Are There Virtues Associated with Adult ADHD?: Comparison of ADHD Adults and Controls on the VIA Inventory of Strengths

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Introduction

A lifetime diagnosis of ADHD is associated with many life impairments. It has been suggested in some trade publications that ADHD confers "gifts" on those with the diagnosis, including at least one peer-reviewed study reporting greater creativity in a sample of adults with ADHD (White & Shah, 2011). The current study examined the question of whether there are character virtues associated with ADHD.

Purpose and Hypothesis

The purpose of this study is to provide an empirically-derived answer to the question of whether adult ADHD is associated with "gifts" when compared to a non-ADHD control group using an established self-report questionnaire measuring various Virtues.

It was hypothesized that measures of Virtues characterized by intact selfcontrol, specifically Courage ("exercise of will to accomplish goals") and Temperance ("strengths that protect against excess") would be lower among the ADHD group when compared to control groups; on the other hand, it was hypothesized that Virtues characterized by qualities attributed to ADHD, specifically Wisdom (which includes the facets of Creativity and Curiosity) and Transcendence (which can be considered "big picture thinking") would be higher among the ADHD group when compared with controls. Seeing as there has been little research on this question, all Virtues were examined.

Materials and Methods

The VIA Inventory of Strengths (VIA: Peterson & Seligman, 2004), was used as a the dependent variable. Scores obtained from an online survey of adults self-identified with ADHD (ADD; n=99), a control group of adults selfidentified as non-ADHD (NO ADD; n=54), and the normative database for the VIA (VIA, n=479,367) were compared. Subjects were recruited from the database of an ADHD Coaching training program and from online links to the VIA survey posted on social media. Each subject was assigned a unique passcode to access the online survey and to obtain their VIA results. By completing the survey, participants consented for their de-identified VIA survey results to be used in this study.

Participants were asked if they had ever been diagnosed with ADHD by a healthcare professional in order to create an ADD group and a NO ADD control group. The normative database for the VIA was also a comparison group, although ADHD status of these respondents is unknown. Comparisons of the ADD, NO ADD, and VIA groups were performed on the six character Virtues measured by the VIA.

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Further Information

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Table 1. One-way Between Subjects ANOVA of Group x Virtue

3 LEVELS: ADD / NO ADD / VIA NORMS

Number of observations read/used: 479.520

Dependent Variable	<u>F Value</u>	<u>P value (* < .05)</u>
Wisdom	12.46	<.0001*
Courage	16.71	<.0001*
Humanity	30.73	<.0001*
Justice	6.38	= .0017*
Temperance	15.95	<.0001*
Transcendence	4.41	=.0121*

WISDOM

TABLE 2. **TUKEY'S STUDENTIZED RANGE TESTS**

Comparisons significant at the 0.05 level are indicated

HUMANITY

Comparisons significant at the 0.05 level are indicate					
by ***.					
	Difference				
Group	Between	Simultane	eous 95%		
Comparison	Means	Confiden	ce Limits		
No - ADD	0.1939394	0.0106739	0.3772049	**	
No - VIA	0.4034379	0.2560108	0.5508649	**	
ADD - No	-0.1939394	-0.3772049	-0.0106739	**	
ADD - VIA	0.2094985	0.1006113	0.3183857	**	
VIA - No	-0.4034379	-0.5508649	-0.2560108	**	
VIA - ADD	-0.2094985	-0.3183857	-0.1006113	**	

TEMPERANCE

Comparisons significant at the 0.05 level are indicated					
by ***.					
	Difference				
Group	Between	Simultane	eous 95%		
Comparison	Means	Confiden	ce Limits		
No - VIA	0.1076319	-0.0429802	0.2582441		
No - ADD	0.3636364	0.1764115	0.5508613	*	
VIA - No	-0.1076319	-0.2582441	0.0429802		
VIA - ADD	0.2560044	0.1447648	0.3672441	*	
ADD - No	-0.3636364	-0.5508613	-0.1764115	*	
ADD - VIA	-0.2560044	-0.3672441	-0.1447648	*	

COURAGE

Comparisons significant at the 0.05 level are indicated				
by ***.				
	Difference			
Group	Between	Simultaneous 95%		
Comparison	Means	Confidence Limits		
No - VIA	0.2471943	0.0924395	0.4019490	***
No - ADD	0.4619529	0.2695783	0.6543275	***
VIA - No	-0.2471943	-0.4019490	-0.0924395	***
VIA - ADD	0.2147586	0.1004593	0.3290580	***
ADD - No	-0.4619529	-0.6543275	-0.2695783	***
ADD - VIA	-0.2147586	-0.3290580	-0.1004593	***

JUSTICE

Comparisons significant at the 0.05 level are indicated				
	by	***.		
	Difference			
Group	Between	Simultane	eous 95%	
Comparison	Means	Confiden	Confidence Limits	
No - ADD	0.0867565	-0.1029342	0.2764471	
No - VIA	0.1879850	0.0353894	0.3405807	***
ADD - No	-0.0867565	-0.2764471	0.1029342	
ADD - VIA	0.1012286	-0.0114761	0.2139332	
VIA - No	-0.1879850	-0.3405807	-0.0353894	***
VIA - ADD	-0.1012286	-0.2139332	0.0114761	

TRANSCENDENCE

Comparisons significant at the 0.05 level are				
indicated by ***.				
	Difference			
Group	Between	Simultaneous 95%		
Comparison	Means	Confidence Limits		
No - ADD	0.200606	-0.003750	0.404962	
No - VIA	0.208165	0.043772	0.372558	***
ADD - No	-0.200606	-0.404962	0.003750	
ADD - VIA	0.007559	-0.113859	0.128977	
VIA - No	-0.208165	-0.372558	-0.043772	***
VIA - ADD	-0.007559	-0.128977	0.113859	

References

Peterson, C., & Seligman, M. E. P. (2004). Character strengths and virtues: A classification and handbook. Washington, DC: American **Psychological Association**

White, H. A., & Shah, P. (2011). Creative style and achievement in adults with attention-deficit/hyperactivity disorder. Personality and Individual Differences, 50, 673–677. doi:10.1016/j.paid.2010.12.015

Table 3. Tukey's Studentized Range Tests (* = p < .05; n.s. = non-significant; d=effect size)				
<u>Virtue</u>	Group Comparisons			
WISDOM	NO ADD (n.s.) ADD $>(*d=.30)$ VIA $*d=.54$			
COURAGE	NO ADD $>(*d=.52)$ VIA $>(*d=.40)$ ADD $*d=.87$			
HUMANITY	NO ADD $>(*d=.45)$ ADD $>(*d=.46)$ VIA $*d=.91$			
JUSTICE	NO ADD (n.s.) VIA *d=.37			
TEMPERANCE	NO ADD (n.s.) VIA > (* d=.48) ADD * d=.63			
TRANSCENDENCE	NO ADD (n.s.) ADD (n.s) VIA *d=.41			
Note. NO ADD = ADD = AD VIA = VIA				

Results

One-way between subjects ANOVAs were conducted to compare results on each of six Virtues measured by the VIA for each comparison group. There were statistically significant group differences on each Virtue (Table 1).

Post hoc analyses were conducted on each Virtue to compare each group against every other group (Table 2). There were no Virtues in which the ADD group scored significantly higher than both control groups. (Table 3) The ADD group scored significantly lower than both control groups on Courage and Temperance. There were no differences between the ADD and NO ADD groups on Virtues of Wisdom, Justice, or Transcendence. Lastly, the ADD group fell in between the comparison groups on Humanity, scoring lower than the NO ADD group and higher than the VIA group, both differences significant.

Conclusions

There was no support for the hypothesis that the ADHD group would score higher than the non-ADHD group on Virtue measures; as predicted, the non-ADHD group scored higher than the ADHD group on Virtues associated with intact self-control. At best, there were Virtues for which the ADHD and non-ADHD groups did not differ.

ADHD is an impairing condition that interferes with the expression and execution of skills and strengths but these "gift" are not necessarily associated with the clinical syndrome. Among the limits of the study was that diagnostic status was based on self-report or not known. The VIA is not designed to necessarily assess the types of "gifts" that have been attributed to ADHD and may not adequately capture them. Further exploration of potential "gifts" associated with ADHD may employ blinded observer ratings or objective assessments.