

THE EFFECTS OF EARLY RECRUITMENT PRACTICES
ON ORGANIZATIONAL ATTRACTIVENESS:
A SERVICE QUALITY APPROACH

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We adopted a customer-supplier framework to investigate the effects of early recruitment practices on prospective applicants' attraction to Belgian national defense. Within this framework, prospective applicants are customers and recruiters are suppliers of information about available jobs. Specifically, we examined the relationship between prospective applicants' service quality assessment of their first recruitment station visit and organizational attractiveness. SERVQUAL was used as a measure of service quality, while organizational pursuit behavior (withdrawal reactions and application behavior), intentions-to-apply, and perceived valence of the organization served as measures of organizational attractiveness. The results showed that there is an effect of prospective applicants' perception of service quality on perceived organizational valence and intentions-to-apply, and to a lesser extent on prospective applicants' actual decision to apply. No relationship was found between service quality and self-selection status.

Introduction

In recent years, the shortages in different labor markets have become apparent across many countries in the European Community and the United States. In part due to the shortages of qualified workers, organizations are facing difficulties in attracting qualified applicants (Adams, 1998; Highhouse, Zickar, Thorsteinson, Stierwalt, & Slaughter, 1999; Rynes, 1991). Belgian national defense is no exception to this. These difficulties are expected to continue because of the rather low unemployment rate and the lack of qualified applicants for many positions (Judy, 1999). As a result, organizations have started devoting considerably more resources to attracting and retaining qualified individuals (Leonard, 1999). For example, many firms are increasing their budgets for recruitment and now spend approximately 31% of the HR budget on recruitment and retention (Leonard, 1999). The recruitment budget of Belgian defense for publicity campaign purposes also is gradually growing, and now amounts to 1500000 EURO, which is an increase of 20% compared to previous years.

In reaction to these developments in professional practice, issues regarding the attraction of applicants to firms have received increased attention in the research literature (see Barber, 1998; Breugh & Starke, 2000; Highhouse & Hoffman, 2001; Taylor & Collins, 2000, for reviews). Understanding factors that influence applicant attraction to firms is important because when top-qualified applicants withdraw from the applicant pool during the recruitment process the overall utility of the selection system is reduced (Boudreau & Rynes, 1985; French, 1987; Murphy, 1986; Murphy & Davidshofer, 1988). The importance of this issue is highlighted by evidence that suggests that more qualified individuals may be more likely to react to negative information about a job or organization during a recruitment process because they have more options available (Rynes, Bretz, & Gerhart, 1991). Given the apparent importance of recruitment to

overall selection utility, it is not surprising that applicants' reactions to recruitment activities have received a great deal of attention in recruitment literature (e.g., Harris & Fink, 1987; Powell, 1984, 1991; Rynes, 1991; Rynes & Barber, 1990; Rynes, Bretz, & Gerhart, 1991; Rynes & Miller, 1983; Taylor & Bergmann, 1987; Turban, 2001; Turban & Dougherty, 1992; Turban, Forret, & Hendrickson, 1998; Wanous & Colella, 1989). Although some evidence indicates that recruiters may have a direct effect on applicant attraction to firms (Alderfer & McCord, 1970; Harris & Fink, 1987; Powell, 1991; Rynes, Bretz, & Gerhart, 1991; Schmitt & Coyle, 1976; Turban & Dougherty, 1992), other evidence suggests that recruiter behaviors do not influence attraction beyond the effects of job attributes (Goltz & Giannantonio, 1995; Rynes & Barber, 1990; Rynes, Heneman, & Schwab, 1980; Taylor & Bergmann, 1987; Turban, 2001; Turban, Forret, & Hendrickson, 1998).

The present study contributes to the literature by focusing on service quality of recruitment activities as a predictor of applicant attraction. We adopted a customer-supplier model because of the growing emphasis on quality and customer service within Belgian defense. Applied to recruitment activities, the model views prospective applicants as customers and the recruiters as suppliers, or vendors, of available jobs. Recruiters should know and understand their customers' (prospective applicants') product and service (e.g., recruitment process) preferences, and try to supply services that meet their customers' expectations and needs. Failure to do so may result in fewer customers (i.e., fewer applicants) (Smither, Reilly, Millsap, Pearlman, & Stoffey, 1993).

Youngsters who want to join Belgian national defense are obliged to pay a visit to one of our recruiting stations. The recruiters are trained to welcome visitors, to provide the necessary information, to answer additional questions visitors have, and to register the application in case someone wants to enter. They represent the first direct contact youngsters have with defense. Until that moment most of them have limited information about the organization. With this research we want to examine whether there is a relationship between perceived service quality and organizational attractiveness. We are not aware of any previous study investigating the influence of recruitment activities on applicant attraction using a service quality framework. Organizational pursuit behavior (i.e., withdrawal reactions and application behavior), intentions-to-apply, and perceived valence of the organization are utilized as measures of organizational attractiveness.

Theoretical background

As discussed in the introduction, whether and how recruiter's behaviors influence applicant attraction to the firm are somewhat debatable. Based on premises of the elaboration likelihood model of persuasive communication (Petty & Cacioppo, 1986), it seems likely that recruiters will have a direct influence on applicant attraction to firms beyond the effects of job and organizational attributes (Turban, Forret, & Hendrickson, 1998). The elaboration likelihood model argues that when the ability and/ or motivation to process information are low, individuals will rely to some extent on peripheral cues. Applicants frequently have incomplete information about a company at early recruitment stages, and therefore have limited ability to examine organizations accurately. They typically have limited contact with potential employers and possess insufficient information about job and organizational characteristics at the time job choice decisions are being made (Dipboye, 1992; Harris, 1989; Rynes, 1991; Rynes, Heneman, & Schwab, 1980). As a result, an applicant may be more influenced by salient environmental cues, such as the attractiveness of the source of the information, than by the information presented, such as job and organizational attributes. This argument suggests that recruiters, who are salient

environmental cues, will have a direct influence on attraction above the effects of job and organizational attributes. For example, a recruiter who emphasizes and acts in a personal manner may lead to positive direct effects on applicant attraction to the organization because the applicant feels a sense of positive affect toward the recruiter that is generalized to the firm (Turban, Forret, & Hendrickson, 1998). Although there is substantial evidence supporting the hypothesized direct effect (Alderfer & McCord, 1970; Harris & Fink, 1987; Powell, 1991; Rynes, Bretz, & Gerhart, 1991; Schmitt & Coyle, 1976; Turban & Dougherty, 1992), recent studies suggest that the effect of recruiter behaviors on applicant attraction is rather indirect (Goltz & Giannantonio, 1995; Turban, 2001; Turban, Forret, & Hendrickson, 1998). Based on propositions from signaling theory (Spence, 1973, 1974), scholars have suggested that without perfect information applicants are likely to make inferences about unknown organizational and job attributes based on observations made during the recruitment process (Breugh, 1992; Rynes, 1991; Schwab, Rynes, & Aldag, 1987; Taylor & Bergmann, 1987). More specifically, applicants may interpret recruitment activities as providing signals concerning working conditions in the firm (Breugh, 1992; Rynes, 1991). For example, unimpressive recruitment materials may signal that the company does not invest much in developing human resources, resulting in low attraction to the firm (Turban, 2001). Analogously, when recruiters provide more information to applicants about the job and the organization, applicants will have more positive perceptions of the job attributes (assuming the information is positive) (Turban, Forret, & Hendrickson, 1998). In a nutshell, there is a vast amount of evidence suggesting that there is an effect – whether it is direct or indirect – of recruitment activities on applicant attraction.

With this research we want to extend earlier research by investigating the effect of recruitment activities on applicant attraction using the Gaps Model of service quality (Parasuraman, Zeithaml, & Berry, 1985, 1988; Zeithaml, Berry, & Parasuraman, 1988). This model suggests that “service quality, as perceived by customers, stems from a comparison of what they feel service firms *should* offer (i.e., from their expectations) with their perceptions of the performance of firms providing the services” (Parasuraman, Zeithaml, & Berry, 1988, p. 16). The term “expectations” as used in the service quality literature differs from the way it is used in the consumer satisfaction literature. Specifically, in the satisfaction literature, expectations are viewed as *predictions* made by consumers about what is likely to happen during an impending transactions or exchange (Parasuraman, Zeithaml, & Berry, 1988). Since service quality is an evaluation similar to attitude (Carman, 1990; Parasuraman, Zeithaml, & Berry, 1985), measures of “importance” of various service attributes should also be considered, as emphasized by attitude theory. Consequently, perceived overall service quality (Q) is considered as a multidimensional construct composed of the *weighted* differences between perceptions (P) and expectations (E). Written in a linear compensatory, expectancy value formulation, this definition becomes,

$$Q = \sum I_i (P_i - E_i)$$

Where: I is the importance of service attribute i ; the sum is over the K service attributes.

In a recruitment context, prospective applicants are customers and recruiters are suppliers. The recruiters supply/ sell available jobs, or provide visitors with information about the organization and its jobs, the latter being the case in Belgian defense. By defining recruitment as a series of service-related activities, the Gaps Model of service quality can be applied to it. Specifically, this research intended to examine whether perceived service quality is related to prospective applicant attraction to the organization. It seems likely that prospective applicants feel more attracted to an organization that is perceived as offering quality recruitment services. The most direct and from a

recruiter's viewpoint probably most relevant measure of attraction is actual organizational pursuit behavior after visiting a recruiting station. The applicant reactions literature suggests that those who hold a negative perception of the process by which hiring decisions are made will be less likely to pursue employment with an organization, and to reapply to the organization if rejected (e.g., Bauer, Maertz, Dolen, & Campion, 1998; Kluger & Rothstein, 1993; Macan, Avedon, Paese, & Smith, 1994; Ployhart & Ryan, 1998; Smither, Reilly, Millsap, Pearlman, & Stoffey, 1993; Stinglhamber, Vandenberghe, & Brancart, 1999; Truxillo & Bauer, 1999). Although these studies particularly focussed on applicants' reactions to selection tests, we expect that their conclusions also go for the application procedure in general. Therefore, we propose the following hypotheses:

HYPOTHESIS 1a: Prospective applicants not applying will evaluate the quality of recruitment services more negative than those who actually apply.

HYPOTHESIS 1b: Applicants self-selecting out will evaluate the quality of recruitment services more negative than applicants continuing the selection process.

Although actual pursuit behavior may be the most appropriate measure of organizational attraction, in most previous studies usually indirect measures of attraction are used, including items assessing company attitudes and intentions (e.g., Fisher, Ilgen, & Hoyer, 1979; Highhouse, Stierwalt, Bachiochi, Elder, & Fisher, 1999; Honeycutt & Rosen, 1997; Macan, Avedon, Paese, & Smith, 1994; Rynes & Connerly, 1993; Schwoerer & Rosen, 1989; Turban, Forret, & Hendrickson, 1998; Turban & Greening, 1996; Williams & Bauer, 1994; Yüce & Highhouse, 1998). In our present investigation, we also included both attitudes and intentions-to-apply as additional, indirect measures of attraction, which results in following hypotheses:

HYPOTHESIS 2a: Service quality has a positive effect on prospective applicants intentions-to-apply.

HYPOTHESIS 2b: Service-quality has a positive effect on prospective applicants' attitude toward the organization.

An interesting feature of company attitude and intention items is that they seem to map on the components of Fishbein and Ajzen's (1975) theory of reasoned action. This theory assumes that human behavior is the culmination of a rational sequence of cognitions. In general, the theory of reasoned action suggests that the most proximal determinant of behavior is a person's intention to engage in it, and intention is a function of attitude toward the behavior. Thus, attitudes influence behavior to the extent that they influence intentions to engage in that behavior. In line with this theory, we hypothesize attitude toward the organization to play a mediating role between service quality assessment and intentions-to-apply. Additionally, earlier research based on Vroom's (1964) expectancy theory suggests that increased expectancy for receiving an offer should result in the increased motivation to pursue an offer (e.g., Barber & Roehling, 1993; Heriott & Rothwell, 1981; Rynes & Lawler, 1983). As a consequence, we propose that the effect of service quality on intentions-to-apply will be mediated by prospective applicants' perceived job chance.

HYPOTHESIS 3a: *The relationship between service quality and intentions-to-apply will be mediated by prospective applicants' attitude toward the organization.*

HYPOTHESIS 3b: *The relationship between service quality and intentions-to-apply will be mediated by prospective applicants' perceived job chance.*

Because of its practical value, we additionally investigated the role of the time delays between recruitment phases. Earlier research suggested that time delays between recruitment phases could have substantial effects on the size and composition of the applicant pool (e.g., Arvey, Gordon, Massengill, & Mussio, 1975; Rynes, Bretz, & Gerhart, 1991; Rynes, Heneman, & Schwab, 1980). However, because of its typicality we find it risky to generalize these findings to the Belgian situation beforehand. In Belgian national defense, it is common policy that prospective applicants are sent home after their initial visit to a recruiting station in order to process all the information before they can actually apply. We find, partly as a result of this policy, that it is no exception that several weeks expire between a prospective applicant's initial informational visit and his/ her application at the same recruiting station. After applying, the selection procedure starts at the recruiting center by means of a computerized cognitive test. For those who pass the test, an appointment is made with the selection center in Brussels for a medical, physical and psychological examination. The time delay between the application and test-taking at the selection center usually varies between one week and one month. To investigate the relationship between time delay and job pursuit behavior, the following research question is formulated:

RESEARCH QUESTION 1: *Is there a significant negative relation between time delay and job pursuit behavior?*

Method

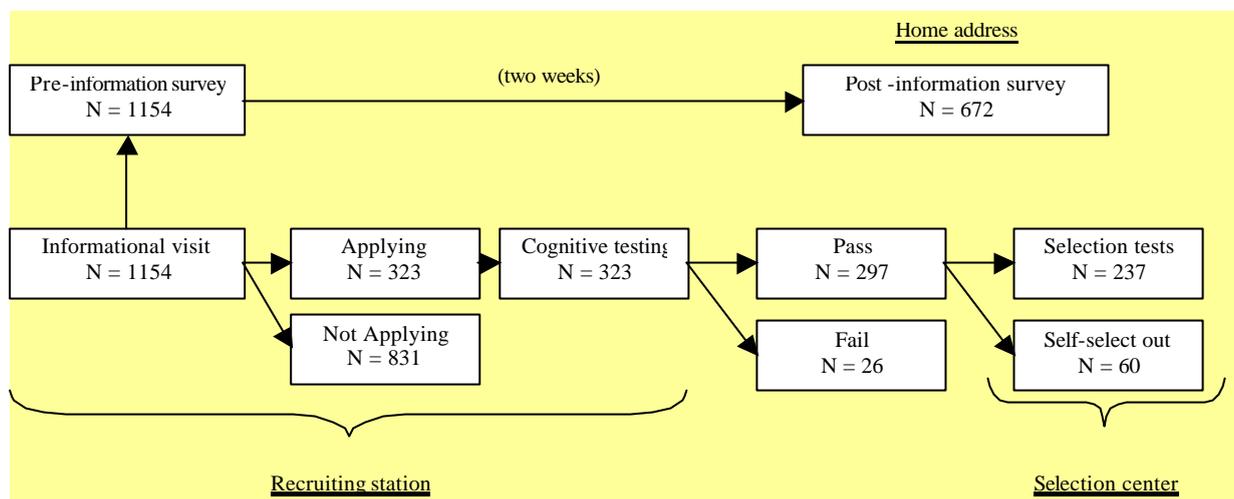
Procedure

Figure 1 provides a schematic of our data collection procedure and the hiring process. Data were collected from all persons visiting a recruiting station for the first time and showing real interest in a job in defense. Immediately after entrance, recruiters solicited participation from visitors who were assured of the confidentiality of their responses and were asked to complete a survey prior to the information session and two weeks after the initial visit through mail. The first survey included an autobiographic form and the first part of the service quality questionnaire (SERVQUAL), in which visitors were asked about what they *expect* of excellent recruiting stations. In general, it took approximately 15-20 minutes to complete the survey. The recruiters were instructed to emphasize that the pre-information survey dealt with expectations only, and not with perceptions of the station in question. This was once more repeated in the survey itself. 1154 visitors completed the survey.

Approximately, two weeks after their initial visit to the recruiting station we mailed the second part of the survey to all 1154 visitors who had completed the first part. This post-information survey included measures of organizational attraction, an inventory of possible reasons not to apply, and the second part of the service quality questionnaire (SERVQUAL), in which former visitors were asked about their *perceptions* of the level of service quality offered by the particular station they visited. 672 visitors completed and sent back the survey, which corresponds with a

response rate of 58%. 135 cases were deleted because of missing or invalid data. Most analyses were conducted using these remaining 537 cases.

Figure 1
Schematic of data collection and hiring process



Respondents

The majority of the respondents were male (85%), and were French-speaking (54%). 202 respondents were unemployed (32%). A few already had a job at the time they visited the recruiting station (21%). Most of the respondents, however, were secondary school students (38%) looking for a job or only for information. Consequently, the majority of respondents had no (47%) or very little (less than one year) work experience (18%). Most of the respondents had very little experience with procedures used by organizations to recruit/ select individuals (88%). The average age of the respondents was 21.

Measures

Prospective applicants' assessment of recruitment service quality. To measure service quality of early recruitment practices we made use of the SERVQUAL scale. The SERVQUAL scale represents one of the major outcomes of the programmatic research initiated by Parasuraman and colleagues (Parasuraman, Zeithaml, & Berry, 1985, 1988; Parasuraman, Berry, & Zeithaml, 1991). In the conceptual models developed by these researchers, service quality is the key outcome variable. It is a five-dimensional construct, consisting of Tangibles, Reliability, Responsiveness, Assurance, and Empathy. In its finalized form SERVQUAL contains 22 pairs of Likert-type items. One-half of these items are intended to measure consumers' expected levels of service for a particular service industry. The other 22 matching items are intended to measure the perceived level of service provided by a particular organization. The items are presented in a 7 point response format, with anchors "strongly agree" (7) and "strongly disagree" (1). Service quality is then measured by calculating the difference or gap score between corresponding items (i.e., perceptions minus expectations). The wording of all expectation items focus on what customers would expect from a company delivering excellent service. For instance, "Excellent XYZ will insist on error-free records". Each perception statement also contains a reference to company XYZ. For instance, "XYZ insists on error-free records". In this study we applied

SERVQUAL to the services offered by the Belgian recruiting stations. We translated the revised scale, and customized the wording and subject of some individual items to fit the Belgian recruitment setting. The adjusted SERVQUAL scale now consisted of 26 items.

To verify the dimensionality of the 26 items, perception-minus-expectation gap scores (Qs) for these items were factor analyzed using exploratory factor analysis (EFA). Because SERVQUAL was hypothesized to have a five-dimensional structure, the initial analysis was constrained *a priori* to five factors. We used the maximum likelihood method of estimation, followed by a Varimax normalized rotation. After eliminating factorial complex items¹, we ended up with 19 items. The five factors explained 39.00% of the total variance. This solution was accepted, because the factor structure was interpretable, and because there was rather good agreement with the expected SERVQUAL dimensions.

In general, target loadings ($N = 19$) were consistently high (min = .34; max = .76; median = .51), while non-target loadings ($N = 76$) were low (min = -.02; max = .31; median = .12). The factor intercorrelations revealed some evidence of differential validity, indicating that the dimensions of the questionnaire were measuring different aspects of service quality (min = .33; max = .66; median = .58). The results are presented in Table 1, with the target loadings in bold.

Factor 1 accounted for 24.20% of the total variance (eigenvalue = 4.60) and consisted of items pertaining to the original Responsiveness and Assurance scales. This dimensional overlap in the present study was also reported earlier by Parasuraman, Berry, and Zeithaml (1991). Factor 2 consisted of two items of the original Tangibles scale, both pertaining to physical facilities and equipment, and accounted for 4.38% of the total variance (eigenvalue = .83). This finding is also consistent with the results of Parasuraman, Berry, and Zeithaml's study (1991). Factor 3 accounted for 3.86% of the total variance (eigenvalue = .73) and included four items pertaining to various SERVQUAL dimensions. Closer inspection of the item content revealed that all four items referred to some sort of information (e.g., conditions of employment). Therefore, it was decided to include this factor in the present study as an additional subject related service quality dimension. With four items, Factor 4 accounted for 3.70% of the total variance (eigenvalue = 0.70). All items came out the Reliability scale. Factor 5 included three items of the Empathy scale, and accounted for 2.86% of the total variance (eigenvalue = 0.54).

The findings from the factor analysis suggest the following key conclusions: (1) the degree of overlap between Responsiveness and Assurance was substantial, which made them virtually indistinguishable. As a result, we combined the two into a single factor; (2) a subject related factor emerged, referring to recruiters' main activity that is to provide visitors with information; and (3) the eigenvalues of four out of five factors were below 1.00. However, because of the criterion of interpretability, and the resemblance with the original SERVQUAL dimensions, we preferred the five-factor EFA solution.

¹ Factorial complex items (Q3, Q4, Q13, Q16, Q21, Q25, Q26) were excluded from further analysis.

Table 1
Factor loadings and intercorrelations on a four EFA/ML solution with varimax normalized rotation of SERVQUAL Q scores*

Items	Factor loadings				
	F1	F2	F3	F4	F5
Q10	.467	.085	.140	.235	.081
Q11	.671	.116	.052	.094	.226
Q12	.690	.122	.201	.118	.160
Q14	.449	-.020	.308	.132	.002
Q15	.510	.026	.105	.290	.048
Q17	.410	.060	.165	.029	.196
Q1	.077	.538	.146	.106	.105
Q2	.105	.765	.073	.087	.043
Q9	.311	.089	.472	.292	.076
Q22	.131	.114	.561	.152	.198
Q23	.148	.062	.607	.067	.121
Q24	.177	.137	.498	.153	.170
Q5	.098	.123	.042	.620	.153
Q6	.145	.122	.151	.382	.079
Q7	.194	.076	.302	.506	.120
Q8	.124	-.007	.091	.547	.061
Q18	.220	.064	.095	.171	.337
Q19	.127	.112	.247	.100	.701
Q20	.283	.050	.200	.246	.447
Factors	1	2	3	4	5
1	(.75)	--	--	--	--
2	.328	(.61)	--	--	--
3	.648	.402	(.70)	--	--
4	.573	.357	.609	(.64)	--
5	.652	.349	.659	.595	(.58)

Note. * Perception-minus-expectation scores.
Alphas are given in parentheses.

The reliability of the scales was assessed using reliability and item analysis. Reliability coefficients (Cronbach's alphas) were respectively .75 for Responsiveness/ Assurance ($N = 6$), .61 for Physical facilities/ equipment ($N = 2$), .70 for Information ($N = 4$), .64 for Reliability ($N = 4$), and .58 for Empathy ($N = 3$). In general, the coefficients are quite acceptable for developmental and research purposes (Cascio, 1991; Nunnally, 1978). Moreover, it should be noted that the scale reliability of our instrument might have been lowered due to the relatively small number of items in the five scales.

Prospective applicants' attraction to the organization. We included both direct and indirect measures of organizational attractiveness. Indirect measures were prospective applicants' attitude toward the organization, and prospective applicants' intentions-to-apply. Organizational pursuit behavior was used as a direct measure of attraction.

Attitude toward the organization. We measured prospective applicants' attitude towards the organization in the post-information survey through valence perceptions of the organization. Respondents indicated on a single item "how attractive is this company as an employer, for you?" (1 = *not attractive at all*, 6 = *very attractive*). Previous research on organizational attractiveness also made use of valence perception items (e.g., Harris & Fink, 1987; Turban & Dougherty, 1992; Turban, Forret, & Hendrickson, 1998).

Intentions-to-apply. In the post-information survey subjects were forced to make a choice between whether or not they still intended to apply. Only six respondents indicated that they were undecided, and that they could therefore not answer the question. These cases were eliminated from further analyses.

Organizational pursuit behavior. For a period of six months, we registered all persons visiting a recruitment station and verified at various times later on whether or not they had already applied. Next to it, for all applicants we checked whether or not they self-selected out during the selection procedure.

Perceived job chance. Perceived job chance was measured using one item: "How likely do hold it to receive a job offer?" The item was rated on a six-point Likert scale (1 = *very unlikely*, 6 = *very likely*).

Time delay. Time delay was grasped by the number of days in between the test-taking at the recruiting station and the remainder of the selection procedure at the selection center.

Analyses

STATISTICA '98 Edition (StatSoft, Inc, 1998) was used for all statistical analyses. Of all applicants, only those who filled in the post-information survey before applying were considered. This is because immediately after subjects have applied, they are invited to take the cognitive test at the same recruiting station. The outcome of this test is likely to distort applicants' perceptions of recruiters' preceding informational activities for which the post-information survey was in fact designed.

Results

Table 2 presents the descriptive statistics and correlations of the variables included in the study. For three out of five factors, the perception-minus-expectation gap scores were positive. Physical facilities/ equipment clearly is valued most negative. Perceived job chance showed significant correlations with Information, Reliability, and Empathy. Perceived valence of the organization showed significant correlations with Empathy, Reliability, Physical facilities/ equipment, and Responsiveness/ Assurance. The average time delay amounted to approximately 19 days.

Table 2
Descriptive statistics and correlations of the variables included in the study

	<i>N</i>	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7
1. Responsiveness/ Assurance	519	.15	.76							
2. Physical facilities/ equipment	519	-.29	1.41	.23**						
3. Information	517	-.09	.85	.48**	.28**					
4. Reliability	519	.38	1.01	.39**	.22**	.41**				
5. Empathy	519	.13	1.13	.46**	.22**	.43**	.38**			
6. Perceived valence	611	5.26	.88	.11*	.12*	.09	.15**	.19**		
7. Perceived job chance	630	4.5	1.05	.05	-.01	.14*	.10*	.11*	.33*	
8. Time delay	291	18.9	12.32	-.05	-.06	-.01	-.06	-.04	-.05	-.10

Note. * $p < .05$. ** $p < .01$.

Test of hypotheses

Hypotheses 1a and 1b. A one-way between-subjects MANOVA was used to assess differences in the five service quality dimensions according to application status (0 = *has not applied*; 1 = *has applied*). Because of missing data, only 342 cases were available for the analysis. Means and univariate tests are presented in Table 3. Analyses revealed only significant differences for Reliability, $F(1, 340) = 4.83$, $p < .05$, suggesting that those who do not apply find recruiters less reliable than those who apply. However, after introducing perceived job chance as a covariate, the difference was no longer significant. Accordingly, Hypothesis 1a, that those not applying would perceive the quality of recruitment services less positive than those who actually apply would, did not receive strong support. Multivariate analyses revealed little differences between selection status groups (0 = *has self-selected out*; 1 = *has continued the procedure*) in service quality dimensions; thus, in the interest of space, these results are not presented in the tables. Hypothesis 1b, that those self-selecting out would perceive the quality of recruitment services more negatively than those continuing the selection procedure, was not supported.

Table 3
Differences by application status

Measure	Applied		Not Applied		<i>F</i>	<i>df</i>	<i>p</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
Service Quality					1.96	5, 336	<i>ns</i>
1. Responsiveness/ Assurance	.152	.87	.160	.76	.01	1, 340	<i>ns</i>
2. Physical facilities/ equipment	-.136	1.20	-.384	1.54	2.27	1, 340	<i>ns</i>
3. Information	-.123	.99	-.102	.87	.04	1, 340	<i>ns</i>
4. Reliability	.533	1.00	.261	1.12	4.83	1, 340	.05
5. Empathy	.216	1.03	.056	1.22	1.46	1, 340	<i>ns</i>

Hypotheses 2a and 2b. A one-way between-subjects MANOVA revealed significant differences in service quality assessments according to intentions-to-apply (0 = *does not intend to apply*; 1 = *intends to apply*), $F(5, 333) = 5.44$, $p < .001$. The follow-up univariate tests are presented in Table 4. Main effects were found for four out of five service quality dimensions. Subjects intending to apply were more positive about Responsiveness/ Assurance, $F(1, 337) = 6.01$, $p < .05$, Physical facilities/ equipment, $F(1, 337) = 7.42$, $p < .01$, Reliability, $F(1, 337) = 12.68$, $p < .01$.

.001, and Empathy, $F(1, 337) = 10.28, p < .01$, than subjects not intending to apply. As can be seen from Table 2, perceived organizational valence correlated significantly with the dimensions Responsiveness/ Assurance ($r = .11, p < .05$), Physical facilities/ equipment ($r = .12, p < .05$), Reliability ($r = .15, p < .01$), and Empathy ($r = .19, p < .001$). To further examine Hypothesis 2b, a hierarchical multiple regression analysis was performed with the information we had collected. Perceived job chance was entered in the first step of the regression analysis. As shown in Table 5, perceived job chance explained 17.19% of the variance, $F(1, 339) = 70.36, p < .001$. The set of service quality variables, which were entered in the next step, were responsible for a significant proportion of additional variance in the criterion of 4.00%, $F(6, 334) = 14.93, p < .001$. Physical facilities/equipment ($\hat{a} = .12, p < .05$), and Empathy ($\hat{a} = .14, p < .05$) emerged as significant predictors. In particular, when stations were perceived as better equipped and recruiters as more empathic, prospective applicants felt more attracted to the organization. Thus, Hypotheses 2a and 2b were supported.

Table 4
Differences by intentions-to-apply

Measure	Intends to apply		Does not intend to apply		F	df	p
	M	SD	M	SD			
Service Quality					5.44	5, 333	.001
1. Responsiveness/ Assurance	.197	.75	-.102	1.00	6.01	1, 337	.05
2. Physical facilities/ equipment	-.216	1.39	-.816	1.66	7.42	1, 337	.01
3. Information	-.110	.90	-.143	.98	.05	1, 337	ns
4. Reliability	.435	1.08	-.153	.98	12.68	1, 337	.001
5. Empathy	.189	1.10	-.381	1.42	10.28	1, 337	.01

Table 5
Overview of hierarchical regression analyses of Perceived Organizational Valence on Perceived Job Chance and Service Quality dimensions

Model	R ²	ΔR ²	B	\hat{a}	t(334)	p
1. Perceived job chance	.172	.172	.403	.415	8.39	.001
2. Service Quality	.212	.040				
Responsiveness/ Assurance			.035	.031	.51	ns
Physical facilities/ equipment			.075	.118	2.29	.05
Information			-.096	-.096	-1.57	ns
Reliability			.024	.028	.50	ns
Empathy			.112	.143	2.32	.05

Hypotheses 3a and 3b. We predicted organizational attitude to mediate the relationship between service quality and intentions-to-apply. MANCOVA on service quality with attitude as a covariate variable did not reveal a significant main effect of attitude. We still found a main effect of intentions-to-apply, $F(5, 332) = 293, p < .05$, as was the case in Hypothesis 2a. However, the follow-up univariate tests revealed a main effect of attitude for Physical facilities/equipment, $F(1, 336) = 4.16, p < .05$, and Empathy, $F(1, 336) = 7.63, p < .01$. In accordance with Hypothesis 3a, there was no longer an effect of intentions-to-apply on Physical facilities/equipment and Empathy after correcting for organizational attitude. Only for Reliability the effect of intentions-to-apply remained, $F(1, 336) = 6.61, p < .05$. Hypotheses 3b predicted perceived job chance to mediate the

relationship between service quality and intentions-to-apply. MANCOVA on service quality with perceived job chance as a covariate variable did not reveal a significant main effect of perceived job chance. Contrary to our expectations, we still found a main effect of intentions-to-apply on service quality, $F(5, 331) = 5.05, p < .001$. Univariate tests showed a main effect of perceived job chance for Information, $F(1, 335) = 7.37, p < .01$. After correcting for perceived job chance, we still observed a main effect of intentions-to-apply for Responsiveness/ Assurance, $F(1, 335) = 5.17, p < .05$, Physical facilities/equipment, $F(1, 335) = 6.12, p < .05$, Reliability, $F(1, 335) = 8.57, p < .01$, and Empathy, $F(1, 335) = 6.04, p < .05$. Thus, Hypothesis 3a was at least partially supported. Hypothesis 3b on the other hand, did not receive strong support.

Research Question 1. A one-way between-subjects ANOVA with time delay (in days) as the dependent variable revealed a significant effect of selection status, $F(1, 281) = 6.28, p < .05$, indicating that those self-selecting out ($M = 22.65$) had to wait longer than those continuing the selection procedure ($M = 17.90$). We reached the same conclusion based upon the median, which was 23 days for the former, and 15 days for the latter.

Discussion

With this research we wanted to extend existing research on applicant attraction by adopting a customer-supplier framework. Within this framework, recruiters are considered as representatives of the organization, whose task it is to provide prospective applicants with quality information about career possibilities and conditions of employment. By offering excellent services, they may contribute to the attractiveness of defense. In the present study, we investigated the relationship between prospective applicants' service quality assessment of their first recruitment station visit and organizational attractiveness. The effects of recruiter behavior on applicants have already been extensively examined in previous research (e.g., Harn & Thornton, 1985; Harris & Fink, 1987; Linden & Parsons, 1986; Powell, 1984; Taylor & Bergmann, 1987). However, in most of these studies the initial employment interview is carried out by recruiters, who therefore have a selection assignment. This was not the case in the present study, in which recruiters primarily provided prospective applicants with job- and organization-related information. Another striking distinction with our study is that in most previous research on recruiter behavior the questioning of applicants only took place after the interview, and that preinterview expectations were completely left out of consideration (for an exception see: Herriott & Rothwell, 1981). A third difference is that we not only focused on individual recruiter behavior as was the case in previous studies, but also involved in our study the recruiting environment (e.g., infrastructure).

Judging by the significant negative gap score, prospective applicants' expectations of Physical facilities/ equipment remained to a large extent unfulfilled. On the other hand, most prospective applicants were elated by the recruiters' Reliability, apart from those who did not intend to apply after their initial visit. The latter also showed themselves more negative about the recruiter's Responsiveness/ Assurance, Empathy, and about the recruiting station's Physical facilities/ equipment. Moreover, prospective applicants not intending to apply after the initial visit valued the organization less than all others. Those who actually applied were most enthusiastic about the recruiter's Reliability. The results supported the hypothesis that service quality, defined as the difference between prospective applicants' expectations and perceptions of recruitment services, has an influence on applicant attraction to the organization. However, the effect size depended on the measure of organizational attractiveness. The largest effects were found for attitude toward the organization and intentions-to-apply. Furthermore, attitude was found to mediate the effect of service quality on intentions-to-apply. There was only a small effect of service quality on

applicants' decisions to apply, and no effect on withdrawal behavior. These findings are perfectly in line with Fishbein and Ajzen's (1975) theory of reasoned action.

Additionally, we found that the waiting time between the application and the test-taking at the selection center differed significantly for those who self-selected out and those who continued the selection procedure. Those who finally self-selected out would have had to wait a week longer than those who continued.

How can these results contribute to recruitment policy? Firstly, the infrastructure of the recruiting stations could be improved. We expect this to have a positive effect on prospective applicants' attitude toward the organization, and consequently also on their intentions and decisions to apply. Secondly, we emphasize the importance of recruiter training and selection. Apparently, trustworthiness and empathy are significant recruiter qualities. Therefore, we advise to give current recruiters the opportunity to develop these qualities, and to select future recruiters on the basis of these criteria. One may notice that the effect of service quality on actual behavior was rather small, and that weighty countermeasures are premature. The effect on behavioral measures was indeed limited, indicating that other factors played a more important role (e.g., economics, family dynamics, and peer pressure). On the other hand, service quality had a direct effect on attitudes and to a lesser extent on intentions, and therefore indirectly on behavior. But even more important is that the organizational image partially depends on what individuals, both applicants and non-applicants, have experienced during their visit at the recruiting station. Their impressions and perceptions are passed on, thereby modeling the image of national defense in society. Thirdly, the time delay between applying at the recruiting station and test-taking at the selection center should be reduced. Of course, the less time in between, the less opportunity someone has to apply elsewhere, and the more a prospective applicant feels he or she is of importance to the organization. Furthermore, a swift procedure gives evidence of organizational skills, which might win over a few doubters.

Contributions, Limitations and Further Research Opportunities

A notable contribution of this study is that it extended earlier research on recruitment practices by introducing a marketing-related construct, viz. service quality. The definition of service quality consists of expectations, perceptions and values, the constituent components of Vroom's (1964) theory on work motivation. Although the meanings of the constructs are slightly different, there exists a striking similarity between the two methods of approach. This study shows that marketing theory can be valuable to investigate psychological phenomena, and vice versa.

Irrespective of the integrating attempt, several limitations, as well as recommendations for future research, should be mentioned. First, to further explore the perception-minus-expectation gap scores, the expectations ratings and perceptions ratings of SERVQUAL should be factor analyzed separately. In addition, further research should include measures of importance, as suggested by Parasuraman, Berry, and Zeithaml (1991, p. 424). Furthermore, the survey still can be improved by extending the number of items belonging to each dimension. Then again, contrary to Parasuraman, Berry, and Zeithaml (1991), we did encounter problems with respondents not understanding the distinction between the expectancy and the perception part of SERVQUAL, suggesting that perhaps should be looked for an alternate measure of service quality. This thought is consistent with Hurley and Estelami's (1998) quest for alternative indexes of service quality. Additionally, future research might examine whether applicants have different expectations of recruitment and selection activities. In our opinion, this is rather unlikely since both originate in the psychological contract. For recent writings on the psychological contract, we refer to Rousseau (1989, 1990, 1995) and Rousseau and Parks (1993).

Although it is very constructive to know that prospective applicants are affected by the quality of service offered, it is equally important to understand the mechanisms involved. This boils down to the notorious question whether the effect of recruiters' activities on applicant attraction is direct or indirect. As mentioned before, this debate is still going on, although recent evidence supports the 'indirect effect' hypothesis (Turban, 2001). In the near future, researchers should continue to investigate how recruitment activities influence attraction (i.e., mediating models) and also investigate which types of recruitment activities – which service dimensions – have the greatest utility for increasing organizational attractiveness.

Acknowledgments

The views, opinions, and findings contained in this paper are solely those of the authors and should not be construed as an official Belgian defense position, policy, or decision, unless so designated by other documentation.

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