search activities". The coefficient α for this scale was .78. [1]

Control variables. We controlled for sex (0 = *male*, 1 = *female*) because of research suggesting that men are slightly more likely to engage in job seeking than women (Kanfer et al., 2001; Van Hooft et al., 2005). We also controlled for education specialization, serving as a proxy for labor market demand (Wanberg et al., 2002). For individuals with unique skills that are high in demand, it might be easier to find an internship so that the quality of their search behavior may matter less (Van Hooft et al., 2013). Four dummy variables (i.e., Marketing, HRM, IT and Taxation) were created, with the biggest group (i.e., Finance) used as the reference category.

---

[1] An exploratory factor analysis (EFA) showed that metacognitive activities might better be represented by two factors instead of one as originally intended. A CFA confirmed that a two-factor model combining the first three items in one factor and the last three items in another factor ($\chi2(8) = 29.28$, p < .001, CFI = .91, RMSEA = .12, SRMR = .08) provided a significantly better fit ($\Delta\chi2(1) = 37.53$, p < .001) to the data than a one-factor model ($\chi2(9) = 66.81$, p < .001, CFI = .76, RMSEA = .19, SRMR = .11). These results seem to support our assumption that search process quality is better represented by multiple factors. However, we still computed one overall score for metacognitive activities for use in the analyses, reflecting its intended conceptualization (Turban et al., 2009) and use in prior research (da Motta Veiga & Gabriel, 2016), and given our aim to investigate the added value of our proposed multiple dimensions of search process quality beyond the supposedly unidimensional measure of metacognitive activities from prior research.

Results

Table 2 presents the means, standard deviations, and correlations of the study variables. We tested our first set of hypotheses by conducting four hierarchical regression analyses with satisfaction, perceived fit, search speed, and performance as the respective dependent variables. In each regression, we entered sex and education specialization as control variables (Step 1), followed by search intensity (Step 2), and the four dimensions of search process quality (Step 3).

As shown in Table 3, in Step 1, the control variables only explained significant variance for search speed (12%), $F(5,172) = 4.73$, $p < .001$. Women (ß = .17, $p = .041$) and individuals who studied Taxation (ß = .22, $p = .006$) tended to find an internship faster.

In Step 2, search intensity only explained significant incremental variance in search speed (5%), $F(1,171) = 11.26$, $p = .001$. However, search intensity was negatively related to search speed (ß = -.24, $p = .001$).

Our hypotheses predicted that search process quality would be positively related to search success, above search intensity. Results for Step 3 indicate that the search process quality dimensions explained incremental variance in all four outcomes: satisfaction (11%), $F(4,173) = 5.50$, $p < .001$, perceived fit (9%), $F(4,173) = 4.68$, $p = .001$, search speed (15%), $F(4,167) = 9.55$, $p < .001$, and performance (7%), $F(4,167) = 3.30$, $p = .012$ in support of Hypotheses 1 to 4.

However, not all search process quality dimensions were significant predictors. Students who engaged more in planning found an internship faster (ß = .47, $p < .001$). Individuals who reflected more during their search for an internship showed higher satisfaction (ß = .33, $p < .001$), a better perceived fit (ß = .29, $p = .001$), and better performance (ß = .25, p = .004). Goal establishment and goal striving were not significant predictors of search success in our study.

As outlined in Hypothesis 5, we expected that the relationship of the four search process quality dimensions with performance would be mediated by fit. To test this hypothesis, four mediation analyses were conducted using the PROCESS mediation macro in SPSS (Hayes, 2013) with the unstandardized indirect effects and the 95% confidence intervals computed for each of 5,000 bootstrap samples. In each mediation analysis, one of the search process quality dimensions was entered as the independent variable, fit as the mediating variable, and performance as the dependent variable. The other three search process quality dimensions were entered as covariates, together with sex, the education specialization dummy variables, and search intensity. Consistent with the results for Hypotheses 2 and 4 (where reflection emerged as the only significant predictor of fit and performance), we only observed a significant indirect effect on performance through fit for the reflection dimension ($B = .22$, 95% CI [.08, .47]). In addition, the direct effect of reflection on performance was no longer significant ($\beta = .47$, p = .04) when controlling for fit. Therefore, in line with Hypothesis 5, these results suggest that fit mediated the relationship of reflection with performance. No mediation was observed for goal establishment, planning, and goal striving.

To test our final hypothesis regarding the incremental validity of the four search process quality dimensions above metacognitive activities, we performed four additional regression analyses, with satisfaction, perceived fit, search speed, and performance as the dependent variables. The predictor variables were sex and education specialization (Step 1), followed by metacognitive activities (Step 2), and the four dimensions of search process quality (Step 3). As shown in Table 4, the results show that in Step 2 metacognitive activities were positively related to satisfaction ($\beta = .19$, p = .01) and perceived fit ($\beta = .17$, p = .03), but explained no significant variance in the other search outcomes.

In support of Hypotheses 6a to 6d, the results for Step 3 indicate that the search process quality dimensions explained significant incremental variance above metacognitive

activities in all four search success outcomes: satisfaction (7%), $F(4,173) = 3.86$, $p = .005$,

perceived fit (7%), $F(4,173) = 3.27$, $p = .013$, search speed (20%), $F(4,167) = 12.10$, $p < .001$,

and performance (6%), $F(4,167) = 3.30$, $p = .012$.

Discussion

Internships provide a great way for graduates to acquire job relevant experience and to

prepare job acquisition skills such as networking and résumé writing (Gault et al., 2000).

However, little research is available on internships and how to best perform the internship

search process. In addition, prior research on job search has mostly focused on quantitative

aspects of people's job search behavior and scholars have recently called for attention to the

quality of the search process (Kanfer et al., 2001; Wanberg, 2012). Therefore, we set out to

test a new theory in the field by examining the relationship between four dimensions of search

process quality and four different internship success outcomes, relying on Van Hooft et al.'s

(2013) conceptual self-regulatory model. The results of this study carry implications for

research on internships and job search.

First of all, our study shows the added value of a qualitative approach to search

behavior beyond a quantitative measure in predicting search success. We found that search

process quality explained incremental variance in all search outcomes, beyond search

intensity. Search intensity explained significant variance in only one outcome (i.e., search

speed) and this relationship was negative. These results suggest that the content and quality of

the performed search behaviors matter beyond and even more than their mere intensity, in line

with the self-regulatory model of job search quality (Van Hooft et al., 2013). In other words,

searching hard does not appear to be as beneficial as searching smart (Koen et al., 2010). This

positive relationship of search process quality with search success appears relatively robust, as

we observed it for different types of outcomes, including satisfaction, perceived fit, search

speed, and even job performance, which has rarely been examined in a job search context.

Second, we found that reflection might be an especially important component of search process quality. Reflection means that individuals evaluate whether their search outcomes correspond with their goals and whether improvements should be made to their goals, planning, or behavior (Van Hooft et al., 2013). The results show that individuals who reflected more about their search were more satisfied with their internship, perceived a better fit, and performed better. In addition, the relationship between reflection and performance was mediated by fit. This is in line with self-regulation theory (Kanfer et al., 2001; Saks, 2005) and the total quality management literature (Dean & Bowen, 1994; Hackman & Wageman, 1995), which state that reflection is indispensable in order to achieve an upward cycle of learning and performance enhancement. Reflection has hardly been studied in the job search literature, but it has been used in feedback research as a facilitator for development after feedback (Anseel, Lievens, & Schollaert, 2009). Employees who reflected after receiving feedback improved more in task performance than employees who solely received a feedback report. Although the importance of the various job search process quality dimensions is likely to depend on the specific context and outcome under consideration, at the very least, our results suggest that more research on reflection during job search is warranted.

Finally, we found that the search process quality dimensions explained incremental variance in all search outcomes, beyond a unidimensional measure of metacognitive activities. Moreover, the search process quality dimensions appeared to be stronger predictors for the outcomes than metacognitive activities. Metacognitive activities only predicted two outcomes and were even no longer significant once the search process quality dimensions were controlled for. Moreover, our confirmatory factor analyses indicated that search process quality was better represented by four distinct dimensions (i.e., goal establishment, planning, goal striving, and reflection) instead of one, in line with our multidimensional conceptualization (Van Hooft et al., 2013). In addition, the different dimensions were

differentially related to the various outcomes, in a conceptually meaningful way. Specifically, engaging more in planning related to finding an internship faster, whereas reflection positively related to satisfaction, perceived fit, and performance. Therefore, to enhance our understanding of individuals' search for an internship or job and how this relates to specific outcomes, future research would benefit from using a similar multidimensional approach towards conceptualizing and measuring search process quality.

Limitations

Although this is the first study to develop and use job search process quality scales in line with the self-regulatory model of Van Hooft et al. (2013), this comes with some limitations. We have carefully developed and selected items for these scales, however we did not engage in all necessary steps for full development and validation of a new instrument (Worthington & Whittaker, 2006). We found a relatively low internal consistency reliability of the 'goal striving' dimension (.55). Due to this limitation, our results should be interpreted with caution, although none of the significant results involved goal striving. At the very least, our results suggest that future research on the multiple dimensions of search process quality and their relationship with search success would be valuable. Following best practices for scale development (Worthington & Whittaker, 2006), future research could build upon and refine the questionnaire, in order to get adequate reliability measures for each dimension while maintaining an optimal fit. Incremental variance in explaining job search success beyond other related job search constructs (e.g., strategy development, Crossley & Highhouse, 2005; career planning and implementation intentions, Saks & Ashforth, 2002; Zikic & Klehe, 2006, job search clarity, Wanberg et al., 2002; motivation and emotion control, Wanberg, Kanfer, & Rotundo, 1999) should also be examined.

Second, our data are correlational in nature and some of the items in our study relied on self-report measures, so common method bias and social desirability might have inflated

the relationship between the variables (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003; Podsakoff & Organ, 1986). The correlations among our self-report variables were generally modest, which shows that common method variance might not have been a major issue in the current study (Spector, 2006). Furthermore, we made an effort to minimize these effects by also including database measures (i.e., search speed and performance). We tried to diminish social desirability by emphasizing the anonymity of our participants (Podsakoff & Organ, 1986). Nonetheless, future research on search process quality should try to include other measures than self-reports to assess search behavior (e.g., counselor reports; Van Hooft, 2014).

Third, while including database measures might reduce the effects of common method bias and social desirability, it also offers some downsides, as we were restricted to the information and scales collected by the University Internship Office. The speed measure, for example, does not cover when students officially started searching for an internship. This implies that the link between planning and speed may not be as robust as our findings show. It is possible that a student might have already found an internship before the university starts with enrolments, and that their proposal will be handed in early. This does not imply that their search lasted shorter than the search of someone who hands in the proposal at the final day and only started searching two weeks before. In addition, the mean performance rating was quite high, which is fairly common for internship supervisor ratings. Future research should try to incorporate other or more sophisticated objective measures such as the actual length of the search process and a more balanced measure of performance.

Fourth, it might be that the responses of our participants were affected by retrospective bias. Consistent with some previous research applying a retrospective design to study job search behavior (e.g., Crossley & Highhouse, 2005; Saks, 2006), participants were asked to report their search behavior after finding and conducting an internship. This design

might have introduced some issues of reverse causation. For instance, students who were not satisfied with their internship could be more likely to question their own search process. Future research should use multiple time waves or apply diary designs, so that search quality can be assessed during the actual search and the dynamic aspects of the search process can be investigated.

In fact, the Van Hooft et al. (2013) model describes an essentially cyclical search process, whereby one phase needs to be completed before moving on to the next phase and each phase builds on the preceding phase. Job seekers are also proposed to typically cycle through these phases multiple times. These dynamic aspects of the model could not be tested in our cross-sectional and retrospective design, but would represent an intriguing avenue for future research. Along these lines, our findings tentatively suggest that not all search quality dimensions were related to search success (in this study's context). This was true both for the regression and the correlation analyses, indicating that overall later phases did not seem to subsume the effect of preceding phases. When we exploratively repeated the hierarchical regression analyses reported in Table 3 with the search process quality dimensions entered individually or one after another, largely similar results were obtained, with the exception of goal establishment. When goal establishment was entered as the first or only predictor after the control variables and search intensity, it was significantly and positively related to satisfaction ($\beta = .15$, $p = .04$), perceived fit ($\beta = .16$, $p = .04$), and performance ($\beta = .15$, $p = .049$). These effects became insignificant when the other dimensions were added, especially reflection, even though the drop in the size of the regression weight was only small (see Table 3). This makes sense, given that it is hard to reflect on your search outcomes and their correspondence to your goals without first having established clear goals. Future research could delve further into these and other dynamic aspects of the Van Hooft et al. (2013) search quality model.

Finally, the generalizability of our findings might be restricted by our sample of final year internship seekers. For instance, it is possible that final year students, still preparing to enter the labor market, are more intrinsically motivated to look for an internship as compared to unemployed job seekers confronted with job loss. As a result, an unemployed job seeker might have a greater need for self-regulation. Future research with a sample of more senior job seekers is needed to determine the generalizability of our results to other types of job seekers.

Directions for Future Research

In the Van Hooft et al. (2013) job search quality model, the authors argue for a distinction between quality as a process and quality as a product, and assume that process quality leads to product quality, which in turn leads to success. Our focus for this study was on process quality. Future research could also measure the aspect of job search product quality, to further enhance our understanding of job search quality. Operationalizing and measuring product quality should involve ratings of subject matter experts on the labor market (e.g., recruitment consultants, hiring managers) as to what extent the job search products (e.g., résumés, interview performance) meet their expectations of quality. This can then be compared to self-assessment ratings.

A second area for future research would be to look more into the specific features of reflection. In our research, the role that reflection played in the search process was substantial, but this dimension has been given least consideration in prior research compared to the other dimensions (e.g., goal setting, planning). For example, it could be interesting for future research do delve into the specific aspects of reflection (i.e., self-evaluation, learning from failures, causal attributions, self-reactions, and self-rewarding) and to look at the effects these aspects have on the job search process and/or outcomes. For example, research has shown that self-compassion is a promising emotion regulation strategy that can be used by job seekers to counteract detrimental emotional effects during job search (Kreemers, van Hooft, & van

Vianen, 2018). Furthermore, it might also be interesting to investigate interpersonal differences, and to look at whether some job seekers are more likely to reflect than others and are therefore more inclined to learn and improve their job search process. For example, highly conscientious individuals might be more apt to reflect and learn than individuals who are low in conscientiousness (Lee & Klein, 2002).

Practical Implications

Our study also has practical implications. First, our results suggest that graduates should pay attention to the quality of their internship/job search process, because search intensity alone is not sufficient. More specifically, they should reflect upon the search process, as this positively relates to employment quality. Universities could aid young graduates by facilitating reflection among students concerning their job interests, skills, and values. For example, internship reports and other papers should not only focus on creating a specific end product (e.g., finishing a project), but should also include a short journal which students create as they reflect on their learning.

Second, young graduates often have little experience in self-regulation of their job search. These new labor market entrants often do not know what they want, let alone how to strive for their goals. Universities could guide and train students' search process quality, in order to increase their chances and quality of employment after graduation and to facilitate the school-to-work transition. For example, a one-day course or training consisting of four sections that consecutively target goal setting, planning, goal striving, and reflection, based on the model by Van Hooft et al. (2013), could be offered to students in their final year of education. Even a short training or intervention can have long-lasting effects on job search and career outcomes (Liu, Huang, & Wang, 2014; Van Hooft & Noordzij, 2009).

Finally, job search counselors should recognize the importance of job search process quality and avoid a predominant focus on quantitative search aspects. For instance, it seems

more important to work on setting clear goals and encourage a focused search strategy than to emphasize that job seekers should submit as many applications as possible. In addition, the public employment service should consider aspects of job search process quality to determine whether job seekers qualify for unemployment benefits instead of only focusing on quantitative aspects such as number of job applications and interviews.

References

Anseel, F., Lievens, F., & Schollaert, E. (2009). Reflection as a strategy to enhance task

performance after feedback. *Organizational Behavior and Human Decision*

Processes, 110, 23–35.

Baard, P. P., Deci, E. L., & Ryan, R. M. (2004). Intrinsic need satisfaction: A motivational

basis of performance and well-being in work settings. *Journal of Applied*

Psychology, 34, 2045-2068.

Bright, J. E. H., & Hutton, S. (2000). The impact of competency statements on résumés for

shortlisting decisions. *International Journal of Selection and Assessment, 8*, 41–53

Caldwell, D. F., & Burger, J. M. (1998). Personality characteristics of job applicants and

success in screening interviews. *Personnel Psychology*, *51*, 119–136.

Cammann, C., Fichman, M., Jenkins, D., & Klesh, J. (1983). Assessing the attitudes and

perceptions of organizational members. In S. E. Seashore, E. E. Lawler III, P. H.

Mirvis, & C. Cammann (Eds.), *Assessing organizational change: A guide to*

methods, measures, and practices (pp. 71–138). New York, NY: Wiley.

Crossley, C. D., & Highhouse, S. (2005). Relation of job search and choice process with

subsequent satisfaction. *Journal of Economic Psychology, 26,* 255−268.

Crossley, C. D., & Stanton, J. M. (2005). Negative affect and job search: Further

examination of the reverse causation hypothesis. *Journal of Vocational Behavior,*

66, 549–560.

da Motta Veiga, S. P., & Gabriel, A. S. (2016). The role of self-determined motivation in

Job search: A dynamic approach. *Journal of Applied Psychology, 101,* 350-361.

Dean, J. W., & Bowen, D. E. (1994). Management theory and total quality: Improving

research and practice through theory development. *Academy of Management*

Review, 19, 392–418.

Deci, E. L., & Ryan, R. M. (2000). The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry, 11*, 227-268.

DeRue, D.S., Nahrgang, J.D., Hollenbeck, J.R. & Workman, K. (2012). A quasi-experimental study of after-event reviews and leadership Development. *Journal of Applied Psychology, 97*, 997-1015.

Dineen, B. R., Duffy, M. K., Henle, C. A., & Lee, K. (2017). Green by comparison: Deviant and normative transmutations of job search envy in a temporal context. *Academy of Management Journal, 60,* 295-320.

Gault, J., Redington, J., & Schlager, T. (2000). Undergraduate business internships and career success: Are they related? *Journal of Marketing Education, 22*, 45-53.

Greguras, G. J., & Diefendorff, J. M. (2009). Different fits satisfy different needs: Linking person-environment fit to employee commitment and performance using self-determination theory. *Journal of Applied Psychology, 94*, 465–477.

Hackman, J. R., & Wageman, R. (1995). Total quality management: Empirical, conceptual, and practical issues. *Administrative Science Quarterly, 40*, 309–342.

Hayes, A. F. (2013). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. New York, NY: The Guilford Press.

Lee, S., & Klein, H.J. (2002). Relationships between conscientiousness, self-efficacy, selfdeception, and learning over time. *Journal of Applied Psychology, 87*, 1175-1182.

Liu, S., Huang, J.L. & Wang, M. (2014). Effectiveness of job search interventions: a metaanalytic review. *Psychological Bulletin, 140*, 1009-1041.

Kanfer, R., Wanberg, C. R., & Kantrowitz, T. M. (2001). Job search and employment: A personality-motivational analysis and meta-analytic review. *Journal of Applied Psychology, 86,* 837-855.

Koen, J., Klehe, U. C., van Vianen, A. E. M., Zikic, J., & Nauta, A. (2010). Job-search

strategies and reemployment quality: The impact of career adaptability. *Journal of

Vocational Behavior, 77*, 126-139.

Koen, J., Klehe, U., & Van Vianen, A. E. M. (2012). Training career adaptability to

facilitate a successful school-to-work transition. Journal of Vocational Behavior,

81, 395–408.

Koen, J., Van Vianen, A. E. M., Van Hooft, E. A. J., & Klehe, U. C. (2016). How

experienced autonomy can improve job seekers' motivation, job search, and chance

of finding reemployment. *Journal of Vocational Behavior, 95*, 31–44.

Kristof-Brown, A. L., Zimmerman, R. D., & Johnson, E. C. (2005). Consequences of

individuals' fit at work: A meta-analysis of person–job, person–organization,

person–group, and person–supervisor fit. *Personnel Psychology, 58*, 281-342.

Kreemers, L. M., Van Hooft, E. A., & Van Vianen, A. E. (2018). Dealing with negative job

search experiences: The beneficial role of self-compassion for job seekers' affective

responses. *Journal of Vocational Behavior, 106*, 165-179.

McKee-Ryan, F. M., Song, Z. L., Wanberg, C. R., & Kinicki, A. J. (2005). Psychological

and physical well-being during unemployment: A meta-analytic study. *Journal of

Applied Psychology, 90*, 53-76.

Noordzij, G., Van Hooft, E. A. J., Van Mierlo, H., Van Dam, A., & Born, M. Ph. (2013).

The effects of a learning-goal orientation training on self-regulation: A field

experiment among unemployed job seekers. *Personnel Psychology, 66*, 723-755.

Nunley, J.M., Pugh, A., Romero, N., & Seals, R.A. (2016). College major, internship

experience, and employment opportunities: estimates from a résumé audit. *Labour

Economics, 38*, 37-46.

Podsakoff, P. M., MacKenzie, S. B., Lee, J., & Podsakoff, N. P. (2003). Common method

 biases in behavioral research: A critical review of the literature and recommended

 remedies. *Journal of Applied Psychology, 88*, 879-903.

Podsakoff, P. M., & Organ, D. W. (1986). Self-reports in organizational research: problems

 and prospects. *Journal of Management, 12,* 531-544.

Rosseel, Y. (2012). Lavaan: An R Package for Structural Equation Modeling. *Journal of

 Statistical Software, 48*, 1-36.

Saks, A. M. (2005). Job search success: A review and integration of the predictors,

 behaviors, and outcomes. In S. D. Brown & R. W. Lent (Eds.), *Career development

 and counseling: Putting theory and research to work* (pp. 155–179). Hoboken, NJ:

 Wiley.

Saks, A. M. (2006). Multiple predictors and criteria of job search success. *Journal of

 Vocational Behavior, 68,* 400-415.

Saks, A. M., & Ashforth, B. E. (2002). Is job search related to employment quality? It all

 depends on fit. *Journal of Applied Psychology, 87*, 646–654.

Sansone, C., & Thoman, D. B. (2006). Maintaining activity engagement: Individual

 differences in the process of self-regulating motivation. *Journal of Personality, 74*,

 1697–1720.

Spector, P. E. (2006). Method variance in organizational research - Truth or urban legend?

 Organizational Research Methods, 9, 221−232.

Taylor, S. M. (1988). Effects of college internships on individual participants. *Journal of

 Applied Psychology*, 73, 393–401.

Turban, D. B., Stevens, C. K., & Lee, F. K. (2009). Effects of conscientiousness and

 extraversion on new labor market entrants' job search: The mediating role of

 metacognitive activities and positive emotions. *Personnel Psychology, 62,* 553–573.

Vancouver, J. B., & Day, D. V. (2005). Industrial and organisation research on self-regulation: From constructs to applications. *Applied Psychology: An International Review, 54*, 155–185.

Van Hooft, E. A. J. (2014). Motivating and hindering factors during the reemployment process: the added value of employment counselors' assessment. *Journal of Occupational Health Psychology, 19*, 1–17.

Van Hooft, E. A. J. (2018). Self-regulatory perspectives in the theory of planned job search behavior: Deliberate and automatic self-regulation strategies to facilitate job seeking. In U. C. Klehe & E. A. J. Van Hooft (Eds.), *The Oxford Handbook of Job Loss and Job Search* (pp. 205-221). New York: Oxford University Press.

Van Hooft, E. A. J., Born, M. P., Taris, T. W., van der Flier, H., & Blonk, R. W. B. (2005). Bridging the gap between intentions and behavior: Implementation intentions, action control, and procrastination. *Journal of Vocational Behavior, 66*, 238–256.

Van Hooft, E. A. J., & Noordzij, G. (2009). The effects of goal orientation on job search and reemployment: A field experiment among unemployed job seekers. *Journal of Applied Psychology, 94*, 1581-1590.

Van Hooft, E. A. J., Wanberg, C. R., & Van Hoye, G. (2013). Moving beyond job search quantity: Towards a conceptualization and self-regulatory framework of job search quality. *Organizational Psychology Review, 3,* 3-40.

Van Hoye, G. (2018). Job search behavior as a multidimensional construct: A review of different job search behaviors and sources. In U. C. Klehe & E. A. J. Van Hooft (Eds.), *The Oxford Handbook of Job Loss and Job Search* (pp. 259-274). New York: Oxford University Press.

Van Hoye, G., Saks, A. M., Lievens, F., & Weijters, B. (2015). Development and test of an integrative model of job search behavior. *European Journal of Work and Organizational Psychology, 24,* 544-559.

Van Hoye, G., Van Hooft, E. A. J., & Lievens, F. (2009). Networking as a job search behaviour: A social network perspective. *Journal of Occupational and Organizational Psychology, 82,* 661-682.

Wanberg, C.R. (2012). The individual experience of unemployment. *Annual Review of Psychology, 63,* 369–396.

Wanberg, C. R., Hough, L. M., & Song, Z. (2002). Predictive validity of a multidisciplinary model of reemployment success. *Journal of Applied Psychology, 87,* 1100–1120.

Wanberg, C. R., Kanfer, R., & Rotundo, M. (1999). Unemployed individuals: Motives, job search competencies, and job-search constraints as predictors of job seeking and reemployment. *Journal of Applied Psychology, 84*, 897–910.

Wanberg, C. R., Zhu, J., & van Hooft, E. A. J. (2010). The job-search grind: Perceived progress, selfreactions, and self-regulation of search effort. *Academy of Management Journal, 53,* 788–807.

Worthington, R. L., & Whittaker, T. A. (2006). Scale development research: A content analysis and recommendations for best practices. *The Counseling Psychologist, 34,* 806-838.

Zhao, H., & Liden, R. C. (2011). Internship: A recruitment and selection perspective. *Journal of Applied Psychology, 96,* 221–229.

Zikic, J., & Klehe, U.-C. (2006). Job loss as a blessing in disguise: The role of career exploration and career planning in predicting reemployment quality. *Journal of Vocational Behavior, 69,* 391–401.

Zimmerman, B. J. (2000). Attaining self-regulation: A social cognitive perspective. In M.

Boekaerts, P. R. Pintrich, & M. Zeidner (Eds.), *Handbook of self-regulation* (pp.

13–39). San Diego, CA: Academic Press.

Zottoli, M. A., & Wanous, J. P. (2000). Recruitment source research: Current status and

future directions. *Human Resource Management Review, 10*, 353–382.

Table 1

Items and Standardized Factor Loadings of Search Process Quality Scales

	Goal establishment	Planning	Goal striving	Reflection
I had a clear idea of the type of internship I was looking for	.85			
I set goals concerning the internship I wanted to do	.82			
I knew in which domain I wanted to do an internship	.71			
I developed a coherent plan about how, when and where I would search for an internship		.96		
I knew exactly how I would tackle the search for an internship		.73		
I set myself a deadline for when I aimed to have found an internship		.52		
I persisted to reach my goal			.69	
I made sure I did not get distracted whilst looking for an internship			.51	
I did not give up when I had a setback or rejection			.49	
I thought about my application to improve my subsequent performance				.84
I tried to learn something out of every application or contact with organizations				.70
When accepting an internship, I took my goals into account				.45

Table 2

Means, Standard Deviations, Internal Consistencies and Correlations of Study Variables

Variable	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Control variables																
1 Sex[a]	.52	.50	-													
2 Marketing[b]	.21	.41	.17*	-												
3 HRM[b]	.17	.38	.38**	-.23**	-											
4 IT[b]	.13	.34	-.17*	-.20**	-.17*	-										
5 Taxation[b]	.13	.33	.10	-.19**	-.17**	.15**	-									
Search process quality																
6 Goal establishment	3.41	.90	-.03	.10	-.15*	-.07	.20**	(.83)								
7 Planning	3.21	.93	.10	-.11	-.00	-.01	.15*	.27**	(.75)							
8 Goal striving	3.52	.63	.13	.01	.04	.13	.01	.13	.28**	(.55)						
9 Reflection	3.95	.63	-.01	-.02	-.09	.04	.13	.25**	.37**	.28**	(.78)					
Metacognitive activities																
10 Metacognitive activities	3.29	.72	.18*	-.01	-.02	.03	.15*	.28**	.45**	.42**	.56**	(.78)				
Search intensity																
11 Search intensity	2.45	.62	.17*	.13	-.05	.07	-.05	.09	-.14	.25**	.18*	.27**	(.72)			
Search success																
12 Satisfaction	4.19	.77	.04	.16*	.11	-.05	-.14	.12	.01	.04	.26**	.15*	.05	(.79)		
13 Perceived fit	3.77	.84	.07	.06	.17*	-.04	-.00	.15*	.13	.09	.27**	.16*	.01	.70**	(.78)	
14 Search speed	29.08	35.41	.23**	-.04	.12	-.17*	.25**	.05	.43**	-.04	-.01	.10	-.23**	.03	.17*	-
15 Performance	15.49	1.73	.10	.16*	.10	-.08	-.05	.14	-.01	-.01	.19**	.09	.06	.50	.34**	.02

Note. N varies from 178 to 191. Reliability coefficients are shown in parentheses along the diagonal of the table.
[a] Categories include 0 = *male*; 1 = *female*. [b] Omitted dummy category for education specialization is Finance.
* $p < .05$; ** $p < .01$.

Table 3

Hierarchical Regression Analyses of Search Success on Search Intensity and Search Process Quality

Predictor	Satisfaction			Perceived fit			Search speed			Performance		
	Step 1	Step 2	Step 3	Step 1	Step 2	Step 3	Step 1	Step 2	Step 3	Step 1	Step 2	Step 3
Control variables												
Sex[a]	-.04	-.05	-.02	-.05	-.05	-.03	.17*	.22**	.15	.01	.01	.05
Marketing [b]	.19*	.19*	.17*	.15	.15	.14	-.04	-.02	.04	.19*	.19	.17
HRM[b]	.16	.16	.17*	.25**	.25**	.26**	.07	.04	.07	.14	.15	.16
IT[b]	-.01	-.01	-.02	.04	.04	.04	-.11	-.08	-.07	-.02	-.02	-.01
Taxation[b]	-.08	-.07	-.13	.08	.08	.02	.22**	.21**	.19**	.00	.00	-.04
Search intensity		.06	-.04		.01	-.05		-.24**	-.11		.04	-.02
Search process quality												
Goal establishment			.11			.09			-.04			.13
Planning			-.12			-.01			.47***			-.11
Goal striving			.00			-.01			-.11			-.07
Reflection			.33***			.29**			-.14			.25**
R^2	.06	.06	.17***	.05	.05	.14*	.12***	.18***	.33***	.05	.05	.12*
Adjusted R^2	.03	.03	.12***	.02	.01	.09*	.10***	.15***	.29***	.02	.02	.07*
ΔR^2	.06	.00	.11***	.05	.00	.09*	.12***	.05**	.15***	.05	.00	.07*

Note. *N* varies from 178 to 184. Standardized regression coefficients (β) are reported for the step indicated.
[a] 0 = *male*; 1 = *female*. [b] Omitted dummy category for education specialization is Finance.
* $p < .05$. ** $p < .01$. *** $p < .001$.

Table 4

Hierarchical Regression Analyses of Search Success on Metacognitive Activities and Search Process quality

Predictor	Satisfaction			Perceived fit			Search speed			Performance		
	Step 1	Step 2	Step 3	Step 1	Step 2	Step 3	Step 1	Step 2	Step 3	Step 1	Step 2	Step 3
Control variables												
Sex[a]	-.04	-.08	-.03	-.05	-.08	-.04	.17*	.16	.13*	.02	-.01	.04
Marketing [b]	.19*	.19*	.17	.15	.15	.14	-.04	-.04	.03	.19*	.19*	.17
HRM[b]	.16	.17	.18	.25**	.26**	.27**	.07	.07	.09	.14	.15	.17
IT[b]	-.01	-.02	-.02	.04	.03	.03	-.11	-.11	-.07	-.02	-.02	-.01
Taxation[b]	-.08	-.10	-.13	.08	.06	.03	.22**	.22**	.20**	.00	-.01	-.03
Metacognitive activities		.19*	.04		.17*	-.02		.05	-.01		.09	-.01
Search process quality												
Goal establishment			.10			.09			-.05			.13
Planning			-.11			.02			.51***			-.10
Goal striving			-.02			-.02			-.14			-.07
Reflection			.31**			.28**			-.16*			.25**
R^2	.15	.09**	.17**	.05	.07*	14**	.12***	.12**	.32***	.05	.06	.12*
Adjusted R^2	.03	.06**	.12**	.02	.04*	.09**	.09***	.09**	.27***	.02	.02	.07*
ΔR^2	.06	.03*	.07**	.05	.03*	.07*	.12***	.00	.20***	.05	.01	.06*

Note. N varies from 178 to 184. Standardized regression coefficients (β) are reported for the step indicated.
[a] 0 = *male*; 1 = *female*. [b] Omitted dummy category for education specialization is Finance.
* $p < .05$. ** $p < .01$. *** $p < .001$.