

Sleep and Perceived Stress During COVID-19: What's Mindfulness Got To Do With It?

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INTRODUCTION

The Center for Disease Control and Prevention reports that an estimated 30% of adults in the United States report insufficient sleep [1]. Among sleep-related complaints, sleep latency – difficulty falling asleep – has been associated with, not only daytime functioning, but also anxiety, worry, and cognitive and physiological arousal [2]. To date, there has been minimal research considering sleep and facets of mindfulness. Some studies suggest that psychological distress may mediate the relationship between mindfulness and sleep quality. [3]. Conversely, mindfulness may also mediate the relationship between psychological distress and sleep quality [4]. Furthermore, evidence suggests that mindfulness training may be associated with improvements in sleep quality and onset latency through greater acceptance of pre-sleep emotional arousal and ruminative thought [2].

METHOD

Participants: Our sample included N=93 adults who were primarily female (77.4%), and most participants identified as White (88.2%). Many of our participants were young adults (50.5% between 25-34 years) who identify as heterosexual (78.5%).

Measures and procedure: Study participants (n = 74) completed demographic items and measures of sleep quality, perceived stress, and mindfulness as part of a larger survey study conducted online shortly after COVID-19 was categorized as a pandemic and “stay-at-home” orders were in place. Measures used for this study included:

Perceived Stress Scale [PSS; Cohen et al., 1983]

- The most widely used instrument for measuring the perception of stress that assesses the degree to which situations are appraised as stressful

Pittsburgh Sleep Quality Index [PSQI; Buysse et al., 1989]

- Measures self-reported sleep disturbances and quality of sleep for the past month; participants with total score greater than 5 are classified as “poor” sleepers.

Five Facets Mindfulness Short Form (FFMQ-SF; Baer et al., 2006)

- Measure of various aspects of mindfulness (i.e., observation, description, aware actions, non-judgment of inner experience, and non-reactivity) with higher total scores indicating higher dispositional mindfulness

Figure 1. Groups of Sleep Quality and Latency by Percentage

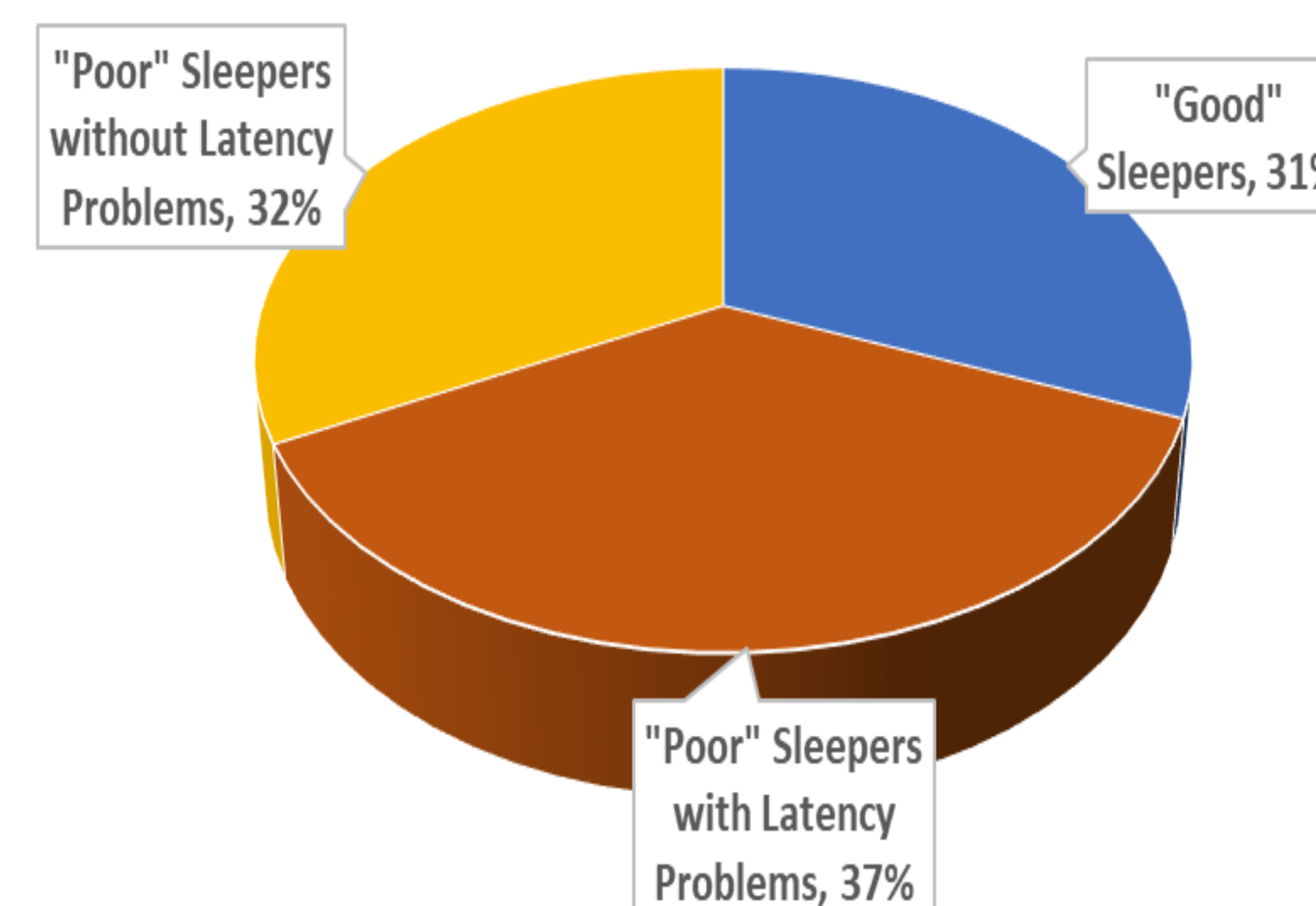


Figure 2. Mean Perceived Stress Scores by Good/Poor Sleeping Groups

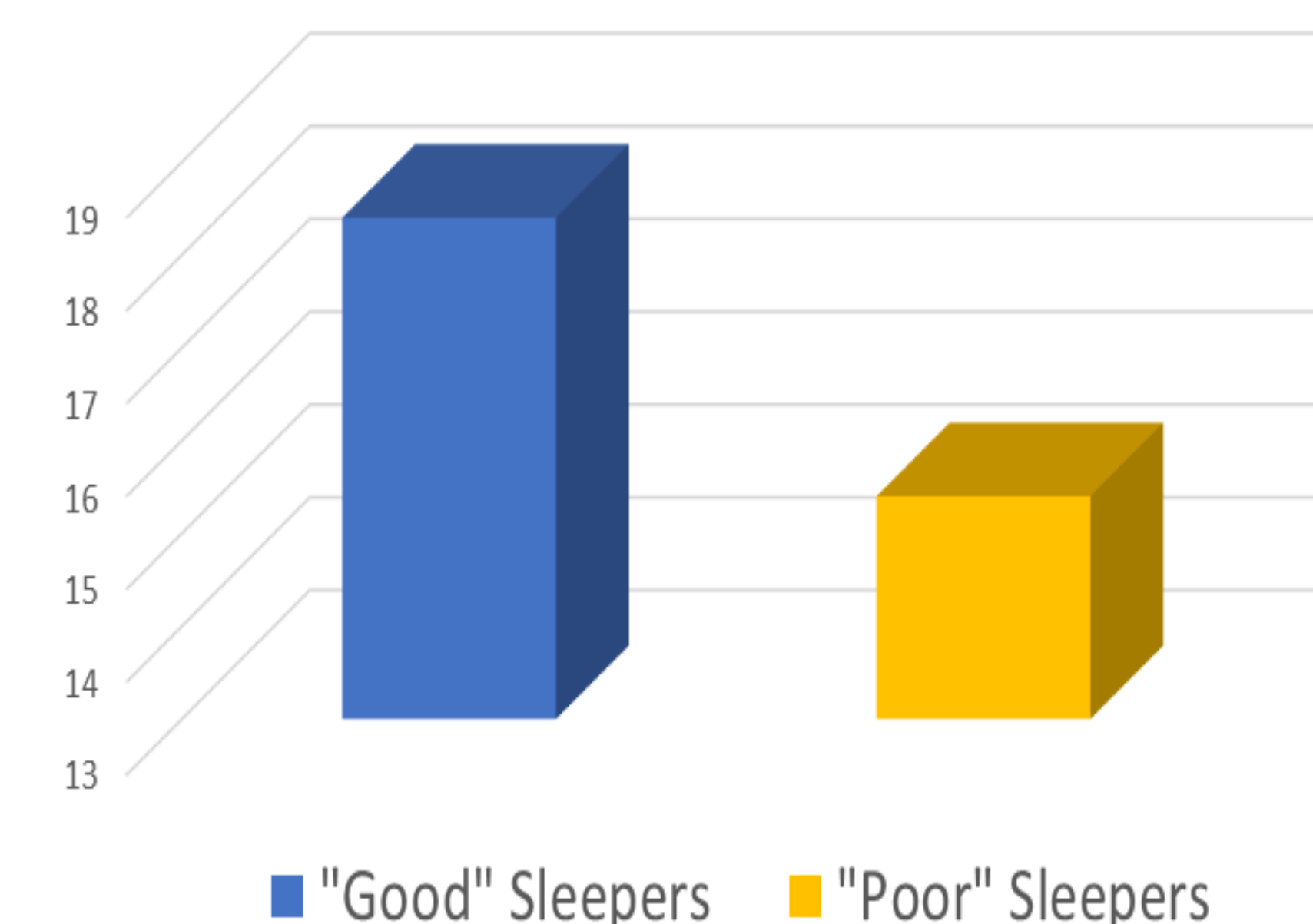


Figure 3. Mean Mindfulness (FFMQ-SF Scores) by Good/Poor Sleeping Groups

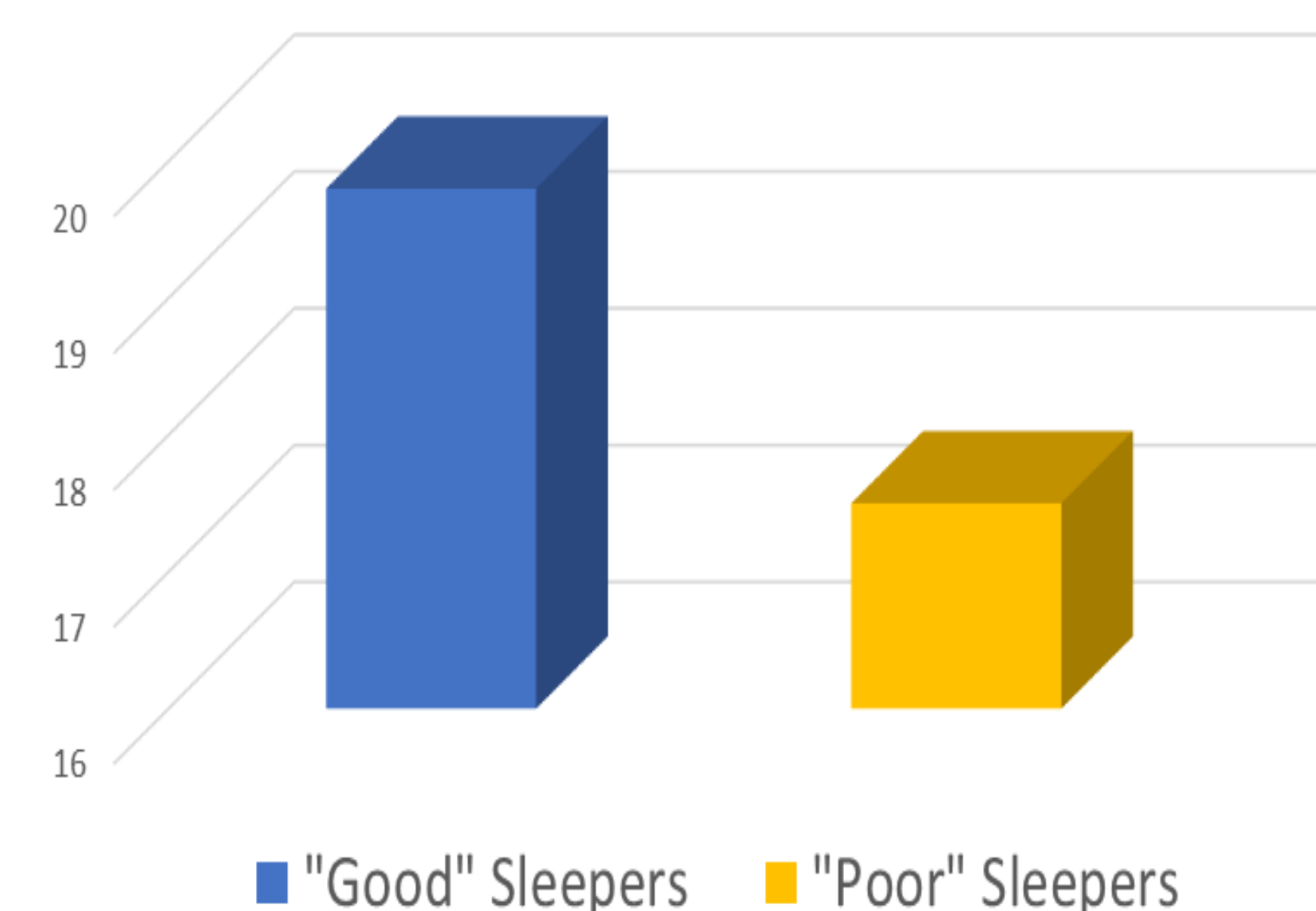


Figure 4. "Describe" Mindfulness Facet Scores by Good/Poor Sleeping Groups

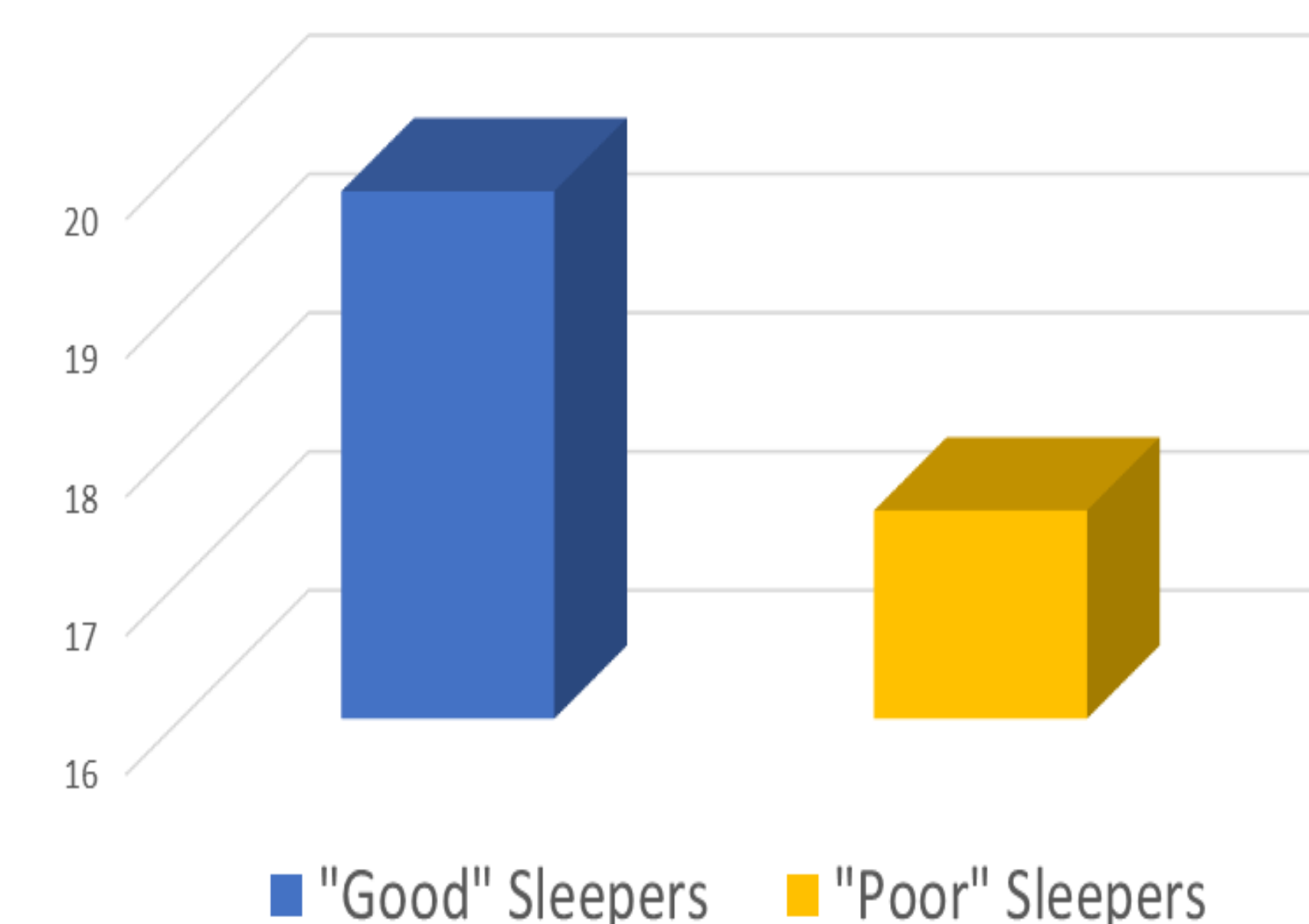


Figure 5. "Nonjudgment" Mindfulness Facet Scores by Good/Poor Sleeping Groups

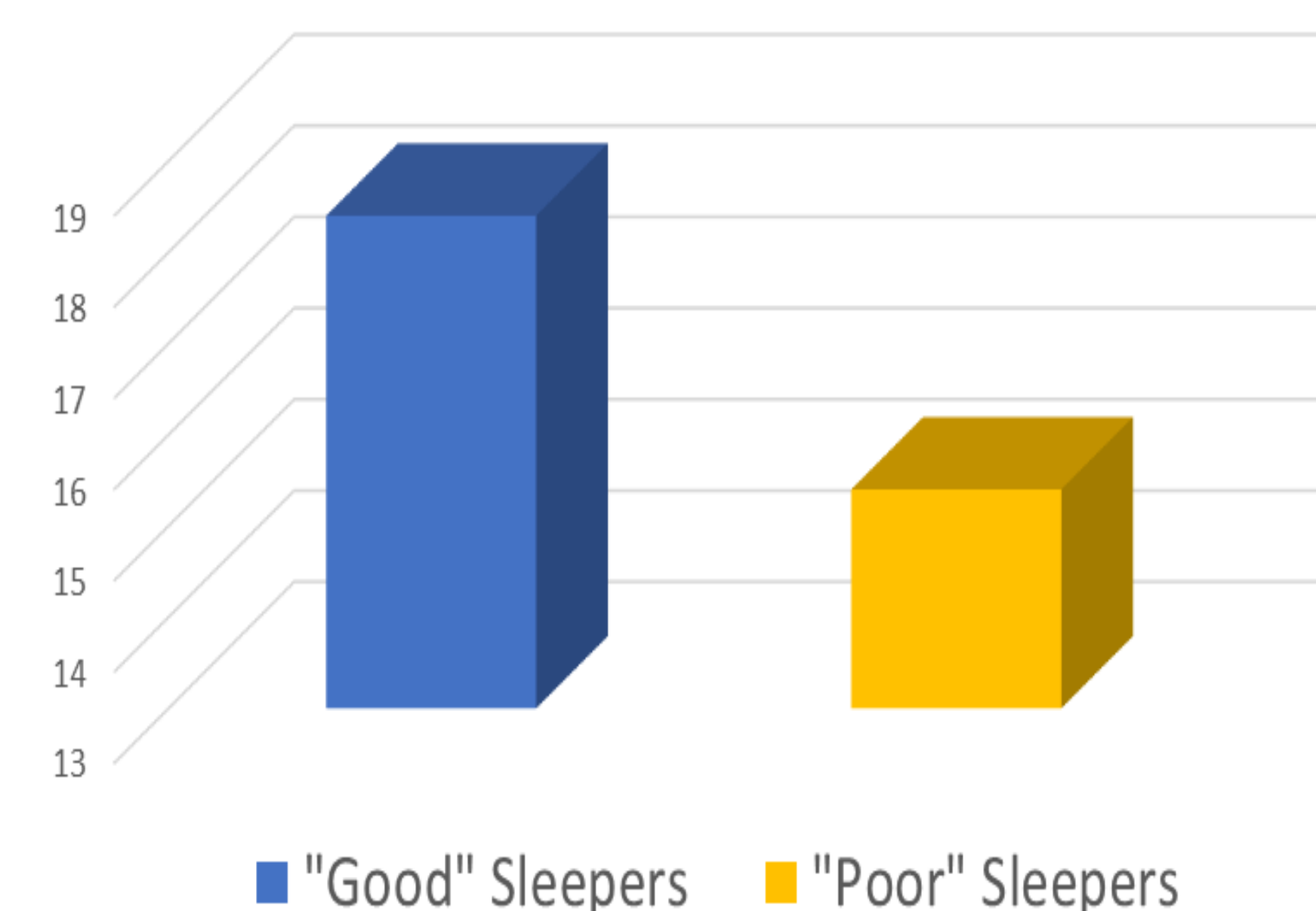
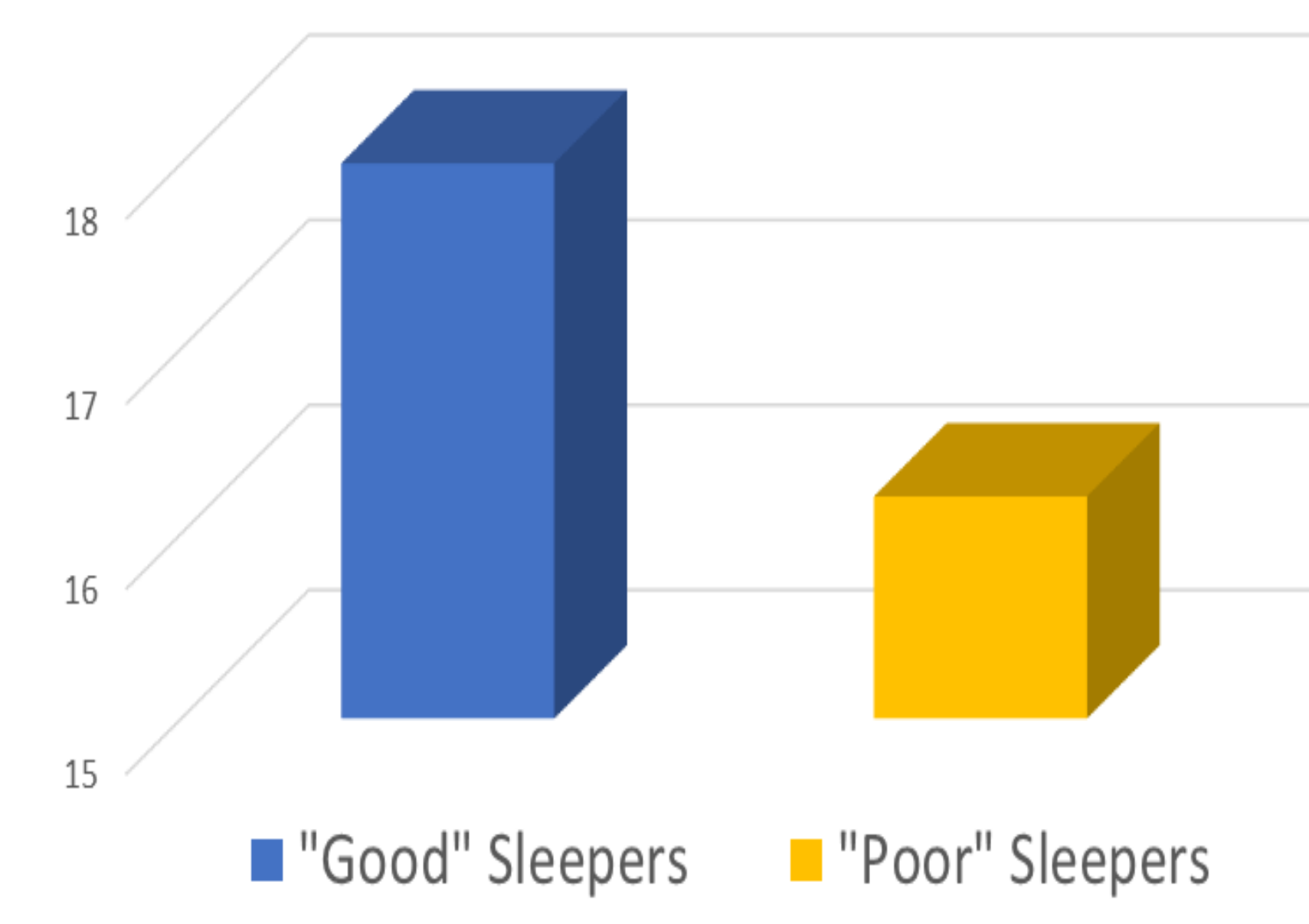


Figure 6. "Acting with Awareness" Mindfulness Facet Scores by Good/Poor Sleeping Groups



RESULTS

- Nearly 70% of participants reports “poor” FSQI sleep scores, with 45% of those “poor” sleep participants reporting difficulty with sleep latency at least three nights a week.
- Compared to “good” sleep participants, “poor” sleep participants reported significantly greater levels of perceived stress [$t(70) = 4.06, p < .001$] and significantly lower levels of mindfulness [$t(68) = 3.095, p < .003$].
- Within the facets of Mindfulness, “poor” sleepers reported significantly lower scores on Describe [$t(71) = 2.231, p = .029$], Nonjudgment [$t(72) = 3.194, p < .002$], and Acting with Awareness [$t(71) = 2.109, p = .038$].

DISCUSSION

Persons struggling with sleep quality and perceived stress may benefit from mindfulness-based interventions, especially with a focus on nonjudgment of experiences (i.e., acceptance) associated with delayed sleep onset. Consistent with findings by Fong et al. [4], mindfulness facets of Acting with Awareness and Nonjudgment specifically appear correlated with sleep quality and perceived stress. Mindfulness interventions, especially those teaching skills in Nonjudgment and Acting with Awareness, may be especially useful with individuals struggling with sleep latency and quality in contexts with high levels of uncertainty.

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