

### ABSTRACT

There are many reasons why an applicant may retake a selection test, whether it's due to reasons outside of their control or perhaps their first test administration was unsuccessful. Research has shown that scores generally increase when applicants retake a test. The current study aims to clarify the conflicting history of research regarding time between tests, while also closing the gap on types of assessments examined in the retesting literature. Results showed that more time between tests resulted in larger score gains for both the SJT and in the in-basket simulation.

### INTRODUCTION

- Job applicants retake selection tests for many reasons including the candidates state of mind or health, testing conditions, familiarity with questions on the test, or not being selected (Hausknecht, 2010; U.S. Department of Labor Employment and Training Administration 1999).
- Scores increase with previous experience on a selection test (Hausknecht, Trevor, & Farr, 2002; Lievens, Buyse, & Sackett, 2005; Van Iddekinge, Morgeson, Schleicher, & Campion, 2011).
- Little research has been done regarding retesting with situational judgment tests and in-basket simulations.
- Most research has been done regarding retesting in initial selection, but this research hopes to examine retesting in a promotional process.
- There is conflicting research regarding time between tests
  - Larger score gains with more time between tests for job knowledge tests (Van Iddekinge et al., 2011).
  - Larger score gains with less time between tests for cognitive ability tests (Bartels et al., 2010; Dunlop et al., 2011; Hausknecht et al., 2007).

### RESEARCH QUESTIONS

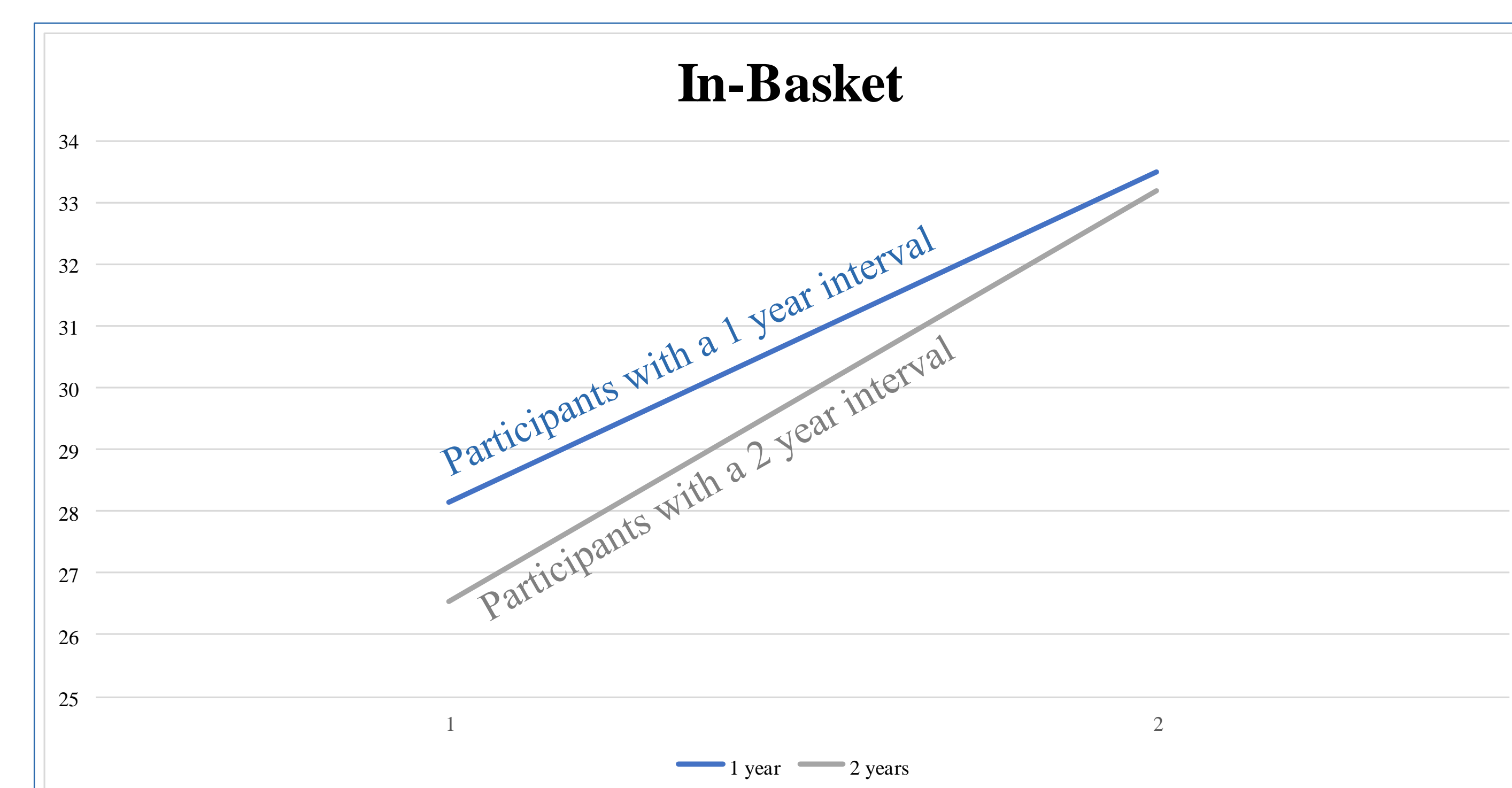
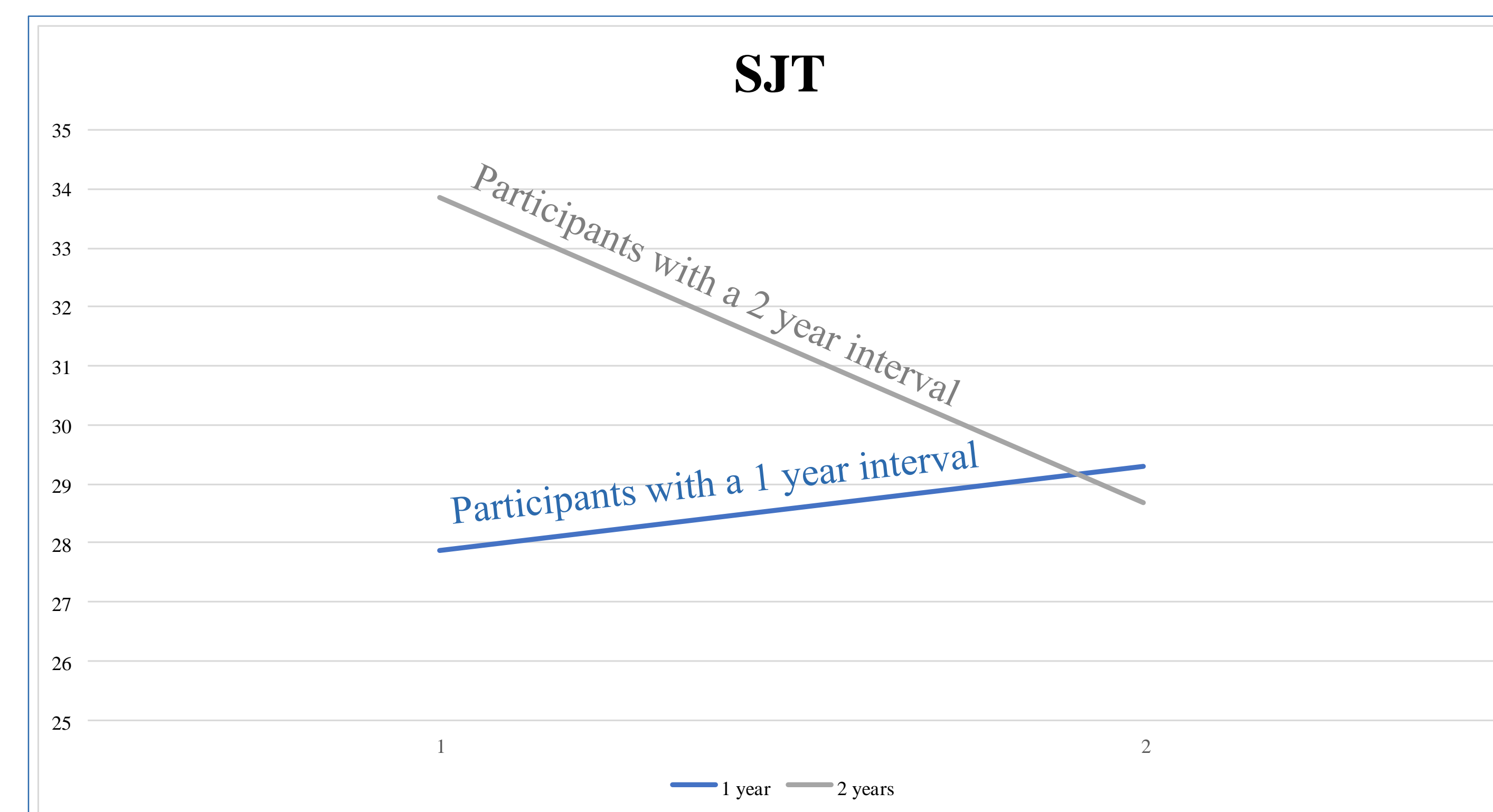
1. Will longer time intervals between test attempts show greater differences in scores than shorter time intervals between attempts for SJTs?
2. Will longer time intervals between test attempts show greater differences in scores than shorter time intervals between attempts for in-basket simulations?

### PARTICIPANTS

- 621 state highway patrol officers applying for promotion over three years.
- The majority of participants were male (95.8%).
- Participants were 89% Caucasian and 7.7% African American
- Participants ages ranged from 23-61 years (Mean = 42.41, SD = 8.66).
- 83 participants had a one-year time interval between tests (took the test in 2015 and 2016 or took the test in 2016 and 2017).
- 101 participants had a two-year time interval between tests (took the test in 2015 and 2017).
- The remaining participants either only took the tests once, or took the test all three years in a row.

### METHODS

- SJT development
  - Command staff saw 150 situations that an applicant would likely see on the job
  - These situations were developed using critical incidents
  - The command staff were able to edit and delete items as well as rank order four response options *best* (1) to *worst* (4)
- In-Basket development
  - Work sample items were developed using critical incidents
  - A fictional district was created within the highway patrol using a command structure similar to that of the highway patrol office for the purposes of the in-basket
  - Materials included instructions, organizational chart, calendar of dates, and response sheets
  - Scorers attended a frame of reference training session
- Procedures
  - Qualtrics was used
  - In-Basket Simulation (3 hours)
  - Lunch
  - Situational Judgment Test (3.5 hours)



	Time 1	Time 2
<b>SJT</b>		
1 year	27.88	29.29
2 years	33.84	28.68
<b>IB</b>		
1 year	28.15	33.51
2 years	26.54	33.19

### RESULTS

- Situational Judgement Tests (SJTs)
  - An independent-samples t-test compared the magnitude of score differences for those who took situational judgement tests one year apart compared to two years apart.
  - One year time interval ( $M=0.18, SD=8.83$ ) vs. two year time interval ( $M=2.13, SD=6.45$ );  $t(182)=1.73, p = 0.002$ .
  - Scores changed more with two years between retest attempts compared to one year between retest attempts.
- In-Basket Simulations
  - An independent-samples t-test compared the magnitude of score differences for those who took in-baskets one year apart compared to two years apart.
  - One year time interval ( $M=6.34, SD=7.92$ ) vs. two year time interval ( $M=6.65, SD=6.42$ );  $t(182)=0.29, p = 0.008$
  - Scores increased more with two years between retest attempts compared to one year between retest attempts.

### DISCUSSION

- Some literature indicates that less time between tests results in larger score gains than more time between tests (Bartels et al., 2010; Dunlop et al., 2011; Hausknecht et al., 2007)
  - Cognitive Ability Tests
- Other literature indicates that longer time between tests results in larger score gains (Van Iddekinge et al., 2011)
  - Job Knowledge Tests
- Construct relevant score change (Randall & Villado, 2017).
  - Allows employees to actually learn more about the job resulting in better scores on a job simulation type of test
- Why did scores go down from time 1 to time 2 for SJTs with one year between tests?
  - Results were significant because the scores increased at a larger magnitude with two years between tests than the magnitude of decrease with one year between tests
  - In-Basket scores (25.53) were much lower than SJT scores (34.21) in 2015, so retesters probably focused their attention on improving in-basket scores.