The relationship between perceived discrimination and decision-making

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Abstract. This study investigated the relationship between decision-making and cognitive factors like perceived discrimination. Decision-making has been widely used in the past as a way to study cognitive functions since cognitive abilities play an essential role in reasoning.1 Decision making can be affected by a plethora of cognitive factors but especially stress in particular. It has been found that stress depletes the number of attentional resources available since it takes up many cognitive resources.2 Over half of a majority of racial and ethnic groups in the United States have reported that they have experienced discrimination.3 Discrimination can cause a significant amount of both short and long-term stress. Previous findings have found that the effects of both short and long term stress depletes the number of attentional resources available.2 Since stress can stem from perceived discrimination and the effects of stress on cognitive resources have been shown, we hypothesized that those who have experienced higher levels of perceived discrimination will score lower on reasoning tasks than those who have not. In order to measure reasoning, this study utilized the Matrix Reasoning Item Bank (MARS-IB; (https://osf.io/g96f4/), an online open science database full of stimuli created to be accessible for many populations. With the MARS-IB, we created a reasoning task and used The Daily Inventory of Stressful Experiences to measure stress. It includes 16 items that include questions like "How stressful was this" and "How much control did you have over the situtatiion.

Keywords. discrimination, cognitive factors, stress

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References

- Bule, J., & Peer, P. (2014). Technical, Legal, Economic and Social Aspects of Biometrics for Cloud Computing. *Journal of Information and Organizational Sciences*, 38(2), 83–95.
- Almeida, D. M., Wethington, E., & Kessler, R. C. (2002). The daily inventory of stressful events: An interview-based approach for measuring daily stressors. *Assessment*, 9(1), 41-55.
- Chierchia, G., Fuhrmann, D., Knoll, L. J., Pi-Sunyer, B. P., Sakhardande, A. L., & Blakemore, S. J. (2019). The matrix reasoning item bank (MaRs-IB): Novel, open-access abstract reasoning items for adolescents and adults. *Royal Society open science*, 6(10), 190232.
- Mayer, D., Sodian, B., Koerber, S., & Schwippert, K. (2014). Scientific reasoning in elementary school children: Assessment and relations with cognitive abilities. *Learning and Instruction*, 29, 43–55. https://doi.org/10.1016/j.learninstruc.2013.07.005
- Sliwinski, M. J., Smyth, J. M., Hofer, S. M., & Stawski, R. S. (2006). Intraindividual coupling of daily stress and cognition. *Psychology and Aging*, 21(3), 545–557. <u>https://doi.org/10.1037/0882-7974.21.3.545</u>
- Mitchell, T. (2021, September 22). Views on Race in America 2019 | Pew Research Center. Pew Research Center's Social & Demographic Trends Project. <u>https://www.pewresearch.org/socialtrends/2 019/04/09/race-in-america-2019/</u>