Applicant Perceptions of Fairness and Equity in Selection

Megan Warrenbrand, Alexandra I. Zelin Ph.D., Christopher J. L. Cunningham Ph.D., & Brian J. O'Leary Ph.D.

Background & Purpose

- Machine-learning algorithms provide organizations with the opportunity to quickly and efficiently process information about job applicants while reducing costs associated with selection and turnover.
- Any bias or error present in the programming as a result of information drawn from historically biased data is evident in the algorithm output (Illingworth, 2015).
- Recent fairness and equity concerns about the risks associated with the use of algorithms in selection processes; existing research has not fully addressed differences in applicant perceptions towards algorithmic or human decision-makers in the selection process.
- The present study analyzes applicant reactions to the selection process to understand whether algorithmic or human hiring decision-makers influence perceptions of fairness and equity and ultimately organizational outcomes like attraction and job pursuit intentions.

Manipulated Vignettes Human Decision-making:

You are applying for a job this summer. You submit your resume to an organization's website and receive a message saying, "Thank you for your submission. Our hiring staff members will be looking through the resumes and will respond to you in two weeks' time."

Algorithm Decision-making:

You are applying for a job this summer. You submit your resume to an organization's website and receive a message saying, "Thank you for your submission. Our electronic database will be sorting through the resumes and you will receive an automated response in two weeks' time."

Methodology Measures

Manipulated Vignettes

Distributive Justice (Colquitt, 2001)

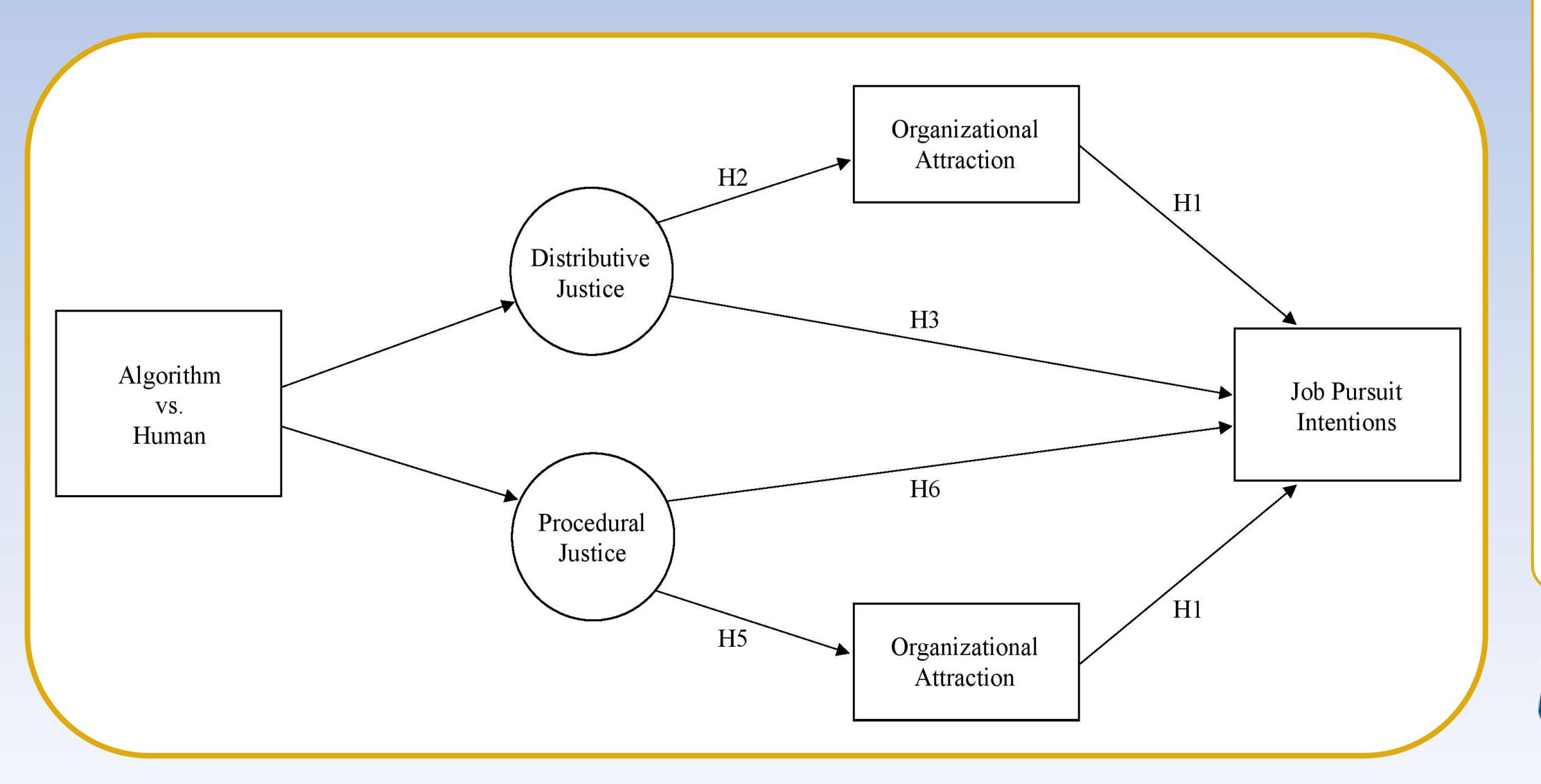
Procedural Justice (Colquitt, 2001)

Organizational Attraction (Highhouse et al., 2016)

Job Pursuit Intentions (Highhouse et al., 2016)

Procedure

Participants will receive a Qualtrics survey that includes the informed consent form. Once participants have agreed to the informed consent, the survey design will randomly select individuals to read one of two scenarios regarding the type of resume evaluation an organization will utilize after applying for a job: a vignette about human evaluation or a vignette about algorithmic evaluation. Then, the survey will prompt each participant to answer questions pertaining to measures of distributive justice, procedural justice, organizational attraction, and job pursuit intentions. Following the questions related to each measure, participants will then complete an attention check to ensure they paid ample attention to and understood their respective vignette. Finally, participants will complete items inquiring about their demographics (e.g., age, gender, ethnicity, socioeconomic status, occupation, highest level of education).



Hypothesized Outcomes:

- Individuals will perceive a higher degree of distributive and procedural justice if they believe a human reviewed their job application information rather than an algorithm.
- Both distributive and procedural justice are significantly and positively related to organizational attraction and job pursuit intentions.
- Organizational attraction positively mediates the relationship between both distributive and procedural justice and job pursuit intentions.

References

Colquitt, J. A. (2001). On the dimensionality of organizational justice: A construct validation of a measure. *Journal of Applied Psychology*, 86(3), 386-400. doi:10.1037/0021-9010.86.3.386

Highhouse, S., Lievens, F., & Sinar, E. F. (2016). Measuring Attraction to Organizations. *Educational and psychological measurement*, 63(6), 986-1001. doi:10.1177/0013164403258403

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