

Examining the Roles of Familiarity and Fluency in Value-Directed Remembering

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Abstract

Younger adult participants ($N = 142$) studied both student loan and Medicare application forms to allow examination of how the familiarity of information and the font styles (regular versus combination of bold/regular) in which the information was presented would combine to affect participants' perceived ease of processing (i.e., fluency) the information and value-directed remembering. Arguably younger adults are more familiar with student loan applications than with Medicare applications. Of interest was whether value-directed remembering would occur as a function of familiarity without arbitrarily assigning point values to information. Counterbalanced conditions revealed that participants expected better memory performance for whichever form came first, but they obtained better recall performance for the less familiar, Medicare form, than for the student loan form. Trends also suggested better memory for conditions with regular font than for those with bold font. Results are interpreted in light of fluency/disfluency effects and value-directed remembering.

Introduction

- Value can influence the type of information that is processed and the manner in which it is processed (Castel, Farb, & Craik, 2007).
- Goal-based and data-based processes may combine to influence both judgments of learning (JOLs) and memory performance (Koriat & Nussinson, 2009).
- Schematic support is defined as the presentation of information in a manner in which the information is familiar, which can help recollection or retrieval even when value is not directly stated (Castel, 2005).
- Easier to process information is rated as easier to remember, a concept known as the ease-of-learning heuristic (Kornell, Rhodes, Castel, & Tauber 2011).
- Information in alternating bursts of fluent and disfluent presentation can increase memory performance (Alter, 2013).
- More fluent font sizes yield higher JOLs than do less fluent fonts (Rhodes & Castel, 2008).
- Recall and recognition may be fundamentally different. Recall may be dependent on a search process much like the two-process model; however, recognition is based on global familiarity and not isolated to the specific target item (Gillund & Shiffrin, 1984).

Hypotheses

- Younger adults will provide higher JOLs for the information found in the student loan application (SLA) than for the Medicare application (MA) in all four conditions.
- Bold font materials will yield higher JOLs overall than normal font materials.
- Younger adults will perform better on the student loan application than the Medicare application in all four conditions.
- Performance will be higher in the normal font conditions than in the bold font conditions, as reflected by better performance on the recall and recognition tests.

Method

Participants

- 142 UAH students (M age = 19.69, $SD = 1.73$), Female = 66%

Design and Materials

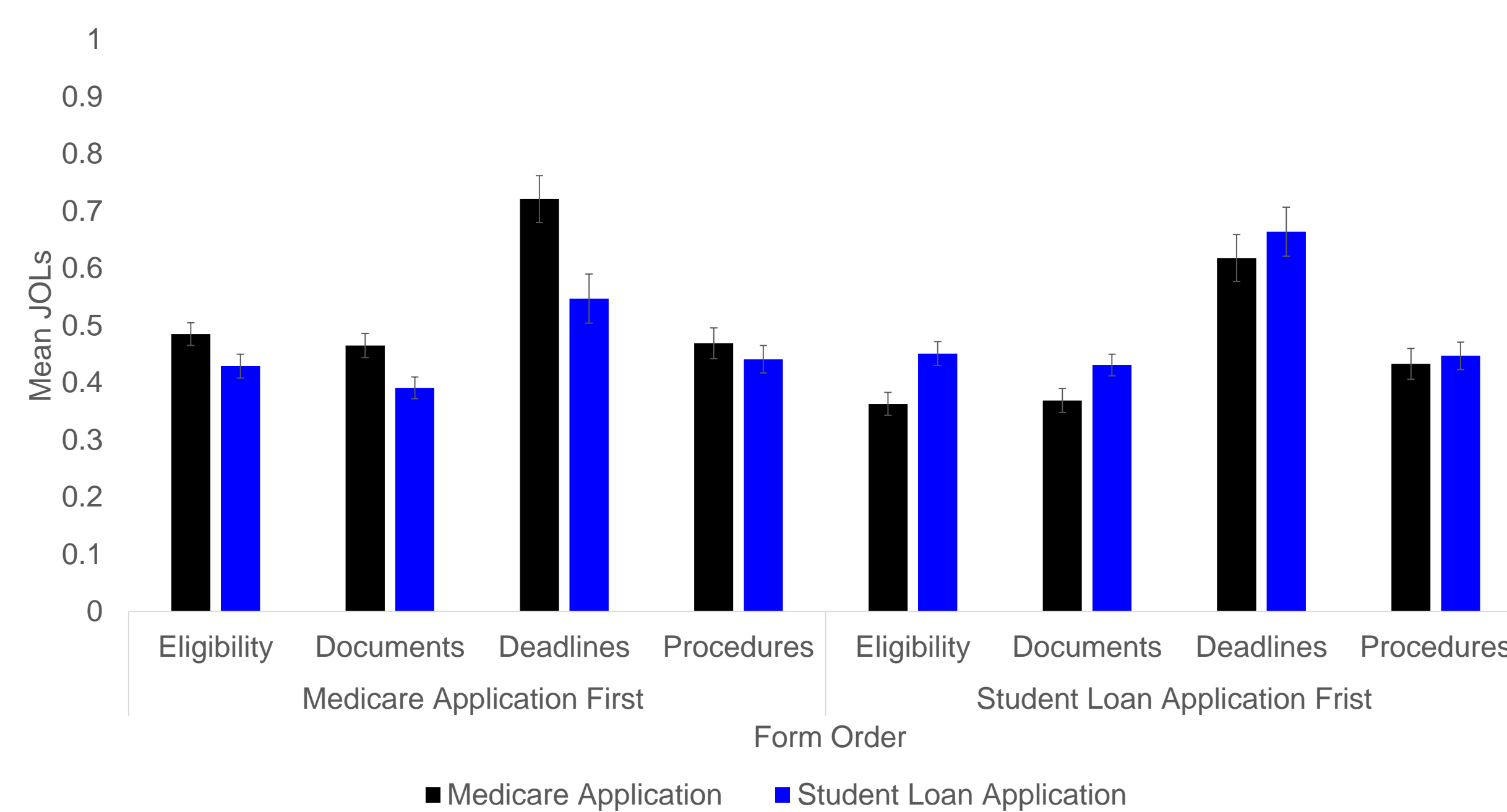
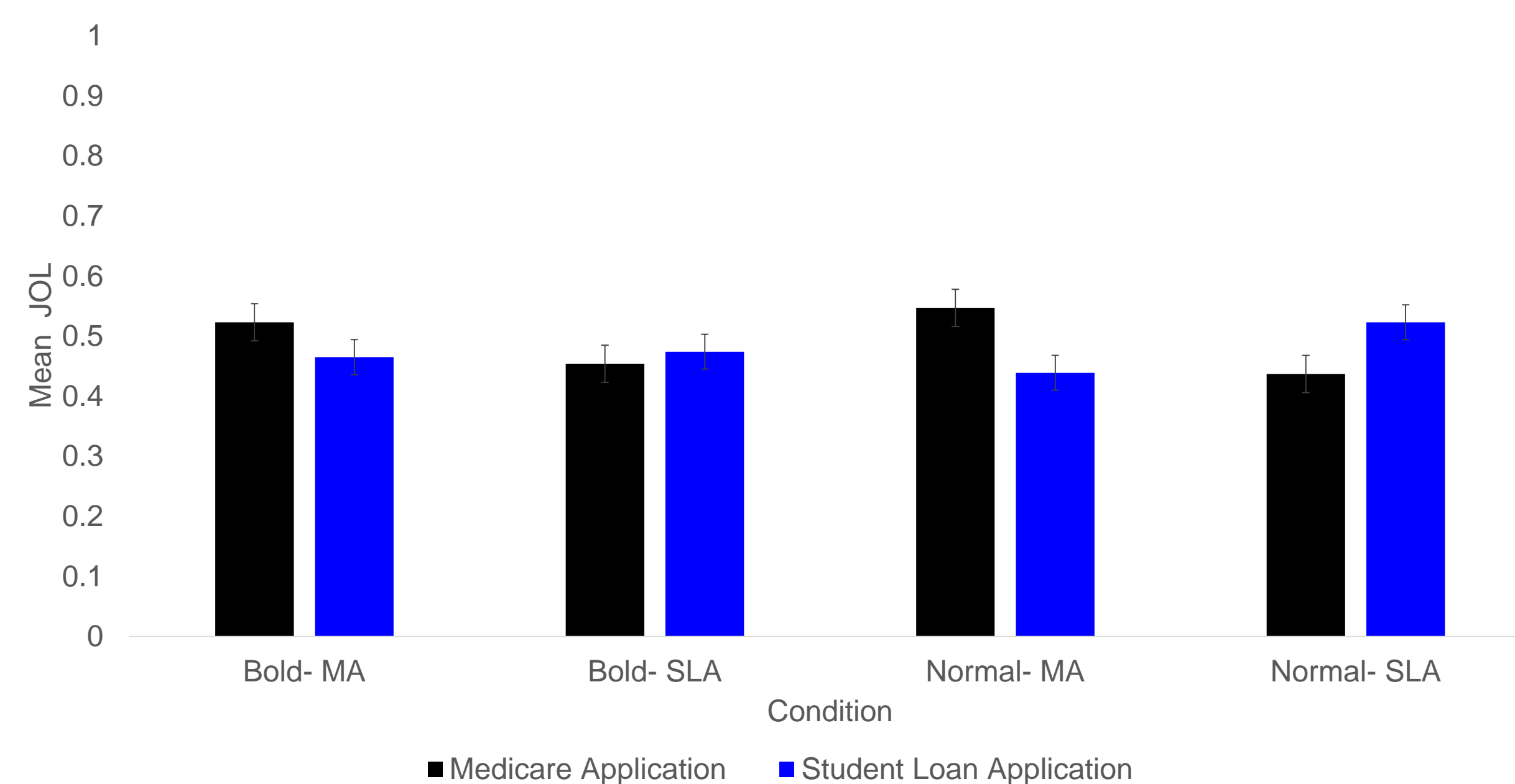
Applications: Student Loan and Medicare

- Contained form-specific information about how to complete each type of application
- Four sections: Eligibility, Documents, Deadlines, Procedures

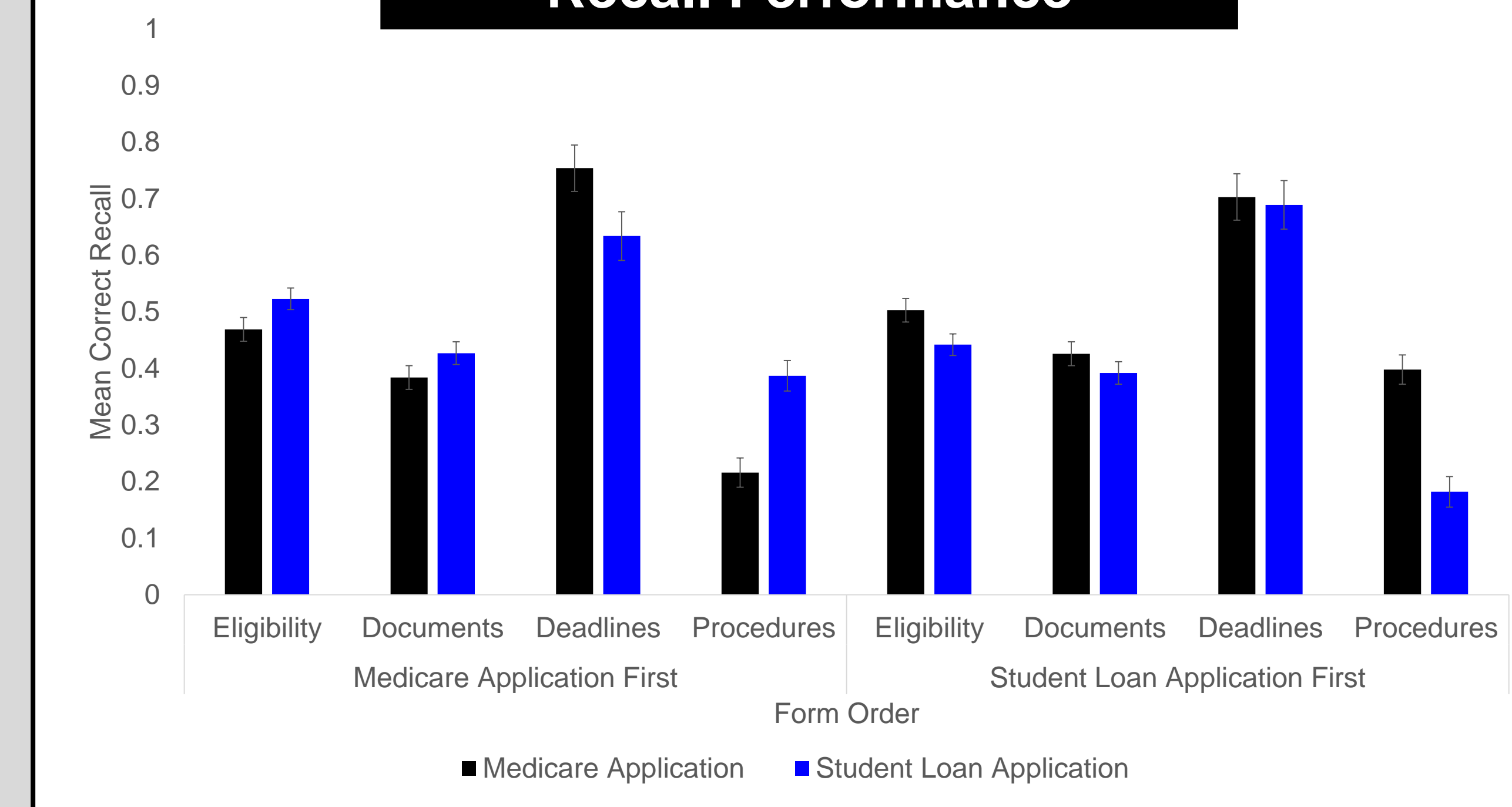
Conditions:

- All conditions contained both a Medicare application and student loan application, with order varying by condition.
- Two conditions contained alternating bold and normal font
 - Bold-MA: Medicare application presented first, both forms had alternating fonts
 - Bold-SLA: Student loan application presented first, both forms had alternating fonts
- Two conditions contained information only in normal font
 - Normal-MA: Medicare application presented first, both forms were in normal font
 - Normal-SLA: Student loan application presented first, both forms were in normal font

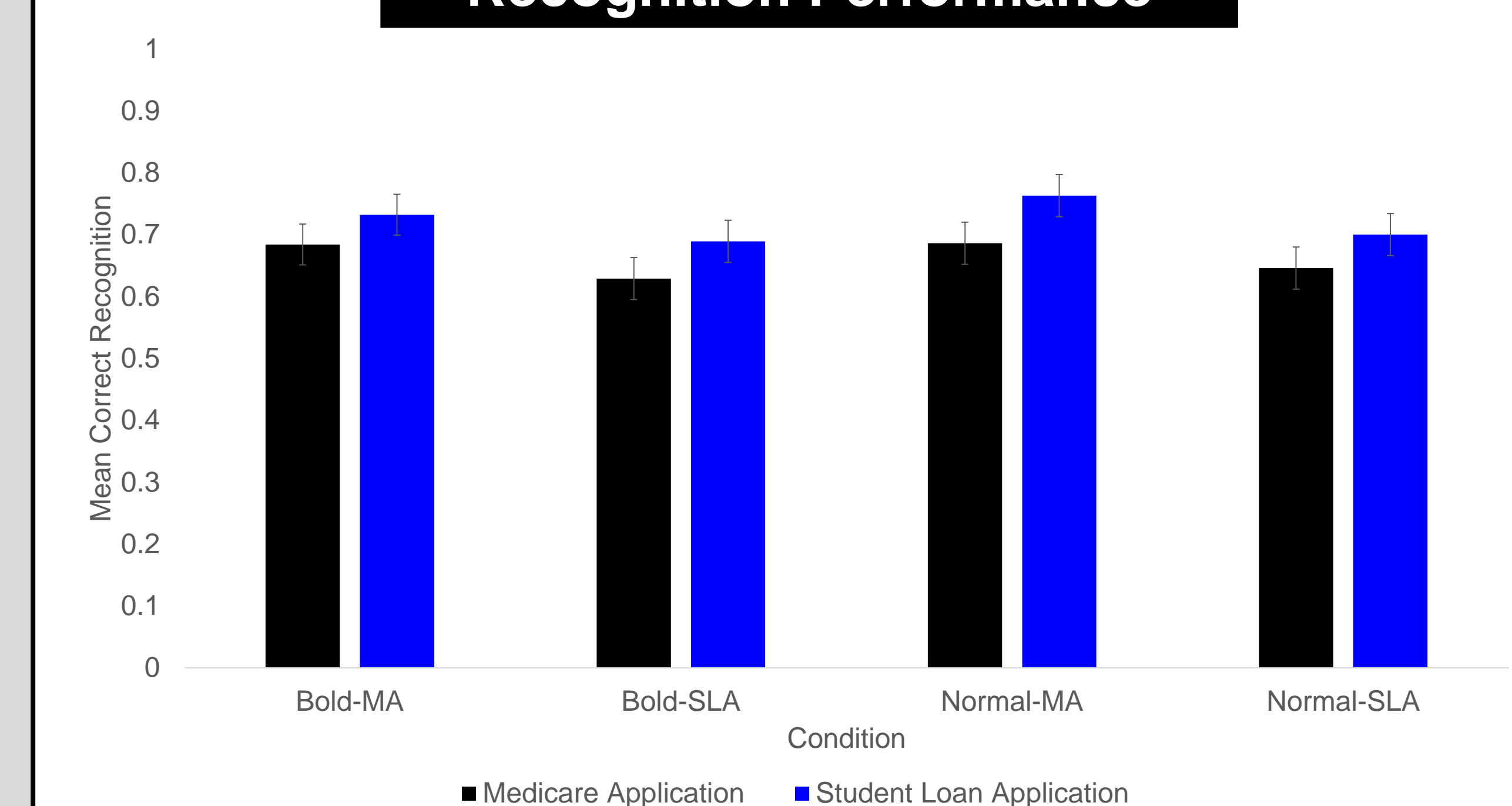
Judgments of Learning



Recall Performance



Recognition Performance



Discussion

- Order directly influenced JOLs and recall performance.
- Dissociation between JOLs and recall performance, such that higher JOLs were given to the first application; however, recall performance was higher on the second application.
- Recognition performance was higher for the student loan application than for the Medicare application across all four conditions.
- Dissociation between the estimated role of font type and actual impact on memory performance.

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