



Relationship Between Grit and Well-being Among PAs Redeployed to Other Medical Specialties During the COVID-19 Pandemic



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INTRODUCTION

- During the pandemic, 7% of the working PA population were redeployed to EDs, ICUs, and other medical specialties (Banks, 2020). These workers experienced greater degrees of stress than the general population (Munn et al., 2021).
- A recent study found a positive correlation between resilience and one's well-being (Munn et al., 2021). Another found that gritty individuals are less vulnerable to the effects of stressful events (van Zyl et al., 2021).
- There is a gap in literature in the evaluation of grit and well-being among PAs redeployed during the COVID-19 pandemic.

PURPOSE

- The purpose of this exploratory study was to investigate if a correlation exists between grit and well-being in PAs redeployed during the COVID-19 pandemic between March to December 2020.

METHODS

- Wagner College IRB approval was obtained (#F21-8).
- An *a priori* power analysis using G*Power Version 3.9.1.7 revealed that the minimum sample size needed to achieve significance was 136 participants at 0.80 power (Germany).
- An anonymous electronic survey contained 45 items adapted from **Duckworth's Grit Scale** (reliability, 0.77 - 0.85) and **Warwick Edinburgh Mental Well-being Scale** (reliability, 0.91).
- The survey was distributed through AAPA Huddle, NYSSPA Listserv, and social media accounts.
- Sample size was **N = 155**.
- Data were analyzed with IBM SPSS Version 26 (Armonk, NY).

Inclusion Criteria

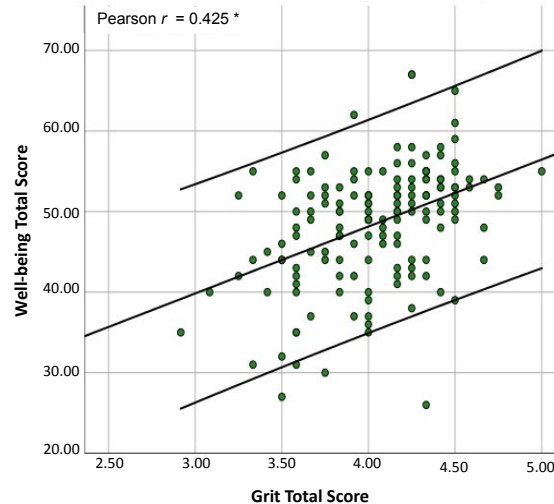
- Certified PAs.
- Redeployed into EM, ICUs, occupational health, telemedicine, or COVID-related medical units for over 2 weeks during 3/2020 to 12/2020.
- Fully completed survey.

Exclusion Criteria

- PAs who are not certified.
- Not redeployed.
- Redeployed for less than 2 weeks between 3/2020 to 12/2020.
- Incomplete survey.

RESULTS

Figure 1. Scatterplot of relationship between grit and well-being



* Correlation significant at the 0.01 level (2-tailed).

Figure 2. Grit total scores

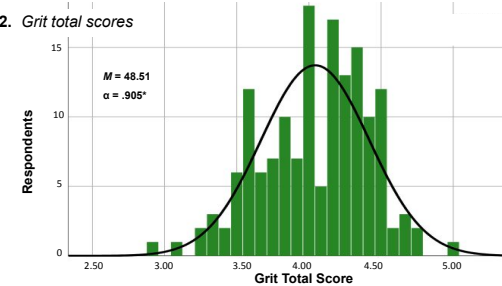
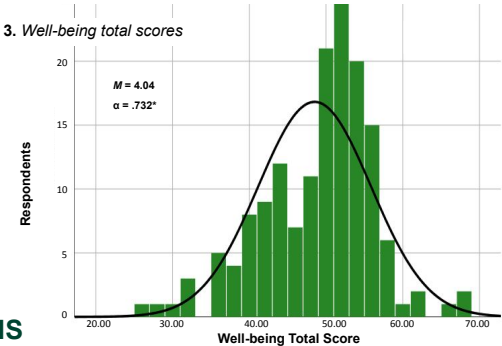


Figure 3. Well-being total scores



CONCLUSIONS

- We found that there is a statistically significant positive relationship ($p < 0.05$) between grit and well-being in PAs who were redeployed.
- The moderate positive correlation between grit and well-being was found to be influenced by an individual's response to being a person of faith and length of practice as a PA.
- Further exploration of the flexibility of the PA profession and its implications for mental health as a result of redeployment is needed.

PROFESSIONAL RELEVANCE

These data highlight a positive correlation between grit and well-being in PAs redeployed during the COVID-19 pandemic. Our research recognizes the overall adaptability of the PA profession, emphasizes the importance of mental health, and ensures protection plans to redeployed PAs during major catastrophes.

Sample

Survey Invitation

Survey respondents
($N = 216$)

Excluded ($n = 2$)

- Did not agree to informed consent

Number of respondents
($N = 214$)

Excluded ($n = 59$)

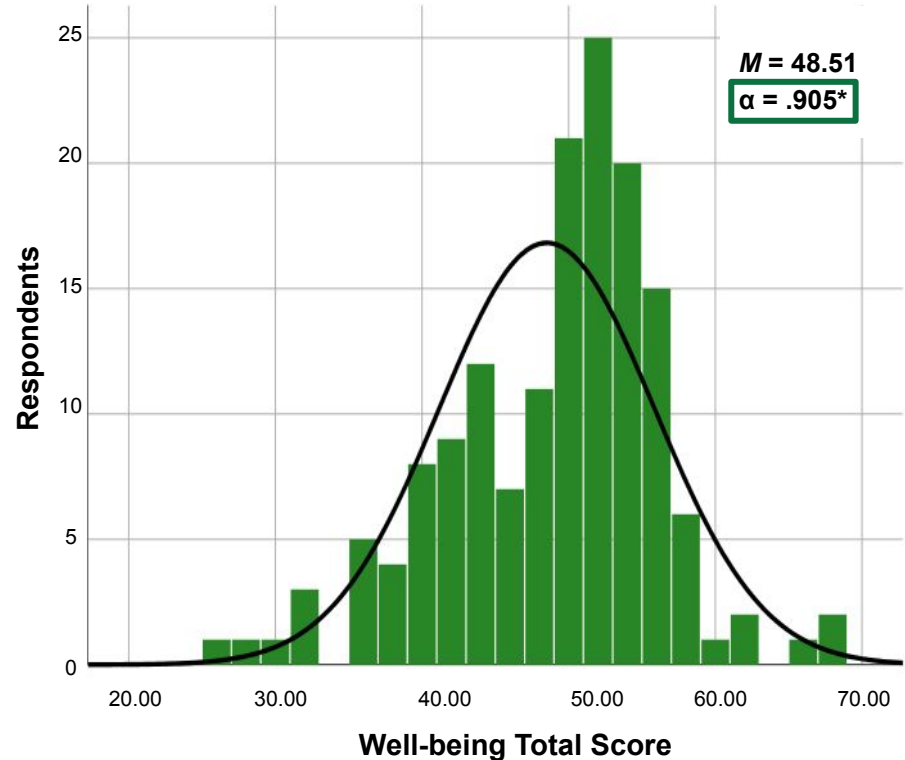
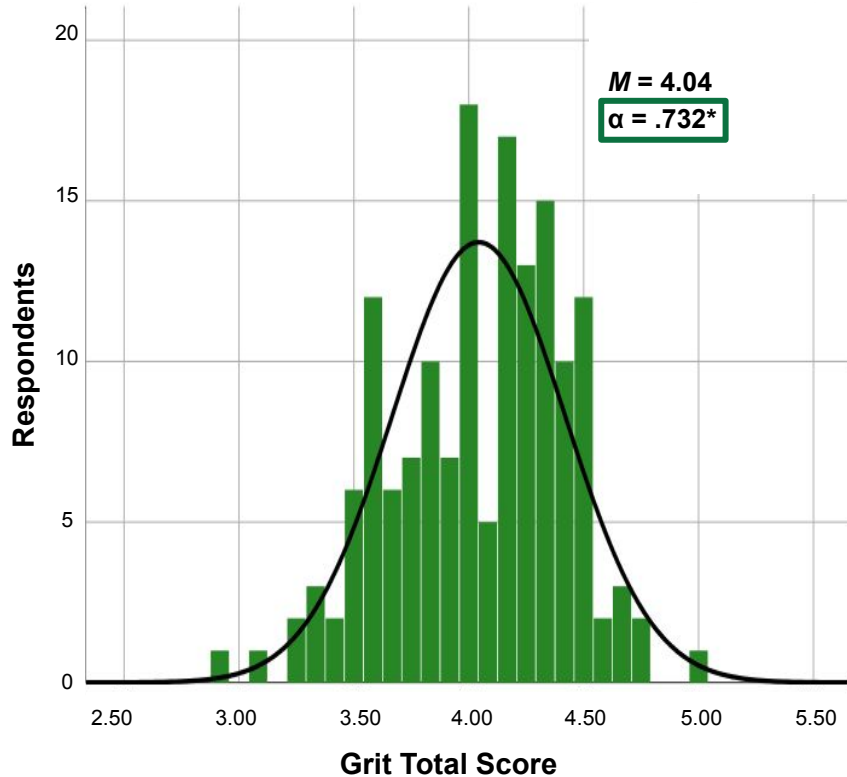
- Incomplete surveys
- Not certified PAs ($n = 9$)
- Not redeployed 3/2020 to 12/2020 ($n = 40$)
- Redeployed less than 2 weeks ($n = 2$)
- Not redeployed to COVID unit, ICU, EM, telemedicine, or occupational health ($n = 8$)

Retained

Total surveys completed
and analyzed ($N = 155$)

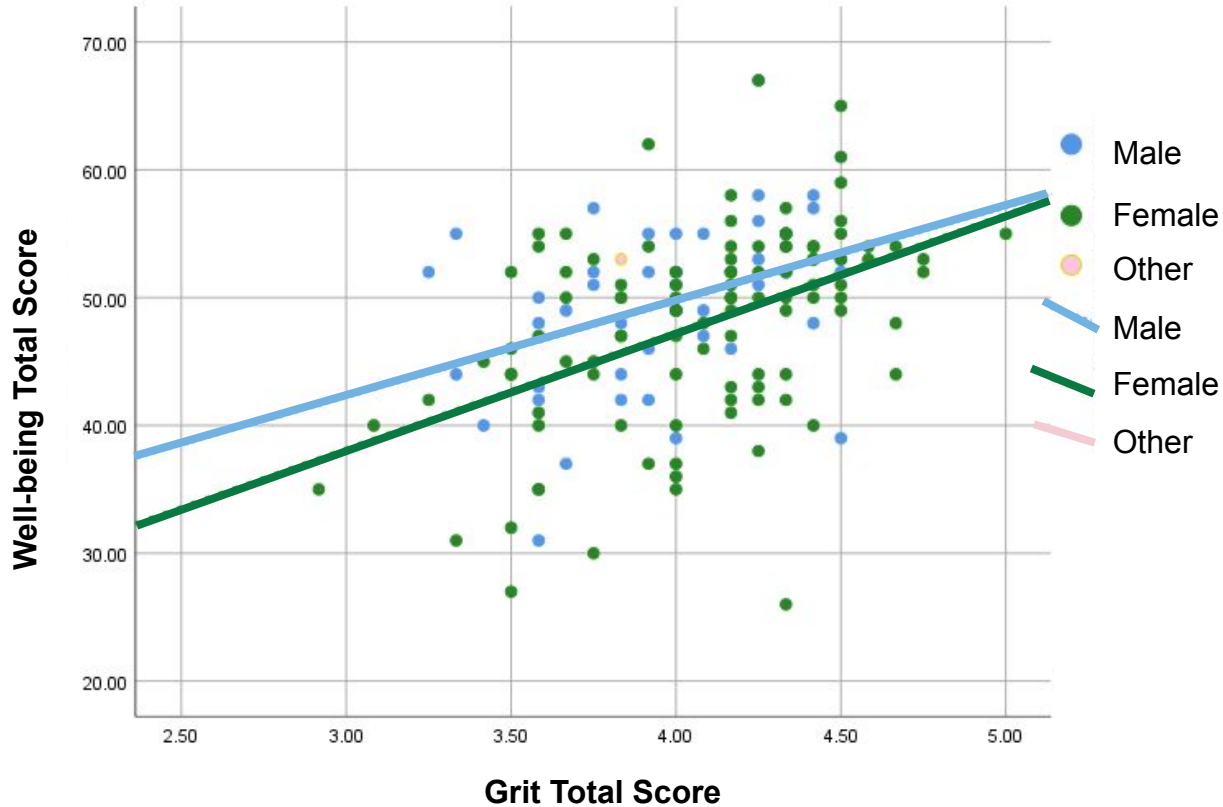
Total Scores

Figure 1. Grit Total Score (N = 155) and Well-being Total Score (N = 155)



Correlations

Figure 2. *Grit Total Score vs. Well-being Total Score by Gender (N = 155)*



** . Correlation is significant at the 0.01 level (2-tailed)

Correlations

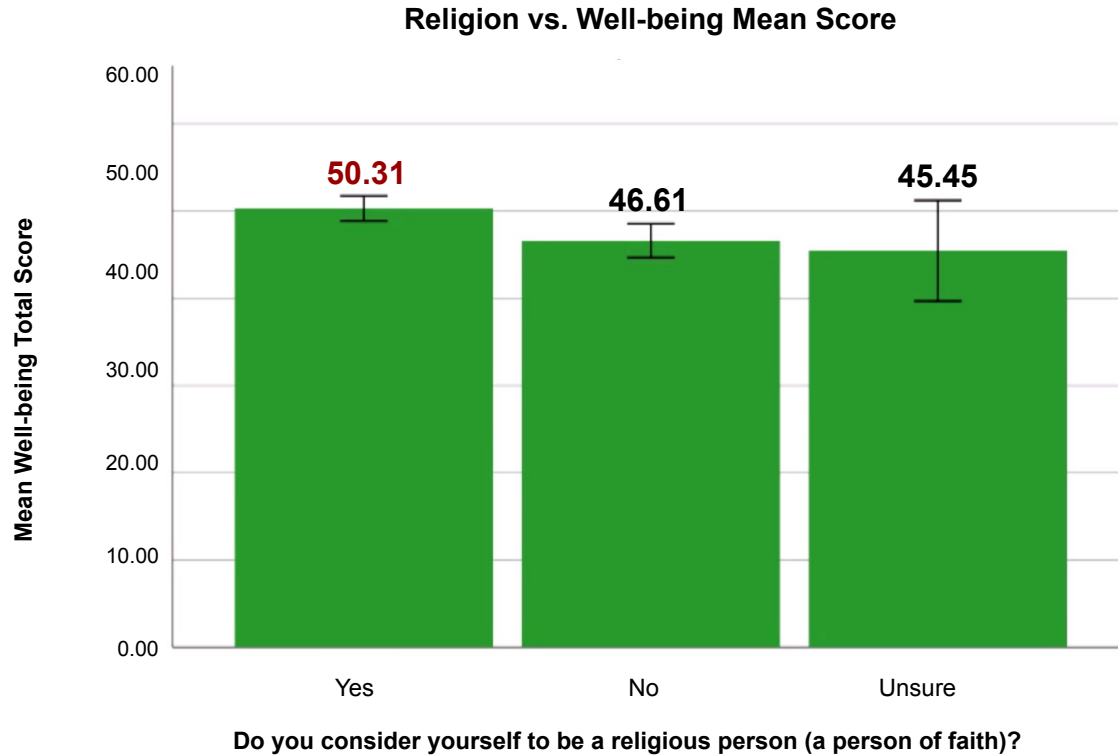
Figure 3. Significant Spearman Rho Correlation Survey Questions vs. Total Grit and Total Well-being Score

Question	Grit Total Score	Well-being Total Score
(Q2) Do you consider yourself to be a religious person (a person of faith) ?	-.117	-.267 *
(Q9) How long have you practiced as a Physician Assistant?	.176 *	.223 *

*. Correlation is significant at the 0.05 level (2-tailed)

Correlations

Figure 4. *Religious Background vs. Total Well-being Score (N = 155)*

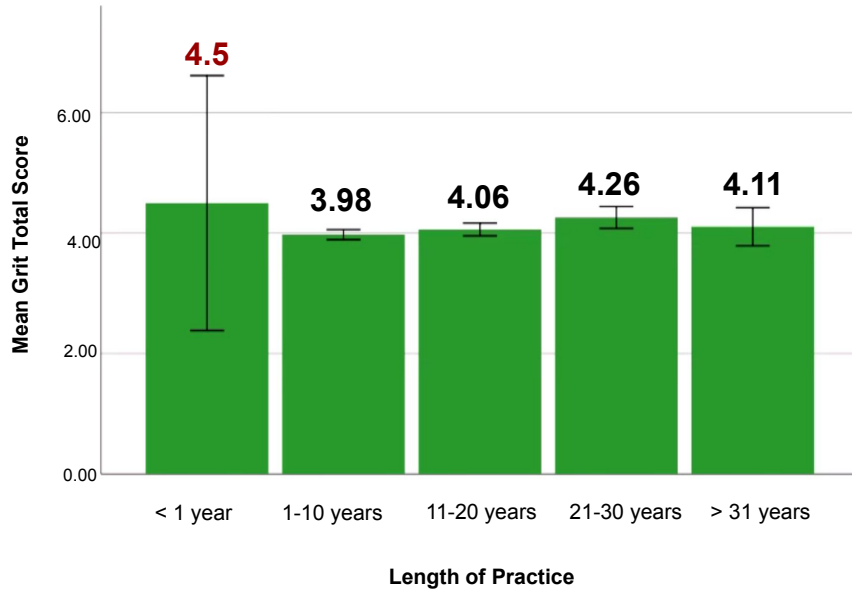


Error bars: 95% CI

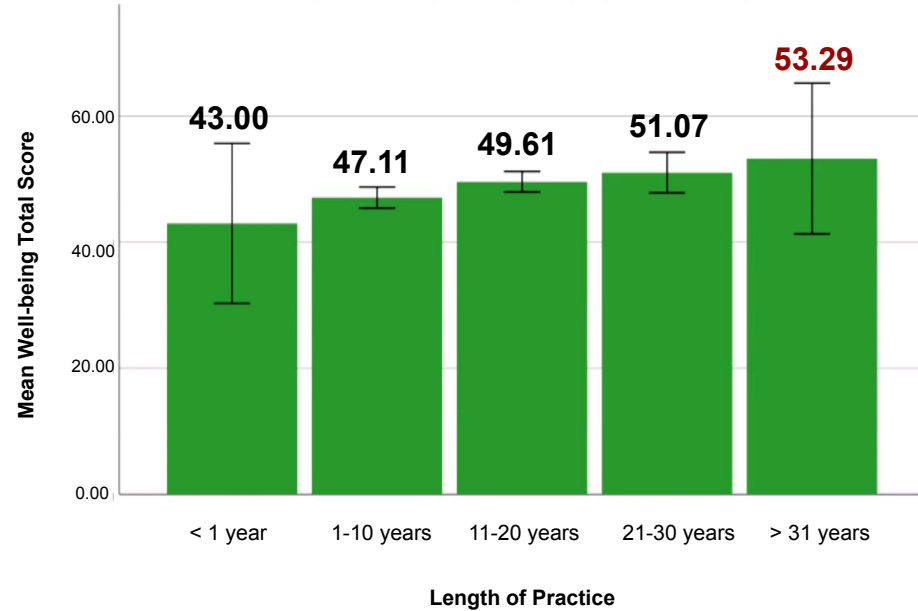
Correlations

Figure 5. Well-being Mean Score vs. Grit Mean Score by Length of Practice (N = 155)

Length of Practice vs. Grit Mean Score



Length of Practice vs. Well-being Mean Score



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