

The Relationship Between Pain and Myers-Briggs Personality Factors

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Abstract

Pain is a multifaceted experience with a complex etiology that can be difficult to trace because it can be affected by wide variety of factors (environmental, biological, psychological, etc.) Pain can be difficult to understand and cope with in many instances. Personality, on the other hand, is a stable template of human perception that is present in all circumstances and perceptual experience. This study sought to better understand the relationships between personality and pain.

Methods

This study was an archival research study that examined an existing dataset originally created by Sylvain Guimond and Wael Massrieh for their study, *Intricate Correlation between Body Posture, Personality Trait and Incidence of Body Pain: A Cross-Referential Study Report*. The researchers sought to analyze whether or not there are links between physical pain and a person's personality. The dataset that was created collected information about various participants including their age, weight, height, sex, and activity level; information about biomechanical pain located in the neck and/or spinal areas was also collected. Personality was assessed using the Myers-Briggs Type Indicator (MBTI) test of personality. Statistical analysis were done using R-Studio.

Purpose

This study sought to answer two questions:

1. Do MBTI personalities differ in pain?
2. Are certain MBTI personality dimensions associated with more pain than others?

Results

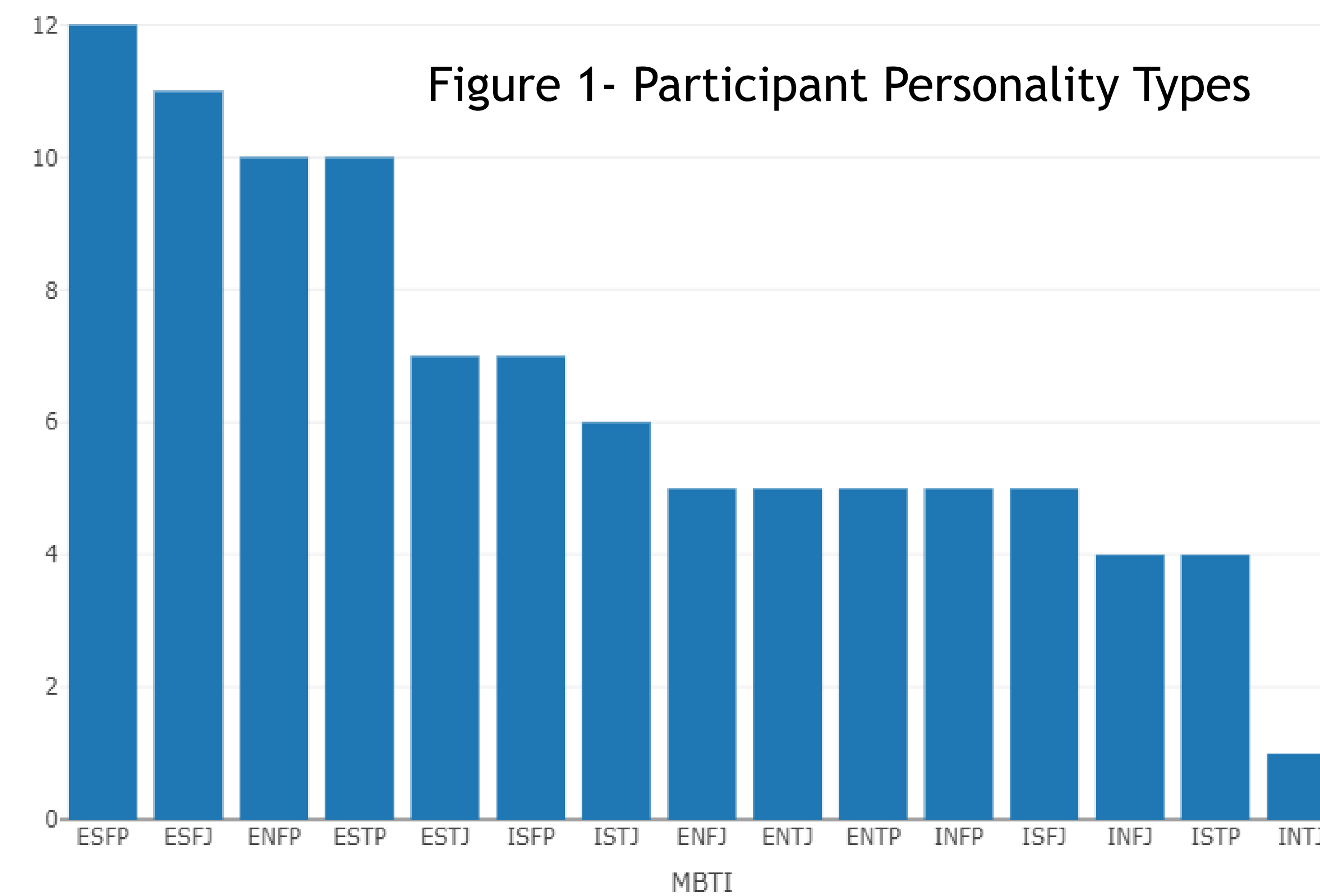


Figure 2- Descriptive Statistics

	AGE	WEIGHT	HEIGHT
N	97	97	97
Mean	43.9	159	65.7
Standard deviation	16.8	36.2	3.74
Minimum	11	68	58
Maximum	82	263	74

Note: Height in inches; Weight in pounds

Table 3- ANOVA (MBTI and Pain)

Pain Type	MBTI			
	SS	df	F	p
Pain 1	54.8	14	0.553	0.893
Pain 2	118	14	0.803	0.664
Pain 3	98.9	14	1.06	0.401
Pain 4	139	14	1.03	0.433

Note: Pain 1 = neck; Pain 2 = thoracic; Pain 3 = lumbar; Pain 4 = sacral

Table 4- Correlations

	Pain 1	
	r	p
Extroversion	-0.183	0.072
Introversion	0.188	0.065

Note: Pain 1 = neck

Conclusions

- The results do not show significant differences between Myers-Briggs Personality Types and pain types.
- The strongest correlations between Myers-Briggs Personality dimensions and pain types were found between Introversion, Extroversion, and Pain 1 (neck pain). It appears Extroversion had a weak negative correlation with neck pain, while introversion had a weak positive correlation with neck pain; none of which were significant. No other such correlations were found between MBTI personality dimensions and pain type.

References

- *Correlation between Posture & Personality Trait*. (n.d.). [Www.kaggle.com. https://www.kaggle.com/datasets/dhanasekarjaisankar/correlation-between-posture-personality-trait/data](https://www.kaggle.com/datasets/dhanasekarjaisankar/correlation-between-posture-personality-trait/data)
- Guimond, S., & Massrieh, W. (2012). *Intricate Correlation between Body Posture, Personality Trait and Incidence of Body Pain: A Cross-Referential Study Report*. *PLoS ONE*, 7(5), e37450. <https://doi.org/10.1371/journal.pone.0037450>