Resilience Practices Through COVID-19: The Role of Healthy Diet considering Sleep, Exercise, Stress, Mindfulness, and Coping

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COVID-19 & HABIT DEVELOPMENT

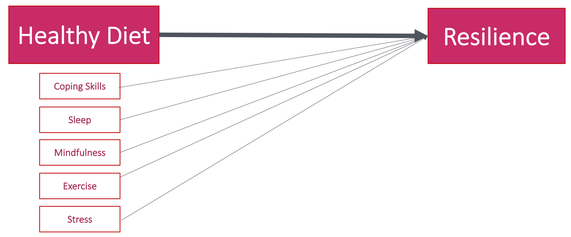
COVID-19 stay at home orders have offered powerful opportunities to study resilience. The highly stressful conditions brought by the pandemic allows us to consider the extent to which people are adopting new habits

Resilience is defined as not merely surviving adversity, but bouncing back, growing from it, and increasing one's capacity to face future challenges (Bonanno & Diminich, 2013; Smith et al, 2008). The outcomes of interest will include resilience (Smith et al., 2008) and General Self-Efficacy (Chen et al., 2001).

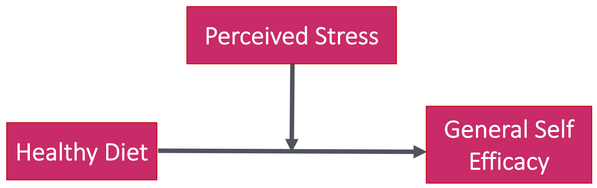
Nine resilience and coping practices will be studied: Planning (Carver, 1997), Growth Framing (Carver, 1997; Dweck, 2006), Spirituality (Carver, 1997; Pargament et al., 1998), Social Support (Carver, 1997), Active Coping (Carver, 1997), Mindful Meditation (Li et al., 2016), Exercise (Craig et al., 2003), Healthy Diet (Jackson, 2006; Warren-Findlow et al., 2017), and Sleep (Marinus et al., 2003). We will control for perceived stress (Cohen et al., 1983).

HYPOTHESES

Healthy diet will predict Resilience above and beyond coping skills, sleep, mindfulness, and exercise.



Perceived stress will moderate the relationship between healthy diet and general self-efficacy.



METHOD

PARTICIPANTS

Participants (N = 500) were required to be at least 20 years old. The sample was 54.6% male and 44.6% female, and 1.6% other, ranging from 20 to 76 years old (M = 36.22, SD = 12.50).

DATA: Prolific

Evidence suggests that online data sources can provide reliable and representative data (Behrend, Sharek, Meade, & Wiebe, 2011; Buhrmester, Kwang, & Gosling, 2011). Thus, participants were reached via Prolific and received $2.00 compensation upon completion of a 15-20-minute survey.

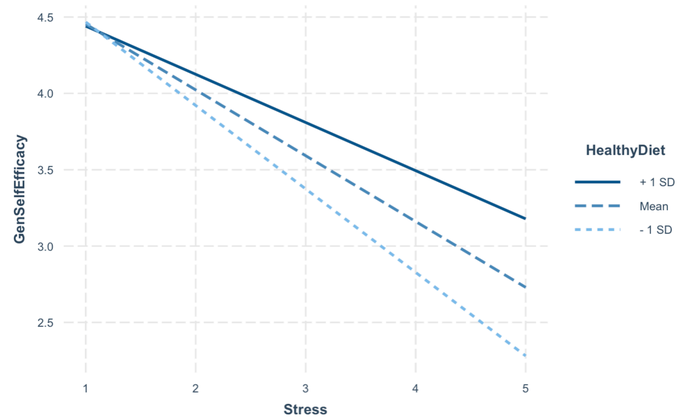
MEASURES

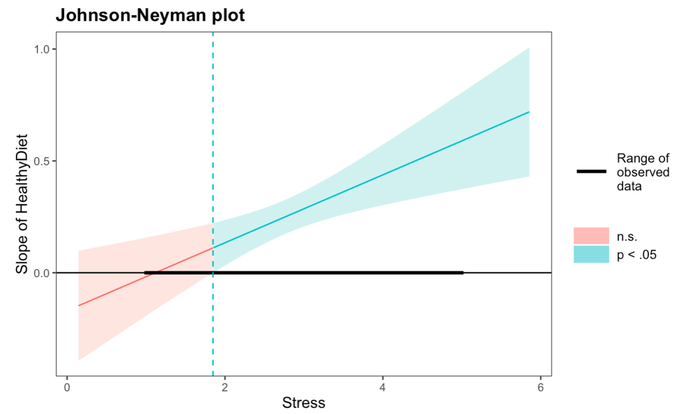
Resilience: 6-item scale called the Resilience Assessment Brief (Smith et al., 2008).
General Self Efficacy: 8-item scale called the New General Self-Efficacy Scale (Chen et al., 2001).
Coping Skills: Brief COPE scale developed by Carver (1997) with adaptations (Dweck, 2006, Pargament et al., 1998, Li et al., 2016).
Mindfulness: The Applied Mindfulness Process Scale (AMPS; Li et al., 2006)
Exercise: 9-item questionnaire called the International Physical Activity Questionnaire Short Form (IPAQ-SF; Craig et al., 2003).
Stress: 5-item questionnaire (Cohen et al., 1983).
Sleep: quality and habits will be assessed using the adapted, SCOPA; Marinus et al., 2003)
Healthy Diet – 4 items using the DASH-Q and Health Practices Scale (Jackson et al., 2006; Warren-Findlow et al., 2017)

RESULTS

After controlling for stress, coping skills, sleep, mindfulness, and exercise, healthy diet significantly predicted resilience (B = 1.11, t = 2.465, p < .014) accounting for a 0.68% change in R^2.

Perceived Stress significantly moderated the relationship between a healthy diet and general self efficacy (B = 0.151, t = 3.327, p < .001). At high levels of stress, a healthy diet is more predictive of general self-efficacy. At low levels of stress, the moderation is significant until stress reaches a unit of 1, and then the 95% CI is no longer indicative of a moderation. May consider checking for non-linearity.





DISCUSSION

Based on these results, healthy diet behaviors such as using food labels to determine which foods might aid in achieving one's health goals can be helpful in practicing resilience, or one's ability to "bounce back" in the face of adversity.

Additionally, results of the moderation indicate that during high stress circumstances it may benefit to consider implement healthy dieting behaviors to achieve higher levels of general self efficacy. Behaviors might consist of following a healthy eating plan or keeping a food diary by tracking the number of calories in food consumed.

One area for future research is to explore the stress variable for curvilinearity.

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