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# What do applicants want? Examining changes in attribute judgments over time

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Despite years of research examining the types of job and organizational attributes (e.g. pay, fit) that influence applicants' perceptions of organizational attractiveness, almost no research has examined how and why the weighting placed on these attributes may change across the stages of a recruitment and selection process. Using a longitudinal policy-capturing methodology, doctoral applicants to a psychology graduate programme were surveyed at three points in time. Results revealed the weighting of fit and funding (pay) attributes increased over time, and there were individual differences in attribute weighting over time. Individual differences in applicant marketability partially explained these changes.

The success of an organization lies in large part on the quality of its employees. Although there are many human resource practices that can influence the quality of human capital, two of the most important are recruitment and selection (e.g. Terpstra & Rozell, 1993). Recruitment is usually considered an organizational phenomenon, such as the '... practices and activities carried on by the organization with the primary purpose of identifying and attracting potential employees' (Barber, 1998, p. 5). However, considering the highly competitive market for attracting talent (Michaels, Handfield-Jones, & Axelrod, 2001), organizations must understand what their potential applicants want. A key to 'identifying and attracting employees' is an understanding of what factors are most/least attractive to one's applicant population. In line with this, recent research highlights the importance of considering recruitment practices from the perspective of the applicant (Breaugh & Starke, 2000; Ryan & Ployhart, 2000; Turban, 2001).

Theoretical work by Behling, Labovitz, and Gainer (1968) illustrates the importance of studying recruitment from the applicants' perspective. They proposed three implicit theories of job choice: objective factors, subjective factors, and critical contact theory.

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Objective factors theory suggests that applicants' job decisions are based on tangible job and organization attributes. Job seekers evaluate the advantages and disadvantages of an organization according to the tangibles offered, and these evaluations subsequently inform important outcomes such as applicants' attractiveness perceptions, acceptance intentions, and ultimate choice behaviour. Subjective factors theory maintains that applicants will evaluate aspects of the organization is environment to make assessments about how well s/he fits with the organization in terms of needs, personality, and values. Attraction, intentions, and choice are the result of finding an organization that can best meet his/her psychological needs, personality, and values; in other words, an organization with which there is high fit. Finally, critical contact theory suggests that applicants lack sufficient information about the job and organizational environment to make job-related decisions and thus rely on characteristics of the recruiter and recruitment process generally when making decisions.

Behling *et al*'s (1968) insights continue to be highly influential in modern recruiting theory. For instance, a plethora of research has demonstrated the significance of both types (objective and subjective) of attributes (Bretz & Judge, 1994; Cable & Judge, 1994, 1996, 1997; Carless, 2005; Chapman, Uggerslev, Carroll, Piasentin, & Jones, 2005) in influencing recruitment-related outcomes such as job-pursuit intentions, organizational attraction, and job choice. Objective and subjective factor theories are of particular relevance because this study is primarily interested in how applicants use information about the job and organizational environment during recruitment.

However, much of this theory and research is based on cross-sectional research (see Barber, 1998; Breaugh & Starke, 2000; Thomas & Wise, 1999). Indeed, Breaugh and Starke call for the structuring of future research with an appreciation for the complexity of the *longitudinal recruitment process*. Such concerns are consistent with recent theoretical awareness of the limitations of cross-sectional research for understanding dynamic longitudinal processes (e.g. Mitchell & James, 2001). Furthermore, research suggests that applicant decision strategies will change throughout recruitment (Osborn, 1990). Namely, Osborn maintains that early in recruitment, applicants use noncompensatory strategies to rule out unattractive alternatives. However, later in recruitment, applicant decision strategies become compensatory; in other words, high values on some attributes can make up for low values on another. By failing to consider the stage in which recruitment phenomena are being studied, it is difficult to determine when certain factors will be the most influential to applicant decision processes and researchers consequently run the risk of overlooking or underestimating the importance of different job-choice predictors.

While it is important to understand which attributes influence organizational attraction across stages of recruitment, it is equally important to understand *why* the weighting of these attributes may change across time. By weighting we are referring to the value applicants place on a particular attribute when making organizational decisions. Research suggests that applicant marketability (or perceived marketability) can influence their approach to the job-search process (Chapman *et al.*, 2005; Tenbrunsel & Diekmann, 2002; Trank, Rynes, & Bretz, 2002). For instance, Chapman *et al.* report that perceived alternatives, perceptions of hiring expectancies, and perceptions about one's performance during an application process can each influence recruitment-related outcomes (e.g. attraction, intentions). Consistent with previous research (Chapman *et al.*, 2005; Trank *et al.*, 2002), we propose that perceived marketability will influence weighting of job and organizational attributes. At early stages in the job-search process, and in the absence of objective offers, applicants will

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have to rely on perceptions of their marketability (e.g. GPA) and these perceptions will likely influence the weighting of various attributes when making organization attraction decisions. However, at later stages in the process applicants have a better sense of their true 'market value' as they receive (or do not receive) job offers. Applicants who receive fewer offers than expected will likely change the weighting they originally placed on certain job and organizational attributes.

Consequently, the goals of the present study are twofold. First, we examine how and when job and organizational attributes affect graduate school applicants' organizational attractiveness perceptions throughout various stages of the recruitment process. We study graduate applicants because the longitudinal nature of this study requires a fairly large number of applicants who are experiencing similar stages of the recruitment process; thus some level of control is needed. The graduate program recruitment process fulfils this requirement.<sup>1</sup> Consistent with objective and subjective factor theories, we propose that graduate applicants will use attribute information to form organizational attractiveness perceptions, and the weighting of this information will increase over time. Second, this study examines individual difference variables (relating to applicant marketability) that may explain why applicants weight job and organizational attributes differently over time. We propose that changes in applicant marketability will explain changes in attribute weighting, such that as applicants perceive increases in marketability they will use attribute information more discriminately when making attractiveness decisions. Towards this end, we propose a longitudinal model (see Figure 1) of the weighting applicants place on job and organizational attributes, and then test this model using a longitudinal policy-capturing study with graduate applicants at several critical points throughout the application process.

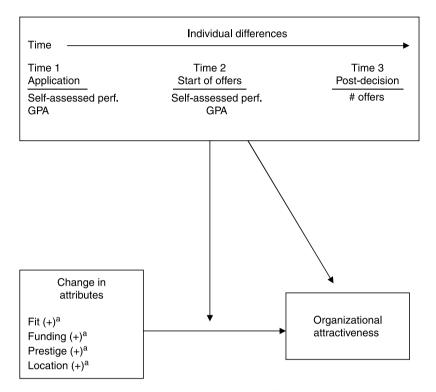
Overall, this study tests and extends recruitment theory by proposing an integrative model describing *how*, *when*, and *why* applicant decision-making changes, and may in turn contribute to practice by helping to understand the types of information most affecting organizational attractiveness at different stages of recruitment. Finding that applicants use attribute information differently across stages of recruitment could have potential implications for the manner with which organizations structure their recruitment processes and the type of information relayed at different stages. Furthermore, identifying predictors of such change will help advance theory of applicant decision making. Therefore, studying the individual difference moderators of the attribute-attraction relationship longitudinally allows a level of refinement not possible with cross-sectional research. For example, if the most desirable applicants manifest the most change in their attractiveness judgments, then organizations may lose the most qualified candidates if they do not alter the information presented to applicants.

#### Attributes affecting applicant organizational attractiveness perceptions

In one of the most influential theoretical approaches to job choice, Behling *et al.* (1968) provided insight into the attributes that impact applicant decision making,

<sup>&</sup>lt;sup>1</sup> It is also important to emphasize that research has not identified contextual moderators (e.g. job type) for recruitment theories, and no current theory of recruitment is sample-dependent. Nevertheless, we later discuss several steps to ensure the generalizability of graduate student applicants to applicants for real-world positions, as well as potential limitations with this sample.

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**Figure 1.** Longitudinal model of applicant attribute judgments. <sup>a</sup>Positive symbols for attributes indicate those expected to increase in weighting over time.

organizational attractiveness, and ultimately job-choice behaviour. The approaches offered by Behling *et al.* have been adopted by recruitment researchers to better understand the applicant-organizational attraction and job-choice processes (e.g. Cable & Judge, 1994; Carless, 2005; Chapman *et al.*, 2005; Feldman & Arnold, 1978; Jurgensen, 1978; Rynes & Lawler, 1983; Turban, Campion, & Eyring, 1995).

Behling *et al.*'s objective factors theory posits that applicants will assess the more objective features of the organization and job offer (e.g. pay, location) with regard to how attractive and important the attribute is to the individual, to form an overall evaluative judgment about the organization. It is the information gained about these objective attributes that drives job-related decisions. Subjective factors theory suggests that applicants evaluate less objective features of the organizations' environment to determine whether the organization will fulfil his/her psychological needs, personality, and values. To the extent the applicant perceives higher levels of congruence, s/he is more inclined to want to join that organization and find the organization more attractive. The subjective factors theory is similar to other fit theories such as Tom's Image Model (1971) or Schneider's (1987) Attraction-Selection-Attrition (ASA) model which suggest that individuals are drawn to organizations whose images and values match their own personalities and values.

Consistent with a needs-supplies perspective (Cable & DeRue, 2002, Simon, 1951), Behling *et al.* (1968) maintain that applicants will assess the characteristics of the job and organizational environment to determine whether the job and organization will

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fulfil his/her needs (whether tangible or psychological in nature). Empirical research suggests that some of the most influential needs driving job decisions are perceived *fit* with the job and organization (Bretz & Judge, 1994; Cable & Judge, 1994, 1996, 1997; Carless, 2005; Kristof-Brown, Jansen, & Colbert, 2002), *pay* (Barber, 1998; Cable & Judge, 1994; Powell & Goulet, 1996), organizational *prestige* (Turban *et al.*, 1995), and *location* (Powell & Goulet, 1996; Rynes & Lawler, 1983; Turban, Forret, & Hendrickson, 1998). For example, if an applicant highly values pay and needs a high pay to care for his/her family and the high pay is offered by the organization, it should follow that organizational attraction will be heightened.

While this research has done much to identify the attributes that applicants attend to in making job-related decisions, it has largely been cross-sectional. This is a potentially important limitation because recruitment is an inherently longitudinal process. Barber (1998) delineated recruitment into three distinct stages: that of generating applicants, maintaining applicants, and influencing applicants' job-choice decisions. As noted by Barber and others (see Breaugh & Starke, 2000; Carless, 2005), recruitment efforts should be tailored according to the stage of recruitment in order for recruitment to be maximally effective. The longitudinal research that has been conducted suggests applicant decision processes and the information attended to change across these stages (Osborn, 1990; Taylor & Bergmann, 1987).

Osborn (1990) maintains applicants' decision strategies change from noncompensatory to compensatory as the recruitment process progresses. This research is significant for two reasons. First, these findings demonstrate that applicant decision making does in fact change over time. Second, because the attributes that influence decision making may change through a recruitment cycle, these findings lend further support for the need for research to examine such processes longitudinally. It is worth noting that just as there is likely to be a change in weightings across time, it is equally important there is variability in attribute weightings at each time (essentially betweenperson variance). Without such between-person variance on attribute weighting, a given attribute cannot be diagnostic and hence will not be considered when making job-related decisions.<sup>2</sup>

In this study, we focus on fit, pay (funding), prestige, and location attributes. As noted earlier, previous research and theory suggests that they are often key drivers in influencing applicants' level of organizational attractiveness (Barber, 1998; Cable & Judge, 1994, 1996, 1997; Carless, 2005; Powell & Goulet, 1996; Turban *et al.*, 1998). We focus on organizational attractiveness perceptions as the dependent variable because previous research suggests that such perceptions are important throughout the stages of a staffing process (such as before an offer is made; Barber, 1998; Rynes, 1991; Rynes, Bretz, & Gerhart, 1991), and are an important determinant of job choice. Furthermore, we expect stage in the recruitment process to moderate the relationship between attribute weightings and organizational attraction. Namely, as applicants progress through the recruitment cycle we expect the weighting of fit, pay (funding), prestige, and location to increase.

*Hypothesis 1:* Fit, funding, prestige, and location attributes will be significant predictors of organizational attraction.

<sup>2</sup> We thank an anonymous reviewer for this suggestion.

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*Hypothesis* 2: The weighting placed on fit, funding, prestige, and location attributes will change across the stages of the application process, such that the relationship between these attributes and organizational attractiveness will increase throughout the application process.

#### Individual differences in attribute weighting over time

Showing that attribute weighting changes over time is important for theoretical and practical understanding, but identifying the causes of these changes is also critical. We propose that individual differences in applicant (perceived) marketability will help explain changes in the attribute-attraction relationship. Namely, we propose that when tangible information about receiving a job offer is not available, applicants' perceptions of their marketability will serve as a signal about their likelihood of receiving offers. During these early stages of the search process, an applicant will rely most heavily on internal cues of his/her market value because there is little external information available with regard to how well s/he is performing when compared with others in the process. Someone with highly favourable self-perceptions of performance and a high GPA will have higher internal perceptions of his/her market value and expect to receive more offers. In the early and middle stages of the process, perceptions of one's abilities will most influence attribute weighting because such information serves as a signal for one's value as an applicant and likelihood of receiving offers. Social psychological research on the self-serving bias finds individuals overestimate their own abilities and view themselves as possessing those characteristics related to success (Kruger & Dunning, 1999; Story & Dunning, 1998). It is likely that applicants who perceive that they will perform well in the application process will subsequently perceive themselves as having a high value and likelihood of being accepted into the organization. As a result, they will weight job and organizational attribute information differently than those who lack these self-perceptions. For example, applicants who perceive themselves as offering more value may be less attracted to any one organization, may use attribute information more discriminately, and may attach greater weighting to job and organizational attributes (Rynes et al., 1991; Trank et al., 2002). However, when organizations notify applicants of their actual decisions (external cues now enter the equation), these internal perceptions (and signals) are either confirmed or refuted and internal perceptions give way to more external/objective information about one's market value (e.g. whether a job offer is received). These objective features will more strongly influence attribute weighting at the final stage (Tenbrunsel & Diekmann, 2002).

Figure 1 integrates theories of attribute weighting with the sparse longitudinal recruitment research to illustrate the nature of our predictions. The model predicts that internal cues of one's marketability (self-assessed performance, GPA) will influence attribute weighting at early and middle stages of the process (note that positive symbols for the attributes indicate the hypothesized attributes increase in weighting over time). However, during the final stages of the process, external cues – more detailed and specific information becomes available about the job, organization, and offer, and objective characteristics will become more influential.

First, self-assessed performance is expected to influence attribute weighting in the early and middle stages of recruitment. We examine self-assessed performance as a self-perception because previous research suggests that self-assessments of performance are among the most important self-perceptions in selection contexts (e.g. Chan, Schmitt, Jennings, Clause, & Delbridge, 1998; Gilliland, 1993, 1994; Horvath, Ryan, & Stierwalt, 2000; Ployhart & Ryan, 1997; Ryan, Greguras, & Ployhart, 1996; Ryan & Ployhart, 2000).

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Self-assessed performance measures specifically how applicants perceive themselves to be performing in the application process when compared with other applicants (Chan *et al.*, 1998; Ployhart & Ryan, 1997). Because they perceive themselves as likely to receive more offers, applicants with more favourable self-assessments should be more discriminating between potential offers and thus weight attribute information more highly. However, this should occur only during the early and middle stages of the process because at later stages self-assessments will have been either confirmed (with offers) or disconfirmed (by rejections).

*Hypothesis 3:* The influence of self-assessed performance on the relationship between organization attraction and fit, funding, prestige, and location attributes will be strongest at earlier stages of the recruitment process. Further, those with higher levels of self-assessed performance will weight the attributes more strongly than those with lower levels of self-assessed performance.

Second, information about one's abilities may also be important in the early and middle stages of the application process. Research suggests that applicants with higher abilities tend to value different job and organizational attributes than lower ability applicants (Trank *et al.*, 2002). High ability individuals place greater value on interesting and challenging work than do others, and tend to be more discriminating when making job-choice decisions (Rynes *et al.*, 1991; Trank *et al.*, 2002). Such individuals are likely to perceive themselves to be more desirable candidates and consequently have more attractive offers (hence as being more marketable). In this study, we operationalize the ability as college Grade Point Average (GPA) both because previous research has found GPA to be an important predictor of job choice (e.g. Trank *et al.*, 2002) and because GPA is a measure of an applicants' ability to perform well in school. We therefore expect that ability (GPA) will influence the weight of attributes at early stages in the process, before actual offers are received, final decisions are made, and more direct experience with the application process has occurred.

*Hypothesis 4:* The influence of GPA on the relationship between organization attraction and fit, funding, prestige, and location attributes will be strongest at earlier stages of the recruitment process. Further, those with higher GPAs will weight the attributes more strongly than those with lower GPAs.

Finally, as one moves to the later stages of the process, we predict that applicants will shift from a reliance on the aforementioned self-perceptions to a more careful consideration of actual offers. At this stage, internal 'signals' are no longer necessary and it is the actual offers that are considered. For example, decision makers with more choices approach the decision-making process and use information differently than those with only a single offer (Bazerman, Schroth, Shah, Diekmann, & Tenbrunsel, 1994; Tenbrunsel & Diekmann, 2002). An applicant with multiple offers has the luxury of choosing the most desirable position, whereas an applicant with only one offer may be forced to accept an otherwise undesirable offer. It is therefore likely that the applicants with more offers will use attribute information to influence their judgments more than those with fewer options (see Turban *et al.*, 1995).

*Hypothesis 5:* The influence of number of offers on the relationship between organization attraction and fit, funding, prestige, and location attributes will be strongest at later stages of the recruitment process. Further, those with more offers will weight the attributes more strongly than those with fewer offers.

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#### **Methods**

#### **Participants**

The participants consisted of applicants to six Psychology PhD departments (i.e. biopsychology, clinical, developmental, human factors, and industrial/organizational) located in the United States during the 2002-2003 recruitment cycle. All applicants to these programs were contacted via mail at Time 1. Included in the Time 1 mailing was a letter detailing the study goals. Namely, potential participants were told the authors were interested in examining factors that influenced attraction to programs, that participation would entail completing surveys at three points throughout the application process so we could examine change over time, and that responses would be entirely anonymous and have no bearing on their selection status. Those who were interested in participating received instructions on how to create an anonymous code that could not be linked to them, and were asked to complete the survey and return it in the enclosed self-addressed stamped envelope. The same procedure was followed at each of the three time periods.

Surveys were mailed at three times to 296 applicants. Time 1 occurred immediately after applicants applied to the departments (shortly after Barber's (1998) generating applicants stage), 143 surveys were returned for a 48% response rate. Time 2 occurred at about the time applicants were interviewing with departments (similar to Barber's maintaining applicants stage), 60 surveys were returned for a 20% response rate. Time 3 occurred immediately after the April 15th deadline set by APA to notify applicants/departments of final decisions (similar to Barber's influencing decisions stage), 43 surveys were returned for a 14% response rate. Twenty-eight applicants completed all three surveys. While this sample may seem small, it is important to keep in mind that when using a policy-capturing design, analyses are based on 16 observations per participant (because we use a  $2 \times 2 \times 2 \times 2 \times 2$  within-subjects design, discussed shortly). Therefore, at Time 1, our analyses were based on 2,288 observations, at Time 2, 960 observations, and at Time 3, 688 observations. At each time period, our respondents were primarily Caucasian (approximately 78%), females (approximately 73%), and on average 24 years of age.

More important is the concern that response rates may affect the results; we address this concern in two ways. First, we found no significant differences in age, gender, and race across time. Furthermore, there were no demographic differences between the full sample and the 28 individuals who completed all three questionnaires. Thus, the demographics of the respondents were equivalent at all three time periods. In addition, since an equal amount of rejected (46%) and accepted (54%) applicants responded at Time 3, our results should accurately reflect the population of applicants (to which the surveys were sent).

Second, we examined any potential difference in our results based on differences in sample size by comparing the full sample to only those 28 who completed all surveys across all three time periods. A significant difference in the weighting of attributes was found only for location at Time 1. There were no other significant differences. We therefore report our analyses based on the full sample because the results are the same.

At this point, it might be helpful to clarify why we chose to use a graduate applicant sample. The main reason is because to test our model and hypotheses, we needed fairly large numbers of applicants who would be in similar (but distinct) stages of recruitment and selection. More typical organizational recruitment practices are likely to be composed of applicants who are in varying stages of recruitment and selection.

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Our design is therefore likely to be more sensitive than those that contain applicants at multiple (and oftentimes unknown) stages, thereby allowing a better and more straightforward estimation of effect sizes and tests of hypotheses. To check the comparability of the graduate selection context to a more 'typical' employment selection context, we surveyed 35 alumni from graduate psychology programs. Results found substantial similarity between the weighting placed on the attributes in this study and the weighting placed on these attributes in more typical contexts (these analyses are available upon request). Thus, theoretically and empirically this sample should be appropriate for testing our model and hypotheses, although we fully consider this issue and potential limits to generalizability later in the Discussion section.

#### Design and procedure

This study employed a 2 (high/low fit)  $\times$  2 (high/low funding)  $\times$  2 (high/low prestige) × 2 (desirable/undesirable location) repeated measures policy-capturing design, with the policy-capturing survey repeated at each of the three time periods. Surveys were mailed to applicants of six Psychology PhD departments at three points in time. At Time 1, immediately following the application deadline set by the department (early January), participants received a questionnaire from the researchers as well as an explanation of the data collection procedure. The participants were asked to complete the questionnaires and return them in the enclosed, self-addressed, stamped envelopes. They were assured that their responses would remain confidential and would have no impact on their respective program's selection decisions. They were also instructed how to create a unique code by which their responses would be anonymous but able to be connected over the three time periods. The same procedure was followed at Time 2, which occurred at about the time many applicants were interviewing and beginning to learn of the programs' selection decisions (the middle of March). The same procedure was followed at Time 3, which occurred right after 15 April. On this date, programs and applicants are required by the American Psychological Association to inform each other of their decisions.

#### Policy-capturing survey

The first part of the questionnaire consisted of 16 scenarios depicting hypothetical graduate school offers. Each scenario contained a paragraph representing one of 16 possible combinations of fit, funding, prestige, and location attributes. Participants were instructed to 'Imagine this fictional program was one of your real possible choices for graduate programs' and 'consider all the information that you have acquired to date in the application process when responding . . . ' The applicants were explicitly instructed to consider the information presented and respond to the policy-capturing scenarios in light of their current selection status to encourage them to use the information (about graduate program attributes) they were gathering in their actual selection processes when responding to the policy-capturing scenarios. For example, if applicants were in the process of interviewing with graduate programs and information about fit attributes was most highly influencing their decision processes at that time, we expected fit attributes to also be weighted most highly when completing the hypothetical scenarios. They then read through the offer and indicated how likely they would be to accept a position with such characteristics, how desirable they found the offer, and how attracted they were to a graduate program with these characteristics. These scenarios were presented in a random order at each time period to prevent order effects.

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Research on applicant decision making has shown policy capturing to be an effective method for predicting and explaining applicants' job choices (Cable & Judge, 1994; Chapman *et al.*, 2005; Graham & Cable, 2001; Slaughter, Richard, & Martin, 2006). However, there are notable challenges with policy-capturing methodologies. Balancing the appropriate number of attributes/scenarios presented with issues of participant fatigue is a major consideration of any policy-capturing survey. Additionally, the extent to which policy-capturing surveys are realistic is another noteworthy concern. In policy-capturing scenarios, participants are presented the complete information for all potential 'organizations' (conditions), a situation not necessarily reflected in the real world (Rynes, 1991; Slaughter *et al.*, 2006). Despite these potential limitations, recent research provides support for the generalizability of policy-capturing judgments to real-world application decisions. For example, Slaughter *et al.* demonstrated that weights derived using a policy-capturing approach could predict actual participant organization choice.

Graham and Cable further maintain 'policy capturing approaches are likely to work best in situations where participants are evaluating scenarios about which they have knowledge or that mirror a context they are experiencing' (p. 27). Therefore, policy capturing is an appropriate method for the present study because our participants were applicants actually considering such information in their real judgments and decisionmaking process. Because the scenarios developed for the present study were very similar to the actual decision-making process the applicants were engaged in, and because we instructed them to consider their current status in the real selection process as they responded to the survey, the policy capturing results should be reasonably representative of their real judgments (see Graham & Cable, 2001). This is why we instructed participants to consider each scenario in light of their current selection status. Therefore, given such instructions we anticipate that the applicants will use the information about graduate program characteristics gathered during their real graduate search and decision-making process and transfer this information to the policy-capturing scenarios. We expect those attributes that influence applicants' actual level of attraction to graduate programs (e.g. actual decision policies) will transfer to the policy-capturing scenarios and influence weighting of attribute information on the survey. Thus, if a certain attribute (for instance, prestige) were particularly salient when an applicant first applied to a program, we would expect the significance of prestige to be manifested in the applicants' judgments of the hypothetical programs presented in the policycapturing scenarios. If fit becomes most salient as the applicant makes a final decision, we expect fit to be highly predictive of organizational attraction during the final survey administration. However, the specific cues used in policy-capturing studies must be realistic. To ensure our cues were appropriate and realistic, a pilot survey was sent to 14 subject matter experts (current graduate students from all disciplines of psychology). They were asked to list attributes most important in influencing their decision of where to attend graduate school, and to list attributes that were most important in influencing their decision to reject an offer. Consistent with previous research, the attributes listed as most important were fit (64%), funding (71%), prestige (79%), and location (79%). Similarly, the lack of these attributes influenced our SME's decisions to reject a decision. This mirrors past research (Cable & Judge, 1994, 1997).

Each attribute was manipulated by varying the levels in a given scenario. Eight new SMEs reviewed the policy-capturing survey and indicated the degree to which they agreed the description provided for each level of each cue was an appropriate description, on a '1' (very inappropriate) to '5' (very appropriate) scale. Mean ratings

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ranged from 4.5 for the 'undesirable location' level to 5.0 for the 'high-prestige' level. Therefore, SME ratings confirm that the manipulations of each cue level were appropriate. Example policy-capturing scenarios are included in Appendix A of this manuscript.

#### Measures

Unless otherwise noted all measures used five-point scales (1 = strongly disagree, 5 = strongly agree). Items were scored such that higher numbers indicated more favourable responses. Internal consistency reliabilities were acceptable for all scales and ranged from .77 to .96. Correlations were quite variable across scenarios and time, arguing against method bias as a primary cause of covariation (means, standard deviations, and correlations can be found in Tables 1–3 for Times 1–3, respectively). As noted earlier, before proceeding with analyses it is important to ensure that there is sufficient between-person variability in the weighting of the four attributes selected for investigation in the present study. Without variability, the attributes cannot be important drivers of attraction. As we demonstrate in Table 4 in our Level 1 model, these four attribute weightings did in fact have significant variance components ranging from .09 (p < .01) for location to .27 for fit (p < .01).

#### Organizational attraction

Upon reading each scenario (at each time period), participants responded to three items ('How likely would you be to accept an offer from this program', 'How desirable do you find this offer', and 'How attractive do you find this graduate program'), which assessed organizational attractiveness. These items were combined to create an organizational attractiveness scale due to the high correlations of the responses to these items. In addition, we conducted analyses with each item separately and found the same results. The intra-class correlation (ICC(1)) for attraction was .07 (p < .05; James, 1982).

#### Self-assessments

Self-assessed performance was measured with a five-item scale adapted from Ployhart and Ryan (1997). Example items were 'My ability to succeed in graduate school is not as good as most people' and 'I did well in the University's graduate admissions process'.

#### Demographics

Demographic items were self-reported race, gender, age, GPA, GRE, and some openended questions. However, we only report the effects for GPA because these are the only effects hypothesized to influence attribute weighting. Although we could not verify the accuracy of self-reported GPA, previous research has reported high correlations (r = .85 or higher) between self-report data and objective measures (Gully, Payne, Keichel-Koles, & Whiteman, 2002). Further, the average undergraduate GPA of current doctoral students at the institution was 3.52, similar to that of our Time 1 participants, 3.55. The mean GRE score of students at this institution is also similar to our participants (GRE = 1, 176 and 1, 107 for current students and applicants, respectively). This reduces (but does not eliminate) the concerns about the self-reported nature of these variables.

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357       0.29       -07       .09       -         3.77       1.28       .17       -01       .09       -         3.84       0.56       .10       -15       .21       .30       .76         3.84       0.56       .10       -15       .21       .30       .76         4.73       0.51       -13       -06       .11      10       .08         1.52       0.64       -07      17      10      06       .26       .16       .85         1.73       0.51      17      10      06       .26       .16       .85         5       3.33       0.79      10      07      11      10       .07       .03       .64      10       .87         7       2.04       0.78      06       .24       .36      01       .57       .06       .92         7       2.04       0.78      01       .06       .15       .33       .35       .16       .38       .34       .84         7       2.04       0.78       .06       .25       .36       .92       .91       .93       .91       .91       .93	I.73	0.45	- 00	I																		
0.77       1.28       .17      01       .09          3.84       0.56       .10      15       .21       .30       .76         3.84       0.56       .10      17      10      06       .11      10       .80         1.52       0.62      07      17      10      06       .11      10       .80         1.78       0.74       .17      24      05       .06       .26       .16       .85         5       3.33       0.79      10       .07       .00       .29       .42       .32       .06       .54      10       .87         6       2.51       0.88      09       .07       .00       .29       .42       .33       .34       .84         7       2.04       0.78      01       .04       .38       .34       .84       .85         8       3.38       0.78      01       .01       .01       .03       .15       .16       .06       .15       .15       .33       .34       .84         8       3.38       0.78      01       .04       .03       .16       .06	3.57	0.29	07	60 <sup>.</sup>	I																	
384       0.56       .10       -15       .21       .30       .76         4.73       0.51      13      05      06       .11      10       .80         1.52       0.62      07      17      10      06       .11      10       .80         4.10       0.61       .09       .03       .03      23      06       .26       .16       .85         5       3.33       0.79      10       .07      03       .64      10       .87         6       2.51       0.86      09      13      07       .00       .29       .42       .20         7       2.04       0.78      10       .07       .00       .29       .41       .86         7       2.04       0.78      10       .07       .00       .29       .42       .38       .94         8       333       0.79      16      01       .04       .42       .08       .15       .33       .05       .44       .38       .64       .10       .66       .19       .06       .27       .16       .09       .07       .06       .28       .28	0.77	1.28	.17	01	60.	I																
473       0.51      13      05      09      25      13       .80         1.52       0.66      07      17      10      06       .11      10       80         4.10       0.61       .09       .03      23      06       .11      10       80         5       3.33       0.79      10       .06       .03       .64      10       80         7       2.04       0.78      10       .07       .00      03       .64      10       87         7       2.04       0.78      10       .07       .00       .24       .36       .44       .38       .34       .84         7       2.04       0.78      10       .04       .33       .05       .44       .38       .34       .84         8       3.33       0.79      10       .04       .42       .33       .05       .44       .38       .34       .84         7       2.04       0.78      00       .04       .43       .05       .44       .38       .4       .84         8       3.33       0.78       .01       .01 <t< td=""><td>3.84</td><td>0.56</td><td>01.</td><td>– .15</td><td>.21</td><td>.30</td><td>.76</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>	3.84	0.56	01.	– .15	.21	.30	.76															
4.73       0.51      13      05      09      25      13       .80         1.52       0.62      07      17      10      06       .11      10       .80         1.78       0.74      17      24      05      06       .26       .16       .85         5       3.33       0.79      10       .07      02      13       .07       .00       .29       .42       .32       .91         7       2.04       0.78      06       .00       .03       .04       .33       .05       .4       .10       .87         7       2.04       0.78      06       .00       .03       .44       .10       .87         7       2.04       0.78       .06       .21       .06       .24       .32       .91         8       3.33       0.79      10       .01       .04       .35       .16       .38       .34       .84         8       3.33       0.78      01       .04       .05       .13       .10       .06       .15       .16       .38       .34       .34         8       3.33																						
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$																						
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	4.73	0.51	- <b>.   3</b>	05	09	25	- <b>I</b> 3	.80														
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	I.52	0.62	07	17	10	06	Ξ.	10	•													
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	4.10	0.61	60.	.03	.03	23	06	.26	•	.85												
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	I.78	0.74	17	24	05	06	0 <u>.</u>	03	.64	10	.87											
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	3.33	0.79	10	.07	– .02	- <b>I</b> 3	07	0 <sub>.</sub>	.29	.42	.32	16:										
2.04       0.78      10      17      21       .03      10       .04       .33       .35       .44       .38       .34       .84         3.83       0.78      02      03      06      21      08       .15       .16      01       .04      06      03       .06       .15       .15       .83       .85         3.83       0.73      16      01       .04      06      03       .06       .15       .15       .33       .50       .16       .27       .16       .89         3.41       0.78      04      02      05      18      06       .28       .18       .31       .10       .06       .42      04       .69       .10       .87         2.45       0.89      10      11       .01      13      09       .35      01       .61      06       .35      06       .35      06       .89       .34       .16       .99       .34       .16       .99       .34       .16       .99       .34       .16       .90       .35       .96       .86       .90       .34       .16       .89 <td< td=""><td>2.51</td><td>0.86</td><td>- 00</td><td>- <mark>18</mark></td><td>22</td><td>12</td><td>06</td><td>.24</td><td>.36</td><td>01</td><td>.52</td><td>90.</td><td>.92</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>	2.51	0.86	- 00	- <mark>18</mark>	22	12	06	.24	.36	01	.52	90.	.92									
3.83       0.78      02      06      21      08       .15       .16      01       .85         3.93       0.73      16      01       .04      06      03       .06       .15       .15       .33       .50       .16       .27       .16       .89         3.41       0.78      04      02      05      18      06       .28       .18       .31       .10       .06       .42      04       .69       .10       .87         2.45       0.89      10      18      11       .01      13      09       .35      01       .61      06       .35      06       .88         2.345       0.89      10      18      11       .01      13       .09       .35      01       .64       .10       .87       .66       .89         2.35       0.90       .11      02      05      16       .01       .32       .16       .33       .10       .24       .13       .38       .61      06       .35       .06       .15       .33       .34       .16       .31       .16       .37       .16	2.04	0.78	10	17	21	.03	10	.04		.05	4 <del>.</del>	.38	.34	.84								
3.93       0.73       -1.6      01       .04      06      03       .06       .15       .13       .50       .16       .27       .16       .89         3.41       0.78      04      02      05      18      06       .28       .18       .31       .10       .06       .42      04       .69       .10       .87         2.45       0.89      10      18      11       .01      13      09       .35      01       .51       .43       .38       .61      06       .86         2.38       0.79       .11      05       .05      04       .16       .37       .10       .24       .19       .35      06       .86         2.38       0.79       .11      05       .05      04       .16       .13       .38       .61      06       .38       .16       .37       .10       .38       .10       .86       .34       .16       .89         2.15       0.93      01       .32       .16       .35       .26       .50       .47       .10       .14       .11       .63       .03       .88         1.1	3.83	0.78	02	03	06	–.21	08	.42		.15	16	08	<u>5</u>	– .I5	.85							
3.41       0.78      04      05      18      06       .28       .18       .31       .10       .06       .42      04       .69       .10       .87         2.45       0.89      10      18      11       .01      13      09       .35      01       .51       .43       .38       .61      06       .86         2.38       0.79       .11      05       .05       .09       .35      01       .51       .43       .38       .61      06       .86         2.38       0.79       .11      05       .05       .36       .28       .36       .39       .10       .24       .13       .28       .34       .16       .89         3.15       0.93      01      16       .01       .32       .16       .35       .26       .50       .47       .10       .14       .11       .63       .03       .88         1.99       0.82      07       .12       .03       .32       .21       .32       .33       .44       .51       .63       .66       .90         2.72       0.94      06      12       .07       .30<	3.93	0.73	–.16	<u> </u>	.04	06	03	90.	.I5	.I5		.50	. I 6	.27	. I 6	89.						
2.45       0.89      10      18      11       .01      13      09       .35      01       .51       .43       .38       .61      06       .86         2.38       0.79       .11      05       .05      04       .12      05       .36       .39       .10       .24       .13       .28       .34       .16       .89         3.15       0.93      11      20      19      06       .12      05       .36       .38       .36       .13       .28       .34       .16       .89         3.15       0.93      11      20      19      06       .12       .05       .36       .38       .14       .11       .14       .11       .63      03       .88         1.99       0.82      07      19      10      03       .05       .44       .10       .14       .11       .63       .03       .88         1.99       0.82      07      19      22      10      03       .32       .21       .27       .39       .45       .10       .01       .20       .44       .07       .69       .66 <t< td=""><td>3.41</td><td>0.78</td><td>- 04</td><td>– .02</td><td>05</td><td>- <mark>  8</mark></td><td>06</td><td>.28</td><td><u>80</u>.</td><td>۲.</td><td>01.</td><td>90.</td><td>45</td><td>04</td><td>69.</td><td>01.</td><td>.87</td><td></td><td></td><td></td><td></td><td></td></t<>	3.41	0.78	- 04	– .02	05	- <mark>  8</mark>	06	.28	<u>80</u> .	۲.	01.	90.	45	04	69.	01.	.87					
2.38       0.79       .11      05       .05      04       .12      05       .36       .39       .10       .24       .13       .28       .34       .16       .89         3.15       0.93      11      20      19      06      16       .01       .32       .16       .35       .26       .50       .47       .10       .14       .11       .63      03       .88         1.99       0.82      07      19      06      16       .01       .32       .16       .51       .32       .33       .04       .44       .30       .28       .50       .91         1.99       0.82      07      19      22      10      03       .05       .43       .26       .33       .14       .51       .32       .33       .04       .44       .30       .28       .50       .91         2.77       0.94      03      21      21      21      21       .21       .20       .45       .10      01       .20       .44       .07       .69       .66       .90         3.02       0.81       .04      06      12       .	2.45	0.89	- 10	- - -		ю <sup>.</sup>	- <u> </u> 3	- 00	.35	10. –	.5 I	.43	.38	.61	06	.35	06	.86				
3.15       0.93      11      20      19      06      16       .01       .32       .16       .35       .26       .50       .47       .10       .14       .11       .63      03       .88         1.99       0.82      07      19      22      10      03       .05       .43       .26       .33       .14       .51       .32       .33       .04       .44       .30       .28       .50       .91         2.72       0.94      03       .05       .43       .26       .33       .14       .51       .32       .33       .04       .44       .30       .28       .50       .91         2.72       0.94      03      21      21      21      21      21       .24       .13       .07       .39       .45       .10      01       .20       .44       .07       .69       .66       .90         3.02       0.81       .04      06      12       .05      02       .31       .12       .40       .26       .36       .91       .34       .12       .55       .09       .36         3.02       0.81       .04	2.38	0.79	Ξ.	– .05	.05	04	.12	05	.36	.28	.36	39	0.	.24	<u>۳</u> .	.28	.34	. I 6	8.			
1.99       0.82      07      19      22      10      03       .05       .43       .26       .33       .14       .51       .32       .33       .04       .44       .30       .28       .50       .91         2.72       0.94      03      24      13       .07       .30       .32       .21       .27       .39       .45       .10      01       .20       .44       .07       .69       .66       .90         3.02       0.81       .04      03      06      12       .05       .30       .32       .21       .27       .39       .45       .10      01       .20       .44       .07       .69       .66       .90         3.02       0.81       .04      03      06      12       .05       .31       .12       .40       .26       .36       .90       .35       .08       .91	3.15	0.93	=.	20		06	16	ю <sup>.</sup>	.32	.I6	.35	.26	.50	.47	01.	<u>.</u>	Ξ.	.63	03	8 <u>8</u> .		
2.72       0.94      03      21      24      13       .07       .30       .32       .21       .27       .39       .45       .10      01       .20       .44       .07       .69       .66       .90         3.02       0.81       .04      03      06      12       .05      02       .31       .12       .40       .26       .36       .09       .38       .34       .12       .55       .09       .35       .08	I.99	0.82	07	- 19		- <b>I</b> 0	03	.05	.43	.26	.33	<u>+</u>	.5 -	.32	.33	9	<del>4</del> .	<u>е</u>	.28	.50	<u>-</u> 6	
3.02 0.81 .04030612 .0502 .31 .12 .40 .26 .36 .09 .38 .34 .34 .12 .55 .09 .35 .08	2.72	0.94	03	–.21	21	24	- <u> </u> 3	.07	30	.32	21	.27	.39	.45	01.	10. –	.20	<del>4</del> .	.07	69.	.66	60
	3.02	0.81	.04	•	06	12	.05	02	<u>.</u>	.12	.40	.26	.36	60.	.38	.34	.34	.12	.55	60 <sup>.</sup>	.35	-
= 143, all col othetical pro		lean 3.67 3.57 3.57 3.57 3.57 3.57 3.57 3.57 1.78 3.33 3.33 3.15 2.245 1.78 3.33 3.15 2.245 3.251 1.99 3.02 3.02 3.02 3.02 3.02 3.02 3.07 77 77 3.25 1.73 3.25 7.73 3.25 7.74 1.73 3.25 7.77 7.73 3.25 7.74 1.73 3.25 7.74 1.73 3.25 7.74 1.73 3.25 7.74 1.73 3.25 7.74 1.73 3.25 7.74 1.73 3.25 7.74 1.73 3.25 7.74 1.73 3.25 7.74 1.73 3.25 7.74 1.73 3.25 7.74 1.73 3.25 7.74 1.73 3.25 7.74 1.73 3.25 7.74 1.73 3.33 3.33 3.33 3.33 3.33 3.33 3.33	Iean         SD           3.67         4.07           1.73         0.45           3.57         0.29           0.77         1.28           3.84         0.56           3.81         0.56           3.81         0.56           3.81         0.56           3.81         0.56           3.81         0.56           3.81         0.56           3.81         0.56           1.52         0.62           1.52         0.62           1.52         0.62           1.52         0.62           1.53         0.74           3.33         0.79           3.83         0.79           3.83         0.78           3.41         0.78           3.15         0.93           3.15         0.94           3.02         0.81           3.15         0.94           3.15         0.94           3.02         0.81           3.02         0.81           3.02         0.81           3.02         0.93           3.15         0.94           3.15	Mean         SD         I           I Age         23.67         4.07         -           2 Sex         1.73         0.45        09           3 GPA         3.57         0.29        07           3 GPA         3.57         0.29        07           4 Offers         3.57         0.29        07           5 Self-         3.84         0.56         .10           assessed         1.73         0.51        13           Perf.         3.84         0.56        07           7 Attract 1         4.73         0.51        17           9 Attract 2         1.52         0.62        07           9 Attract 3         4.10         0.61         .09           9 Attract 4         1.78         0.74        17           10 Attract 5         3.33         0.79        10           11 Attract 6         2.51         0.86        09           12 Attract 1         2.04         0.78        07           13 Attract 1         2.41         0.78        10           13 Attract 1         2.41         0.78        07           14 Attract 1         2.04		Iean         SD         1         2         3           3.67         4.07         -         -         3           1.73         0.45        09         -         -           3.57         0.29        07         .09         -           0.77         1.28         .17        01         .09           3.84         0.56         .10        15         .21           4.73         0.51        13        05        09           1.52         0.62        07        17        10           4.10         0.61         .09         .03         .03           1.78         0.74        17        24        05           3.33         0.79        10         .07        02           3.178         0.74        17        24        05           3.33         0.79        10         .07        01           3.41         0.78        01        04        22           3.43         0.78        07        19        11           2.38         0.79        10        04        05           <	lean         SD         I         2         3         4 $3.67$ $4.07$ -         -	lean SD 1 2 3 4 5 3.67 4.07 1.73 0.4509 3.57 0.2907 .09 3.57 0.2907 .09 3.57 0.2907 .1701 .09 3.84 0.56 .1015 .21 .30 .76 3.84 0.56 .101721 .30 .76 1.78 0.741717100611 4.10 0.61 .09 .03 .032306 1.78 0.741724050600 3.33 0.7910 .07021307 2.51 0.86091812 .03 3.83 0.7910172108 3.93 0.7310172106 3.33 0.7910 .07021307 2.51 0.86091806 3.33 0.780402031013 3.15 0.9310 .040603 3.83 0.791017210603 3.93 0.731017210603 3.93 0.731017210603 3.15 0.93101206 3.32 0.940321212413 3.15 0.93112019221003 3.15 0.93112019221003 3.15 0.93112019221003 3.15 0.93112019221003 3.15 0.931120190603 3.20 0.81 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$2.04$ $0.78$ $10$ $01$ $04$ $02$ $2.14$ $0.78$ $10$ $02$ $06$ $.24$ $2.04$ $0.78$ $10$ $01$ $12$ $06$ $2.14$ $0.78$ $10$ $02$ $12$ $06$ $2.14$ $0.78$ $10$ $02$ $12$ $06$ $2.14$ $0.78$ $10$ $02$ $12$ $06$ $2.16$ $0.79$ $10$ $0$	IeanSDI234567 $3.67$ $4.07$ $  3.57$ $0.29$ $07$ $.09$ $ 1.73$ $0.45$ $09$ $ 0.7$ $.09$ $ .07$ $3.57$ $0.29$ $07$ $.09$ $ .09$ $ 0.77$ $1.28$ $.17$ $01$ $.09$ $ 3.84$ $0.56$ $.10$ $15$ $.21$ $.30$ $3.75$ $0.29$ $07$ $.00$ $07$ $4.73$ $0.51$ $13$ $05$ $06$ $.26$ $1.52$ $0.62$ $07$ $17$ $10$ $.00$ $4.10$ $0.61$ $.09$ $.03$ $.03$ $23$ $4.10$ $0.61$ $.09$ $.03$ $.03$ $24$ $3.33$ $0.79$ $10$ $.07$ $.00$ $.29$ $3.33$ $0.79$ $10$ $.07$ $02$ $06$ $2.45$ $0.86$ $09$ $18$ $02$ $2.46$ $0.86$ $01$ $0.4$ $02$ $03$ $2.41$ $0.78$ $10$ $117$ $21$ $08$ $2.45$ $0.89$ $10$ $112$ $06$ $.24$ $3.33$ $0.79$ $10$ $03$ $06$ $.24$ $3.33$ $0.79$ $10$ $01$ $02$ $05$ $3.41$ $0.78$ $12$ $02$ $12$ $06$ $2.45$ $0.89$ $1$	IeanSDI2345678 $3.67$ $4.07$ 8 $1.73$ $0.45$ $09$ 8 $3.57$ $0.29$ $07$ 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0.1 2.1 2.2 0.1 2.0 2.3 1.1 2.0 2.4 1.3 2.5 0.9 3.0 2.1 2.0 0.6 0.6 1.3 0.6 0.6 1.3 0.7 0.7 5.9 1.0 2.4 0.3 0.6 0.6 1.0 0.0 2.0 2.0 2.3 1.1 2.2 0.9 2.3 0.9 3.3 0.4 1.4 0.3 0.612 0.0502 2.0 2.3 1.1 2.2 0.9 2.9 0.9 3.3 0.4 4.1 30 7.6 5.0 2.2 1.0 2.0 2.3 1.1 2.2 0.9 2.9 3.3 0.4 4.1 30 2.6 5.0 0.9 2.3 2.4 2.6 0.9 3.8 3.4 4.1 3.0 5.6 5.0 0.9 2.3 2.0 0.9 2.8 0.9 0.9 0.0 0.0 0.0 0.9 0.9 2.9 2.9 0.9 2.9 0.0 0.9 2.9 0.9 2.9 0.0 0.9 2.9 0.0 0.9 2.9 0.0 0.9 2.9 0.0 0.9 2.9 0.0 0.9 0.4 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0</td> <td><math display="block"> \begin{array}{cccccccccccccccccccccccccccccccccccc</math></td>	tean SD 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 3.67 407 - 1.73 0.45 -0.09 - 3.57 0.29 -0.07 0.09 - 3.57 0.29 -0.07 0.09 - 3.84 0.56 .10 -15 21 .30 .76 3.84 0.56 .10 -15 21 .30 .76 3.84 0.56 .10 -15 21 .30 .76 3.83 0.51 -13 -05 -0.9 -25 -13 .80 1.52 0.52 -0.7 -17 -10 0.66 .11 -0.10 80 4.10 0.61 0.09 0.3 0.3 -23 -0.6 2.6 16 .85 1.52 0.52 -0.7 -17 -24 -0.0 -0.3 64 -10 87 4.10 0.61 0.09 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.28 .36 .39 .10 .24 .13 .28 .34 .16 .89 3.31 0.78 -0.2 -0.1 -0.1 -0.1 .20 -0.1 2 -0.1 .20 .34 .3 .25 .50 .38 .34 .34 .44 .30 .28 .34 .34 .34 .34 .34 .34 .34 .34 .34 .34	lean SD 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 3.67 407 - 1.73 0.45 -09 - 3.57 0.29 -07 0.9 - 3.57 0.29 -07 0.9 - 3.57 0.29 -07 0.9 - 3.57 0.29 -07 0.9 - 3.7 128 1/7 -01 0.9 - 3.84 0.56 .1015 21 3.0 76 4.10 0.61 0.9 0.3 0.3 -2313 .80 4.10 0.61 0.9 0.3 0.3 -2313 .80 4.10 0.61 0.9 0.3 0.32306 2.6 16 .85 1.52 0.620717240506 0.03 6.410 .87 4.10 0.61 0.9 0.3 0.32306 2.6 1.6 .85 1.23 0.7417240506 0.03 6.410 .87 3.33 0.7910 0.721 0.0301 5.2 0.6 92 3.33 0.7910 0.721 0.0301 5.2 0.6 92 3.34 0.7601 2.0 0.9 3.5 .44 38 .34 .84 3.33 0.79101721 0.0306 1.3 0.6 4.4 0.87 3.33 0.79101721 0.0306 4.2 0.8 1.5 1.608 5115 .85 3.34 0.760203062106 4.3 5 .06 92 2.04 0.7800190611 0.001 5.3 0.5 4.4 38 .34 .84 3.33 0.791011 0.001 3.2 0.16 2.7 1.16 .89 3.33 0.73 0.162106 3.504 1.205 3.6 2.8 3.6 3.9 10 2.4 1.3 2.8 3.4 16 .89 3.34 0.7601190616 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Table 2. Means, standard deviations, and	ans, sta	ndard	deviati	ons, ar		relatio	correlations for Time 2 variables	Time 2	variabl	es													
	Mean	SD	_	2	3	4	5	9	7	8	6	10	=	12	13	4	15	16	17	18	19 2	20 21	
l Age	24.40	5.17	1																				
2 Sex	1.73	0.45	<u>. n</u>	I																			
3 GPA	3.64	0.24	<u>9</u>	10	I																		
4 Offers	2.05	1.74	08	0.	.03	I																	
5 Self-	3.45	0.89	.07	<b>16</b>	N	С	88.																
assessed																							
perf.																							
6 Attract	1.97	0.79	<b>I6</b>	- 00	05	14	05	88.															
7 Attract 2	3.05	0.78	.02	06	01.	22	05	.51	.89														
8 Attract 3	2.16	0.98	.05	06	16	– .29	25	.38	.67	.94													
9 Attract 4	I.44	0.62	16	03	07	20	24	.47	.35	.67	.92												
10 Attract 5	4.43	0.54	04	.23	.22	12	10.	.04	.32	81.	.12	.87											
II Attract 6	2.73	0.80	07	08	02	22	08	.52	.45	.36	.37	8I.	.87										
12 Attract 7	3.68	0.92	13	.24	18	.03	23	01.	.22	.29	61.	.29	.20	6.									
13 Attract 8	3.99	0.82	.08	Ξ.	۳.	21	.07	.17	=	26	.02	<u>+</u>	- 72	Ξ.	88.								
14 Attract 9	4.21	0.79	03	60.	02	.05	Ξ.	.22	Ξ.	.15	.16	.17	.17	.39	01.	.92							
I5 Attract I0	3.61	0.77	.23	.I6	30	25	.04	.I6	01.	.05	=	С	- 17	.03	.58	.07	.89						Att
16 Attract 11	2.81	0.93	Ξ.	20	.07	17	24	.49	19.	.53	.45	<u>е</u> г.	.50	- 36	10	- 14.	Ξ.	.93					ribu
17 Attract 12	2.60	0.84	<u>+</u> .	60 <sup>.</sup>	<u>е</u> г.	06	04	.26	07	<u>8</u>	.17	4	.08	.24	.43	.34	.53	. I5	.94				ite j
I8 Attract 13	3.35	0.84	.03	09	.08	26	.02	.27	19:	.39	.28	М	.50	60.	80.	60.	.07	- 58	16	.92			judį
19 Attract 14	2.08	0.82	10.	09	.I7	– .24	.02	.34	.38	.28	.43	.28	.36	<u>8</u>		<u>-18</u>	.43	4	.29	.32	.94		gme
20 Attract 15	4.93	0.28	17	.07	10	.12	02	– .2	05	.05	- 00	- 0.	03	- 10.	. <u> </u> 3	.I5	- 90.	- 02	90.	- 90.	28 .9	.93	ents
21 Attract 16	3.44	0.98	10	.02	04	– . <b> </b> 5	– . I5	.32	03	0.	-12	02	01.	.25	<del>4</del> .	.45	.29	60.	- 27	15	07 .0	16. 00.	
N = 60, all correlations .25 and higher hypothetical programs and offers.	correlat	ions .	25 and 1 offers	higher		icant a	significant at $ ho$ $<$ .05. Reliabilities appear on the diagonal. Attract 1–16 refer to the rated attractiveness of the 16	.05. R∈	liabiliti	es appo	ear on	the di	agonal.	Attrae	t  - 6	refer	to the	rated	attrac	ctivene	ss of t	the I6	er time
-	D																						20.

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Table 3. Means, standard deviations,	ıs, stan	dard di	eviation		correla	tions fc	and correlations for Time 3 variables	3 variał	oles													
	Mean	SD	-	2	ĸ	4	5	9	7	8	6	0	_ _	12 1	13 14		15	16 17	7 18	61	20	21
l Age	24.93	6.39	I																			
2 Sex	I.8.	0.39	<u>е</u> г.	I																		
3 GPA	3.71	0.19	.23	18	I																	
4 Offers	2.98	I.90	10.	20	60.	I																
5 Self-	3.56	I.07	.04	—. <b>16</b>	.34	.27	16.															
assessed																						
perf.																						
6 Attract I	1.57	0.51	– .21	05	- - -	– . <b> </b> 5	– <b>. I 5</b>	.84														
7 Attract 2	2.74	0.82	- 00	.02	–.16	40	18	.37	.92													
8 Attract 3	I.85	0.79	- <b>.   8</b>	14	–.15	28	20	.37	99.	6.												
9 Attract 4	1.24	0.44	10	.17	19	19	ю <u>.</u>	.50	.30	.47	.89											
10 Attract 5	4.43	0.56	– .50	- 00	04	23	.07	.21	4.	.22	.20	87										
II Attract 6	2.41	0.92	10	0 <u>0</u>	10	40	- <b>18</b>	.47	.47	14	т.	31	.96									
12 Attract 7	3.70	0.84	34	.04	28	<del>.</del> 	– .24	.35	.28	.39	.29	44	. I8 .9	92								
13 Attract 8	3.87	0.78	- 00	.I6	.12	07	0 <u>0</u>	.12	Ξ.	– . <b> 6</b>	.15	8	.36 .I	. 17	84							
14 Attract 9	4.20	0.75	– .33	01.	20	02	3	.32	.03	.25		<u>4</u> .	.02	58 .2		94						
I5 Attract 10	3.45	0.86	– .34	9	– .32	08	09	.20	<u>+</u>	10.		48					88					
16 Attract 11	2.53	I.03	– .26	EI.	– .22	– .45	– .42	.49	.52	.50		31	.58 .61			.48	۰. ۲.	.93				
17 Attract 12	2.65	0.91	06	.17	40	20	- <b>18</b>	<u>8</u> .	60 <sup>.</sup>	.21		.24	.06 .55				43	-	16			
18 Attract 13	3.16	0.92	.02	— .05	90.	23	– .38	.39	.55	.20	.05	12	.58 .28	8.01		.   3 .	0.	.57	.15 .91	_		
19 Attract 14	1.78	0.74	- 00	.02	– . <b>  6</b>	– .3 I	– .29	.32	.47	.27	.45	.22	.73 .27		Ι			.40	.03 .55	3.95		
20 Attract 15	4.93	0.23	– .46	– . <b>I</b> 5	.I6	10. –	90.	04	07	- 4	~	4	.I3 .II		.30		ο. Ε	.06 – .	.10 .15		<u> </u>	_
21 Attract 16	3.40	0.91	- - -	01	26	.05	– .23	.32	<u> </u>	ю <sup>.</sup>	.21	61.	.30	.48 .41		.5I	4	4.	.68 .05	6I.	01.	.93
N = 43, all correlations .29 and higher significant at $p < .05$ . Reliabilities appear on the diagonal. Attract 1–16 refer to the rated attractiveness of the 16 hypothetical programs and offers.	rrelatic ogram:	ons .29 s and c	and hi	igher si	gnificar	it at p	< .05. F	Reliabili	ties app	oear on	the dia	agonal.	Attrac	<u> </u> +	l6 refe	er to t	he ra	ted att	ractiv€	suess	of tl	16 I 6

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Level I model	Ь	t	$\sigma^2$	95% CI
Intercept	1.27*	<b>44.79</b> *	.25*	1.22-1.33*
Fit'	<b>1.40</b> *	<b>55.12</b> *	.27*	1.35-1.45
Funding	<b>0.80</b> *	31.41*	.19*	.75–.85
Prestige	<b>0.74</b> *	<b>28.96</b> *	.18*	.69–.79
Location	0.51*	<b>19.98</b> *	.09*	.46–.56
Level 2 model	Ь	t	$\sigma^2$	95% CI
Intercept	1.30*	27.82*	.25*	1.21-1.40
Fit	1.31*	28.54*	.26*	1.22-1.40
Funding	0.75*	18.60*	.19*	.67–83
Prestige	0.75*	18.49*	.18*	.67–.83
Location	0.49*	15.57*	.09*	.43–.55
Time	- 0.05	- 0.95	.03	1505
Fit*Time	0.16*	3.35*	_	.07–.25
Funding*Time	0.08***	<b>1.81</b> **	_	.00–.16
Prestige*Time	- 0.01	- 0.36	-	10–.07
Location*Time	0.03	0.86	_	04–.09

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Table 4. Levels 1 and 2 models - attribute weightings and change over time

Note. Bolded values represent hypothesized relationships.  $\sigma^2$  denotes between person variance around the effects.

\*p < .05; \*\*p < .10.

#### Number of offers

The number of offers an applicant received was assessed at all three time periods with the item, 'How many programs were you accepted to?' However, most respondents did not begin to learn of their offers until around Times 2 and 3. As with GPA, the number of offers was self-report and could not be verified and hence we cannot rule out the possibility that some applicants inflated their responses. However, there was a range of offers across the time periods (ranging from 0 to 8), suggesting that if applicants were misrepresenting themselves, the majority were not doing so. As presented in Tables 1–3, at Time 1 on average applicants received .77 offers ( $\sigma = 1.28$ ), at Time 2 they received an average of 2.05 offers ( $\sigma = 1.74$ ), and at Time 3 applicants received an average of 2.98 offers ( $\sigma = 1.90$ ).

#### Analytical method

A multi-level random coefficient modelling (RCM) approach, using the SAS System's PROC MIXED procedure with restricted maximum likelihood, was used to run all analyses. This modelling strategy allows for the correct estimation and statistical significance tests, of both within and between individual effects in a longitudinal design (e.g. Bliese & Ployhart, 2002; Hofmann, 1997). In such RCMs, there are actually three levels of the model that are estimated, and each level provides different information. The Level 1 model examines the direct effects of the cue weight (i.e. regressing attractiveness on to fit, funding, prestige, and location) within a time period. The Level 2 model examines the nature of differences in the weighting of attributes across time (essentially is there an attribute × time interaction, or does the weighting of attributes change over time?). Finally, the Level 3 model explains why change occurs by examining individual difference predictors of such within-person variance (i.e. self-assessments, ability, and number of offers). Note the individual difference variables were grand-mean centred and

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standardized. This increases comparability across the individual difference predictors because they differ in their scales of measurement and variances. The intercept therefore refers to the organizational attraction for the average participant, at the first time period, and when the four attributes are all low. Consequently, the effect sizes for the attributes refer to how much of an increase in attractiveness when that attribute is favourable (high). Neither the time nor attraction variables were grand mean centred. However, consistent with (Bliese & Ployhart, 2002), time was coded 0, 1, and 2 (to represent Times 1–3, respectively). Coding time in this manner aids in the interpretability of intercepts and slopes because the intercept refers to the first time period.

The Level 1 model is used to test Hypotheses 1 by examining the statistical significance of the regression coefficients of fit, funding, prestige, and location. Note that in policy capturing these regression weights represent the average weight placed on each attribute such that higher numbers indicate that attribute is weighted more heavily in the judgment process.

The Level 2 model is used to test Hypothesis 2. This hypothesis is tested by allowing variation both within and between individuals in each of the regression coefficients (i.e. random effects) such that individuals differ in how much they weight each attribute within and over time (that is why these models are called random coefficient models; because the regression coefficients may differ across and within people). By introducing this variation it allows us to test whether there is within-person variance over time how people weight attributes; essentially testing attribute × time interactions.

The Level 3 model is used to test Hypotheses 3–5, i.e. whether the individual difference predictors explain significant variation in the relationship between attractiveness and the attributes over time (essentially a cross-level moderator or a three-way interaction). Asked another way, do changes in these individual difference variables help significantly explain change in attribute weighting over time? A different Level 3 model is used to test each of Hypotheses 3–5.

It should also be noted that for all analyses we evaluate findings at both the p < .05 and the p < .10 levels of significance. As noted by previous researchers, a common drawback to testing moderator effects is the loss of power (Aguinis, 1995; Aguinis & Stone-Romero, 1997). Though statistical approaches such as RCM have been demonstrated to be more powerful than traditional moderated multiple regression approaches, power is still an issue when trying to detect such cross-level moderators (Davison, Kwak, Seo, & Choi, 2002). We therefore treat effects supported at the p < .05 level as significant while those at the p < .10 level as marginally significant. This best balances concerns for statistical versus practical significance, and Type I versus Type II errors.

#### Results

#### Level 1 and 2 models: Attribute weighting and change over time

Hypothesis 1 predicted that fit, funding, prestige, and location would be significant predictors of applicants' organizational attraction decision policies. Table 4 provides support for Hypothesis 1. Fit, followed by funding, prestige, and location each demonstrated significant main effects. To determine whether there were significant differences in the weighting of these attributes in influencing decision policies, we conducted z-tests to test for differences between the unstandardized regression weights (cf. Cohen, Cohen, West, & Aiken, 2003). Results demonstrate that fit was weighted significantly higher than the other three attributes (z = 12.33, 13.60, 20.01, p < .05, for funding, prestige, and location, respectively). The weighting applied to funding was

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significantly higher than that applied to location (z = 7.15, p < .05); however, there were no differences between funding and prestige. Finally, prestige was weighted significantly higher than location (z = 5.62, p < .05).

Hypothesis 2 tested the Level 2 model and proposed change over time in attribute weightings. Essentially, Hypothesis 2 tested the interaction between each of the attribute weights and time to determine whether the relationship between attribute weightings and organizational attraction changed over recruitment cycle. Results of this model, presented in Table 4, reveal significant fit × time and funding × time interactions such that both fit and funding weights increased over time (fit:  $\beta = 0.16$ , t = 3.35, p < .01; funding:  $\beta = 0.08$ , t = 1.80, p = .07). Neither prestige nor location weighting changed over time. Thus, fit and funding increase in weighting over time, whereas prestige and location appear more constant, providing partial support for Hypothesis 2. Because there is no change to explain for prestige and location, Hypotheses 3-5 focus primarily on exploring Level 3 predictors that may explain changes in the fit and funding weightings.

# Hypotheses 3–5: Individual differences predictors of change in fit and funding over Time

Prior to testing the proposed hypotheses, exploratory analyses were run to determine whether demographic (e.g. race, age, gender) effects were present. Namely, we wanted to assess whether attribute weighting varied across races, age groups, and genders. Results revealed effects only for gender at Times 1 and 2. Women tended to use fit information more than men when making organizational attractiveness decisions. This finding is consistent with previous research that has detected gender differences in the manner with which information is used in influencing applicant decision making (Thomas & Wise, 1999). However, as demographic differences are not the focus of this study, we encourage interested readers to contact the first author for more details. Additionally, we ran analyses to determine whether there were program-level differences in attribute weighting. No significant effects were found.

Hypotheses 3-5 predicted that individual differences in applicant marketability (or perceptions thereof) operationalized as self-assessments of performance (Hypothesis 3), GPA (Hypothesis 4), and offers (Hypothesis 5) would explain change across time in attribute weightings. More specifically, Hypotheses 3 and 4 proposed individual differences in self-assessed performance and GPA would most influence the relationship between attribute weightings and organization attractiveness at earlier stages of the recruitment process, while Hypothesis 5 proposed individual differences in the number of offers received would most influence the relationship between attribute weightings and organization attraction at later stages of recruitment. Results presented in Table 5 provide partial support for Hypotheses 4 and 5 specifically for the attribute of *fit*; however, no support was found for Hypothesis 3. That is, we found that GPA and offers explained changes in the attribute-organizational attraction relationship, though self-assessed performance was not a significant predictor of change in this relationship. Furthermore, while the weighting of funding changed over time, individual differences in selfassessments, GPA, and offers were unable to explain why the relationship between funding and organizational attraction changed over time. Because we found that the Level 3 individual difference predictors were only able to explain changes in

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Level 3 model	Ь	t	95% CI
Intercept	2.28*	57.52*	2.20–2.36
Fit	1.32*	32.54*	1.24-1.40
GPA	-0.12*	- <b>3.2</b> I*	— . I <b>9</b> —.04
Time	0.03	0.76	— .05—. I I
Fit*Time	0.17*	3.77*	.08–.26
Fit*GPA	0.12*	3.01*	.04–.19
GPA*Time	0.02	0.34	— .0 <b>8</b> —.11
Fit*GPA*Time	- <b>0.09</b> **	- <b>1.67</b> **	1801
Intercept	2.27	47.24*	2.17-2.36
Fit	1.31*	26.22*	1.21-1.41
Offers	- 0.04	- 0.88	— . I 5—.06
Time	0.12*	2.54*	.03–.20
Fit*Time	0.10**	1.89**	.00–.20
Fit*Offers	- 0.04	- 0.76	— . I 6—.07
Time*Offers	-0.11*	- 2.62*	1902
Fit*Offers*Time	0.12*	<b>2.64</b> *	.03–.21

Note. Bolded values represent hypothesized relationships. Individual difference variables are grandmean centred and standardized.

\*p < .05; \*\*p < .10.

fit weightings only time, we turn our discussion to explaining changes in fit weightings.

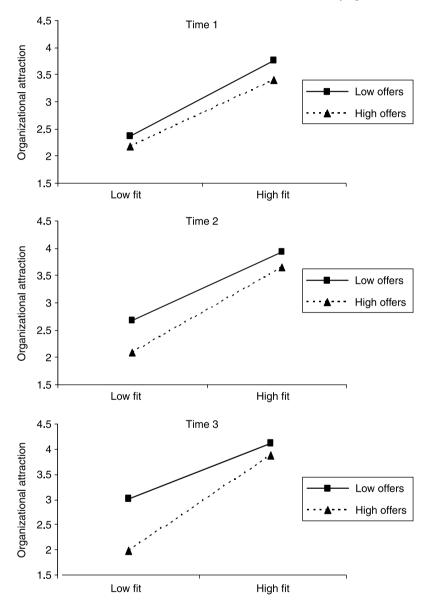
Perceived marketability (GPA and offers) explained changes in fit weightings across time. However, the nature of the fit × GPA × time interaction (b = -0.09, t = -1.67, p < .10) provides limited support for Hypothesis 4. The influence of GPA on the fit-attractiveness relationship did change over time, but this effect was strongest for those with lower GPAs. Counter to Hypothesis 4, applicants with lower GPAs increasingly weighted fit information across the stages of the recruitment process. Applicants with higher GPAs weighted fit information in a relatively stable manner throughout the process.

The three-way interaction between fit × offers × time (b = 0.12, t = 2.64, p < .01) is shown in Figure 2. Consistent with Hypothesis 5, the influence of offers on the fit-attractiveness relationship was stronger at later stages of recruitment. Furthermore, applicants with more offers increasingly weighted fit information relative to those with fewer offers. Specifically, fit had to be at higher levels for those with more offers to be attracted. These results support Hypothesis 5.

#### Discussion

Results from this study indicate that fit and funding attributes increasingly influence organization attraction judgments over time, while prestige and location remain relatively constant. Additionally, individual differences in GPA and offers influence the weighting of fit over time. Applicants with different levels of GPA and different numbers offers used fit information differently over time when making attractiveness judgments. Those with low GPAs and higher numbers of offers tended to increasingly weight fit information across the stages of the recruitment process.

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Figure 2. Three-way interaction between fit  $\times$  offers  $\times$  time.

#### Implications for research and practice

Taken together, these findings have important implications for research and practice. From a theoretical standpoint, it suggests that previous fit and recruiting findings may be conditional on the timing of when the study takes place. Asking questions of 'how important is fit to applicants' may need to be tempered by the stage in which the data are collected. If applicants do not use attribute information in a stable manner over time, as results suggest occurs with fit and funding, then theory and research must be clear about when the attributes are being examined. Many have argued that recruitment research must take a more longitudinal and dynamic

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perspective (e.g. Barber, 1998; Breaugh & Starke, 2000); our study gives empirical support to the notion that time and stage of staffing must be an explicit component of any future theoretical work. One may think of stage of the recruitment process as a temporal moderator such that attribute-attractiveness ratings are time-dependent. Considering that organizations need to know which attributes to emphasize in a recruiting effort, our results suggest they need to simultaneously consider *when* this information will be presented.

Although finding that change in attribute weights has several theoretical and practical implications, our study also provides preliminary evidence for the predictors of this change. For instance, the number of offers an applicant received explained changes in fit weightings over time. In particular, the influence of offers on the fit-attraction relationship increased over time. What is important here, however, throughout the process the most desirable candidates used fit information differently than 'weaker' candidates. For instance, applicants with more offers (e.g. stronger applicants) tended to be more discriminating and to weight fit information differently when making assessments about the organization.

Concerning practical implications, our results suggest that to be maximally effective organizational recruitment processes would be wise to tailor the information they present according to recruitment stage. For instance, location and prestige influenced organizational attraction early in the process, but the weighting of these attributes did not increase throughout recruitment. As the recruitment process progresses our results suggest that applicants will most evaluate information that will allow them to assess how they will fit with the organization and information regarding the salary offered. These factors are weighted highly after applicants apply and the weightings increase as applicants' progress through a recruitment process. The significance of fit is well documented within the literature (Cable & Judge, 1994, 1996, 1997; Carless, 2005; Chapman et al., 2005; Kristof, 1996). However, the fit increased in weighting and increases for desirable applicants are noteworthy findings given that organizations are increasingly finding themselves in a 'war' for qualified talent. It is, therefore, important that an organization present information from which applicants can make assessments about how well they will fit with the organization. An organization may lose the most desirable candidate if they do not present information about job demands, organizational culture, and other important aspects of the job and organizational environment from which applicants can make accurate assessments of fit. Furthermore, our results suggest they need to ensure this information is available throughout the recruitment process. Successful recruitment efforts will require that applicants have the information they need (e.g. information on the organization value, culture, mission, goals, co-workers) to make assessments of fit.

#### Limitations

It is important for readers to remember the aforementioned implications must be tempered against some potentially important limitations. First, one might rightfully question the extent to which generalizations to other settings can be made on the basis of applicants participating in a graduate admissions process. This context and sample will obviously have some differences from other recruitment and staffing processes in other organizations and occupations. However, recent meta-analyses (Chapman *et al.*, 2005; Hausknecht, Day, & Thomas, 2004) suggest that the differences in effect sizes

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between student and applicant contexts are not great. In both the studies, differences between correlations obtained in student and field samples when attractiveness was the dependent variable are less than .04. Additionally, graduate applicants are real applicants competing to obtain a position in an institution and most likely showing motivation similar to those of other job applicants. The psychological processes that a graduate applicant undergoes throughout his/her decision-making process (uncertain outcomes, job choices) are similar to those of applicants in other settings.<sup>3</sup>

A second concern must be made about the generalizability of the policy capturing results to judgments and decisions for real job offers. Specifically, there are some important differences between completing a policy-capturing survey versus using information for real judgments. In policy capturing, individuals are presented complete information about the options they are asked to evaluate. In actual job-search contexts, applicants are forced to make decisions with incomplete information. We took multiple steps, including conducting pilot studies, to ensure our policy-capturing scenario conformed to established guidelines. Research suggests that policy-capturing results can show a high generalizability (i.e. external validity) if they reflect judgments participants are familiar with or currently engaged in, use realistic scenarios with realistic levels for each independent variable, and use a fully crossed design (e.g. Fischhoff, 1996; Graham & Cable, 2001; Hastie & Dawes, 2001; Slaughter et al., 2006; Stewart, 1988). Additionally, recent research provides evidence to suggest policy-capturing judgments can generalize to predict choice contexts (Slaughter et al., 2006). However, future research examining the boundary conditions and contexts to which such results are generalizable will provide greater insights into the utility of policy-capturing information.

Similarly, a major goal of the present investigation was to explore change in decision policies over time. Thus, participants were presented the identical policy-capturing scenarios at three stages in time so that we could be sure that any change was due to the actual change in the weighting of cues and not due to the fact that we changed the information presented. Because scenarios were identical across stages, any change that did occur was in applicants' actual job-search situations and this change influenced their attribute weightings (because we expected they transferred the information used in their actual choice processes to the policy-capturing scenarios). Regardless, in the real world this level of control of information is not possible and the types and level of information presented will change. Again, what policy capturing allows us to do is determine which factors applicants are likely to use when making their actual decisions (Graham & Cable, 2001; Slaughter *et al.*, 2006).

A third concern involves the information contained in our policy-capturing scenarios. Namely, our operationalization of fit is multidimensional consisting of fit with jobs, organizations, and workgroups. There is evidence to suggest that fit is a multidimensional construct and should be researched as such (Kristof-Brown *et al.*, 2002; Kristof-Brown, Zimmerman, & Johnson, 2005). It may be that the weight for fit

<sup>&</sup>lt;sup>3</sup> Results of a follow-up study conducted with individuals who had experienced both the graduate application process and realworld job-search processes (N = 50) indicate that there are a number of important similarities between these processes. For example, among some of the findings that emerged were that 90% of respondents indicated the decision processes used when applying to graduate school were nearly identical to those used when applying to actual jobs. The level of stress and anxiety experienced by 75% respondents was rated as being 'similar' or 'very similar' during the graduation search and job-search processes. There was also substantial overlap in the factors listed as being influential in the decision to accept a graduate offer and the decision to accept a job offer. Due to space constraints, the full results can be obtained from the first author.

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grew because applicants were evaluating different levels of fit at different stages in the recruitment cycle. Teasing apart these relationships was beyond the scope of the present study, but future research may want to explore whether the fit-attraction weightings change over time as a function of the fit level being explored.

A fourth limitation was that our sample size decreased over time and such attrition may be non-random. The data available suggest this was largely randomly missing data and did not affect the results. First, demographically the participants did not change over time. Second, the results obtained when analysing the full sample and the sample of 28 (who responded at all three times) were similar. Third, the psychology department which sponsored this research requested that we ask five brief questions about how applicants perceived the department (e.g. bad-good, unfavourable-favourable). The mean department attractiveness rating decreased over time (most likely due to applicants not being informed of their status or being rejected), arguing against a favourability bias in the response rate. Fourth, a study by Rogelberg et al. (2003) suggests that active non-response is not that frequent. They found that 85% of their sample did not complete mail surveys only because they lost the survey, forgot, or never received it. Finally, attrition in the sample is similar to that experienced in a recent study by Carless (2005) who also conducted a study with graduate-level applicants progressing through a recruitment cycle. Replication with other samples and designs will be required to address this potential limitation.

Though we studied the recruitment process from the perspective of the applicant, we used Barber's (1998) timeline as our organizing framework. As noted by an anonymous reviewer, this framework tends to focus on activities from the organization's perspective and does not necessarily take into account that an applicant can be in multiple stages at different organizations at the same time. For instance, while an applicant may be in the 'maintenance stage' at one organization they can be in the 'influencing status stage' at another organization. There tends to be more uniformity in graduate admissions timelines than more traditional recruitment timelines; however, we recognize that applicants likely began to receive offers at varying time points. During our first survey administration very few of our respondents were receiving offers (see Table 1). The majority of our respondents had begun receiving their offers by our Time 2 administration (see Table 2). While we tried to ensure that our participants were in a similar stage, it is still possible that such differences did occur and may have affected our results. This is an issue, in general, about which recruitment researchers and specifically those conducting longitudinal investigations must be aware.

An additional noteworthy limitation was our inability to study those individuals who may have inquired about the given positions available, but chose not to apply (i.e. preapplication). At Time 1, our applicants had already submitted applications; thus, our Time 1 actually occurred during the very early phase of Barber's (1998) 'maintaining applicants' stage. Since the decision to apply (or not) is an important stage in the decision-making process, future research will want to examine applicants from the preapplication stage to the post-hire stage. Indeed, Barber (1998) highlights the need for research at the generating applicant's stage. Doing so will provide additional insights as to the entire applicant decision-making process.

Similarly, it should be noted that the time lags between Time 1 and Time 2 were not equivalent to the time lags between Time 2 and Time 3 administrations. From the time the first survey was administered to the time the third survey was administered, roughly 15 weeks elapsed; with 10 weeks elapsing between the Time 1 and Time 2 administrations and five weeks elapsing between the Time 2 and Time 3 administrations.

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It is important to point out that these particular time administrations were chosen because they mapped on to Barber's (1998) recruitment stages. In essence, what we are most interested in is how recruitment stage, not time *per se*, influences attribute weightings. However, to ensure that the coding of the time variable did not bias study results, an alternative coding scheme was adopted. Following the guidelines of Singer and Willett (2003), we recoded the time variable to more accurately reflect the numeric distance between survey administrations such that Times 1–3 were coded 0, .67, and 1, respectively. All preceding hypotheses were retested using this coding scheme. Results remained virtually identical and there were little differences in slopes across the two coding schemes. For instance, the nature of the three-way interaction between offers × fit × time remained significant (b = 0.26, t = 2.86, p < .01). However, because it is stage that is of theoretical interest to the present study all results presented in Tables 1–5 are based on a 0, 1, and 2 coding to represent the three time periods/stages (as suggested by Bliese & Ployhart, 2002).

#### Directions for future research

Though we found some support for our hypotheses, we did not find full support for our proposed hypotheses and framework. Perhaps, part of the problem is that these hypotheses need to be more refined such that one must link a particular individual difference to a particular attribute at a particular time. However, there is so little longitudinal recruitment research and theory that we developed our own framework as shown in Figure 1. Our framework was based on the best theory we could integrate, but it is clear this framework falls short of fully *explaining* the change process.

To a certain extent this state of affairs mirrors the development of longitudinal research in many organizational disciplines. For example, early dynamic performance research was able to demonstrate the form of change but not predict it (e.g. Deadrick & Madigan, 1992; Hofmann, Jacobs, & Gerras, 1992); more recent research has learned from this early work to refine the nature of theory and consequently show better support for predictors (e.g. Deadrick, Bennett, & Russell, 1997; Ployhart & Hakel, 1998). It may simply be the case that before we can precisely specify the types of predictors, we must first understand the function and nature of the change process (the classic criterion-problem). We suspect that a similar evolution of research may occur here. Based on our experience with this study and the extant literature, it is possible to make some 'experience-based' predictions to stimulate future research.

First, it will be critical to carefully consider the nature of the attribute in question to articulate the likely individual difference predictors. For example, fit may be most affected by values and personality (Chatman, 1991; Kristof, 1996) while pay may be most affected by need for achievement (Bretz, Ash, & Dreher, 1989). Second, the contextual influences on these attributes must also be considered. One type of contextual influence may be economic factors such that the weighting of pay is most affected by current job status (Cable & Judge, 1994). A different type of contextual influence the weighting placed on various attributes (location is an obvious one; Ryan, Sacco, McFarland, & Kriska, 2000). Thus, the refinement to the model in Figure 1 will come through a more careful specification of individual differences and contextual influences. This is arguing for something similar to Holland's (1985) theory of occupational interests and if correct, the individual difference predictors are more likely to be values, preferences, and personality than the more context-specific predictors we examined in

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this study. Increasing awareness of the specific factors that are most valued by different types of applicants, *at particular points in time*, will lead to refinement in theoretical models and will also enable recruiters to better identify and attract potential candidates. For instance, suppose highly sought-after employees first screen potential firms based on opportunities the firm provides for their spouse. Organizations that emphasize spousal relocation programs in the early stages of recruitment may obtain considerable advantage over those that do not emphasize this information until the end of the process.

#### Conclusion

Understanding how applicants use job and organizational attribute information is important for recruiting research and practice. Further, understanding the *processes* that occur during the recruitment and selection process will help shape applicant decision-making theory. This study suggests that such a longitudinal focus is critical because attribute weights (particularly fit and funding) increase over time and there are individual differences in this change process. Organizations wanting to attract the best employees would be well advised to be aware of the changing needs of applicants, and to structure recruitment procedures accordingly. It is not just a matter of what applicants want, but 'who wants what and when'.

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#### Appendix A: Policy-capturing scenario examples

#### Example 1: Low funding, low prestige, high location, low fit

The characteristics of this program and offer would include:

- A funding package of about \$6,000/yr your first year, with no guarantee of funding in subsequent years.
- The program is ranked about 25th by US News and World Report, faculty and students who conduct very little research, are not well known at conferences and rarely publish in the top journals, and graduates who have a history of receiving mediocre academic and applied jobs.
- Located in an area said to have a very pleasant climate (weather) and provide ample social activities during one's free time, and in an area providing many internship and job opportunities for students of this program.
- You are not interested in the research at program X, the culture of the program is

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thought to promote competition among its students, and you are unlikely to have anything in common with the current student.

#### Example 2: High funding, high prestige, low location, low fit

The characteristics of this program and offer would include:

- A guaranteed funding package of at least \$11,000/yr for the entirety of your graduate career (though not to exceed 5 years).
- A top 10 ranking from US News and World Report, faculty and students who conduct a great deal research, are highly visible at conferences and publish in the top journals, and graduates who have a history of receiving outstanding academic and applied jobs.
- Located in an area said to have an undesirable climate (weather) and does not offer many social activities during one's free time, and students would have to leave the school/area for internships and job opportunities.
- You are not interested in the research at program X, the culture of the program is thought to promote competition among its students, and you are unlikely to have anything in common with the current student.

#### Example 3: High funding, high prestige, low location, high fit

The characteristics of this program and offer would include:

- A guaranteed funding package of at least \$11,000/yr for the entirety of your graduate career (though not to exceed 5 years).
- A top 10 ranking from US News and World Report, faculty and students who conduct a great deal research, are highly visible at conferences and publish in the top journals, and graduates who have a history of receiving outstanding academic and applied jobs.
- Located in an area said to have an undesirable climate (weather) and does not offer many social activities during one's free time, and students would have to leave the school/area for internships and job opportunities.
- The research at program X is a very close fit your research interests, the culture of the program is very supportive of its students, and the current students of this program are very similar to you in terms of your career goals, values, and interests.