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The Effect of the Big Five Personality Traits on the Perceived Restorativeness of Zondervan Library Spaces

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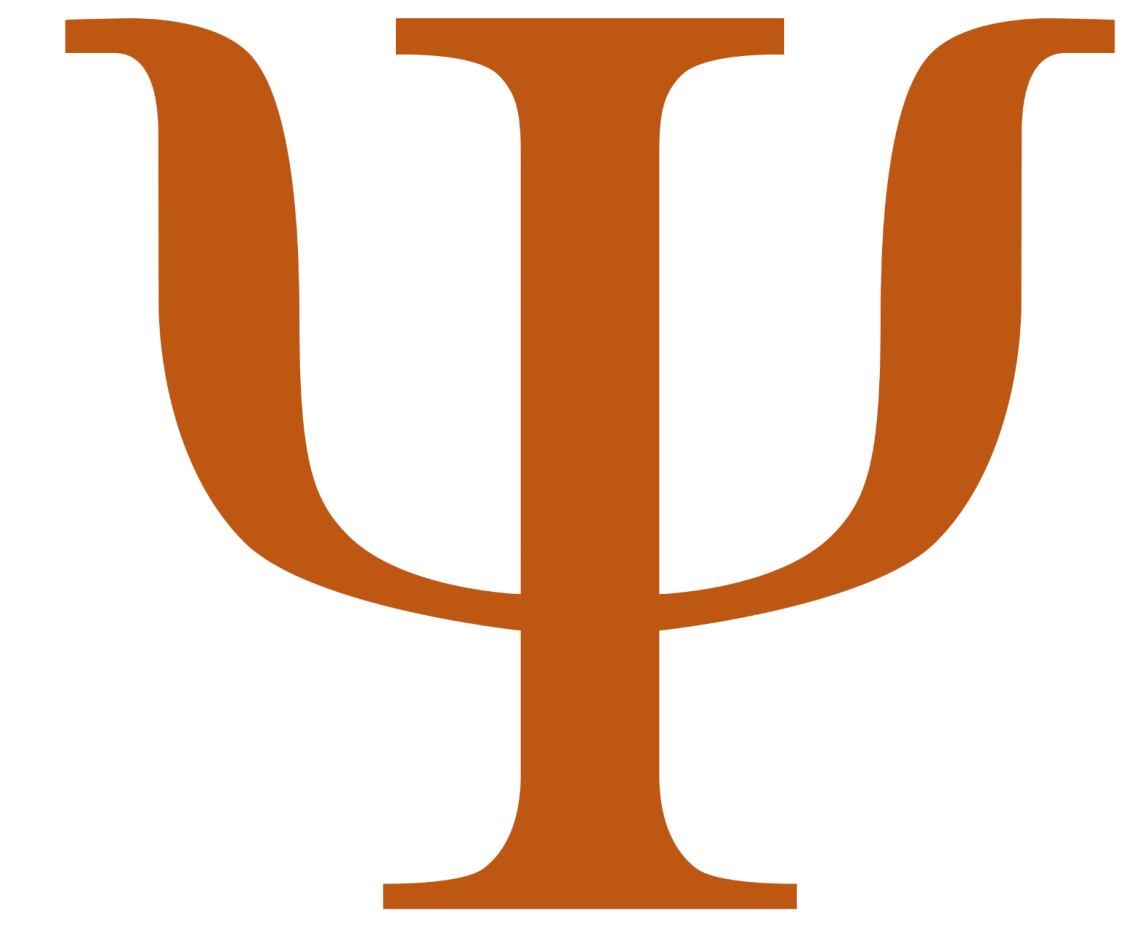
Introduction

- ❑ Every day environments do not always support the activities being performed in them. Performing tasks that are not supported by a given environment drains directed attention resources. Restorative environments foster the recuperation of attentive resources (Hartig et al., 1997).
- ❑ A growing body of research demonstrates that the perceived restorative quality of environments is shaped by personality (e.g., Meagher, 2016; Felsten, 2014).
- ❑ People often behave counter to their natural disposition to fulfill meaningful personal goals (Little, 2008).
- ❑ Counter dispositional behavior can tax cognitive resources, and it takes deliberate effort to sustain (Gallagher et al, 2011).
- ❑ Extended periods of counter dispositional behavior can lead to exhaustion, fatigue, negative affect, and decreased feelings of authenticity (Jacques-Hamilton et al., 2019; Gallagher et al, 2011).
- ❑ The current research aims to identify which personalities experience differences in restorativeness in the Zondervan Library on the Taylor University campus. Additionally, we seek to identify personality groups where there is a significant difference in the restorative experience.

Methods

Participants
- ❑ 302 undergraduate students at Taylor University.
- ❑ Additional demographic information is provided in Table 1.

Measures
- ❑ Johnson's IPIP-NEO-120 was used to assess Agreeableness (A), Conscientiousness (C), Extraversion (E), Neuroticism (N), and Openness (O). Higher scores of a given trait indicate a higher level of that trait in an individual (Johnson, 2014).
- ❑ The Perceived Restorativeness Scale (PRS)* was used to assess the perceived restorativeness of spaces on campus (Hartig et al., 1997).
- ❑ Data was pulled from a larger survey that included multiple other scales and measures.

Procedure
- ❑ Surveys were sent out in February of 2021 to all undergraduate students at Taylor University. Responses were analyzed for significant relationships and mediating effects between measures.

*An adapted version of the PRS was used with a 5-point Likert scale instead of a 7-point Likert scale.

Table 1: Demographics

Demographic	n	Percentage	Demographic	n	Percentage
Overall	302	100%	Overall	302	100%
Sex			Race/Ethnicity		
Male	99	32.78%	White or Caucasian	251	83.11%
Female	193	63.91%	Black or African American	12	3.97%
Missing	10	3.31%	Hispanic or Latino	3	0.99%
Year of College			Asian or Asian American	10	3.31%
Senior	53	17.55%	American Indian or Alaska Native	1	0.33%
Junior	65	21.52%	Native Hawaiin or Pacific Islander	1	0.33%
Sophomore	86	28.48%	Another race	14	4.63%
Freshman	88	29.14%	Missing	10	3.31%

Table 2: Correlation Matrix

Correlations										
Variables	1	2	3	4	5	6	7	8	9	10
1. Agreeableness	1									
2. Conscientiousness	.419***	1								
3. Extraversion	.089	.216***	1							
4. Neuroticism	-.229***	-.346***	-.546***	1						
5. Openness	.168**	-.128*	.115*	.131*	1					
6. Study Room PRS	.165**	.053	-.063	-.029	.154**	1				
7. First Floor Library PRS	.243***	.093	.032	-.119	.146*	.696***	1			
8. Sex	.099	.076	-.042	.223***	.085	.091	.063	1		
9. Ethnicity	.083	-.022	.003	-.034	.073	-.115	-.089	.047	1	
10. Year	.077	.027	-.108	.021	.109	-.009	-.093	-.048	-.040	1

*p<.05; **p<.01, ***p<.001

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Results

Pearson Correlations (Table 2)
Multiple Regression
- ❑ Multiple regression showed only one significant predictor, A (β=.243, p < .001), for the first floor of the library.
- ❑ Two significant predictors were found for the second floor: A (β=.143, p < .001) and O (β=.130, p < .001)

T-Tests
- ❑ People who scored above average in levels of A rated the First Floor of the library (M = 3.115, SD = .684) and the second floor of the library (M = 3.385, SD = .699) as more restorative than those below average in A for the First Floor (M = 2.807, SD = .591) and the second floor (M = 3.218, SD = .685).
- ❑ People who scored above average levels in O rated the first floor of the library (M = 3.182, SD = .745) as more restorative than those below average in O (M = 2.996, SD = .648)

Conclusion

- ❑ Data from our study supported conclusions of Felsten (2014) that highly agreeable and open individuals typically see environments as more restorative than others.
- ❑ Our correlation and regression analyses indicated that individuals who score highly in Agreeableness and Openness see the library as a more restorative environment than those who score lower in these two domains.
- ❑ T-test analyses confirmed that there is a significant difference in PRS rating between those above the mean and those below the mean in these two domains of personality.
- ❑ Multiple regression analysis showed that agreeableness was the single best predictor PRS rating on the first floor of the library, while the second floor of the library had two best predictors: Agreeableness and Openness.
- ❑ Further research should seek to establish whether the environment of the library is catering specifically to the needs of those who are highly agreeable and open, or if the library is a neutral space which reflects general differences in personality.