New Research From Clinical Psychological Science

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The Turker Blues: Hidden Factors Behind Increased Depression Rates Among Amazon's Mechanical Turkers

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Data collection from online platforms, such as Amazon Mechanical Turk (MTurk), has become popular in clinical research, which comes with the advantages of giving researchers access to large samples of participants from diverse demographic backgrounds. However, there are concerns about whether these online participants are a good representation of the general population. Ophir and colleagues analyzed how the rates of major depression compare between MTurk participants and the general population. In two large studies, they asked MTurk participants to complete a measure of depressive symptoms and found that Mturk workers tend to show 1.6 to 3.6 times higher depression rates than the general population, as indicated by the 5th edition of the Diagnostic and Statistical Manual of Mental Disorders or measured by a recent national representative survey by the U.S. Centers for Disease Control and Prevention. Only half of the differences between depression rates in MTurk participants and the general population could be explained by sociodemographic, health, and lifestyle characteristics of the MTurk participants, which may indicate either that MTurk may trigger depression or attract individuals with more depression or that general population estimates of depression are underestimates. Moreover, when Ophir and colleagues did not use a method to screen for inattentive and fake respondents, the depression rates of MTurk participants were even higher (by 18.5% to 27.5%). These findings indicate that researchers may want to address the inflated depression rates among MTurk participants in their MTurkbased clinical research and include data-quality-assurance methods (e.g., an inattention index that allows researchers to exclude participants who fail attention checks).

Central Symptoms Predict Posttreatment Outcomes and Clinical Impairment in Anorexia Nervosa: A Network Analysis Haley Elliott, Payton J. Jones, and Ulrike Schmidt



Elliot and colleagues analyzed the symptoms of anorexia nervosa (AN) and comorbid depression and anxiety at baseline and 6-, 12-, and 24-month follow-ups. By using network analysis, in which symptoms are seen as interconnected and the activation of one symptom may result in the activation of other symptoms, they identified which symptoms are central to AN and how the symptoms' configuration may be predictive of clinical impairment or recovery. In a sample of patients diagnosed with AN or an eating disorder not otherwise specified (i.e., patients who meet most of the criteria for AN but not all of them), Elliot and colleagues found that feeling fat, fear of weight gain, discomfort seeing one's own body, dissatisfaction with weight, and a strong desire to lose weight were the most central for AN across baseline and follow-ups and had a high prognostic utility (i.e., the more central or interconnected with others these symptoms were the higher the likelihood of clinical impairment). Feelings of worthlessness connected AN with depression, whereas having a negative reaction to wanting to weigh oneself weekly and not wanting to eat in social situations were associated with anxiety and depression. These results are consistent with current diagnostic criteria of AN and suggest that treatments targeting the more central symptoms may be more effective in disrupting the AN symptom network than current treatments. Moreover, treatment of patients with an eating disorder and comorbid depression or anxiety may be more effective if it targets the symptoms that connect both networks (e.g., feelings of worthlessness).

Dating With Social Anxiety: An Empirical Examination of Momentary Anxiety and Desire for <u>Future Interaction</u>

Maya Asher and Idan M. Aderka

Asher and Aderka examined how social anxiety disorder (SAD) may affect opposite-sex interactions. Participants with SAD, as determined by self-reported measures and semi-structured interviews, were paired with opposite-sex partners without SAD and instructed to engage in a 30-min conversation that either generated closeness (asking and answering progressively more personal questions, such as "Would you like to be famous?" or "What role do love and affection play in your life?") or focused small talk (asking and answering nonpersonal questions, such as "What did you do this summer?"). Before, during, and after the interaction, participants with SAD were more anxious than those without SAD, especially when the conversation generated closeness. However, this high anxiety was not contagious to the partners without SAD, who reported similar levels of anxiety as when interacting with other partners without SAD. The levels of social anxiety in men with SAD declined throughout the closeness-generating conversation but not throughout the small-talk conversation. Closeness-generating conversation with men with SAD also increased both partners' desire for future interaction. Thus, women with SAD did not seem to have benefitted from the closeness-generating conversation as much as men did. These findings indicate that reductions in momentary social anxiety among individuals with SAD during initial interactions may be important for relationship maintenance and that men with SAD may benefit from longer initial interactions that increase self-disclosure.

Effective Connectivity Between Broca's Area and Amygdala as a Mechanism of Top-Down Control in Worry

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An individual high tendency to worry, rather than worry as a reaction to a specific situation, is often considered maladaptive and may increase interference from irrelevant but negative distractors in

cognitive tasks. However, this research shows that enhanced connectivity between Broca's area (implicated in language production, inner speech, and inhibitory processing) and the amygdala (implicated in the processing of emotions) in individuals with high worry might represent a mechanism of control that fosters compensation for interference effects. Participants completed a questionnaire to assess their level of worry (or anxious apprehension) and performed an emotion-word Stroop task, in which they saw blocks of positive (pleasant) or negative (unpleasant) words alternated with blocks of neutral words depicted in different colors and were instructed to indicate the color of the word and ignore its meaning. While doing the Stroop task, participants' brain activation was measured by functional magnetic resonance imaging. The connectivity between Broca's area and the amygdala was higher when participants responded to negative words. In participants with higher trait worry, activity in Broca's area preceded and suppressed the activity in the amygdala while the participants processed negative words. Worriers in which the connection from Broca's area to the amygdala was much higher than the connection from the amygdala to Broca's area were more accurate than those with a smaller asymmetry in connectivity patterns. These findings indicate that activation in Broca's area precedes amygdala activation during inhibition of processing of negative material and this connectivity may be an adaptive process that allows worriers to successfully regulate emotions.