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A Psychometric Investigation of Highly Dependent Adult Children
James M Hicks*, Frederick L Coolidge, Daniel L Segal
University of Colorado, USA

ABSTRACT

This study established the psychometric properties of a new measure to assess the behavior of adults who are highly dependent on their parent(s), particularly in light of their capacity to function independently and whose behavior appears deviant even when compared to cultural norms. In the present study, these adults were labeled Highly Dependent Adult Children (HDAC). A 32-item HDAC Scale was constructed, based on a review of the behaviors typical of HDAC as reported in the relevant literature. It was found to have excellent internal reliability (Cronbach’s $\alpha = .93$; $N = 665$ adults) and good test-retest reliability ($r = .84$; one-week interval; $N = 104$ adults). A principal component analysis of the HDAC scale revealed six components: alexithymia, blaming/inadequacy, default dependency, aggression, somatization, and limited socialization ($N = 665$). The HDAC overall scale sum ($N = 104$) was correlated strongly and positively with the passive-aggressive, borderline, paranoid, narcissistic, obsessive-compulsive, sadistic, antisocial, schizotypal, and depressive personality disorders scales of the Coolidge Axis II Inventory (CATI), and moderately and positively correlated with a CATI scale measuring executive dysfunction of the frontal lobes. The results of the study suggest that the behaviors associated with HDAC may be related to comorbid alexithymia, personality disorders, and executive dysfunction, and future research with the scale is warranted.

Key words: HDAC Scale, adult entitled dependence, alexithymia, personality disorders, executive dysfunction.

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Novelty and Significance

What is already known about the topic?
• Highly dependent adult children are a cross-cultural clinical phenomenon, and as such remain a topic of public concern and clinical importance.
• While exogenous factors underlying highly dependent adult children have been explored over the past 40 years by economists, sociologists, and family therapists, until recently there remained a lacuna of investigations by psychiatrists and psychologists regarding the endogenous factors underlying Failure to Launch.
• While there has been ample research regarding the nomothetic factors underlying the issue, little attention has been paid to the idiographic perspective, the individual differences influencing the behavior of highly dependent adult children.

What this paper adds?
• This paper investigates Adult Entitled Dependence or Failure to Launch syndrome from an idiographic perspective, focusing on the contribution of behavior, personality, and individual differences exhibited by highly dependent adult children.
• Documents the design and validation of a new measure to assess the symptomology of highly dependent adult children.
• Offers a tentative theoretical construct of highly dependent adult children based on a principle component analysis of the scale items and a subsequent clinical study, suggesting the underlying construct may include a confluence of alexithymia, personality disorders, and executive dysfunction of the frontal lobes.

By the turn of the 21st century, the percentage of adult children domiciled with their parents in the USA (e.g., Settersten & Ray, 2010) and around the world (e.g., Bell, Burtless, Gornick, & Smeeding, 2007) appears to have risen dramatically. Two general subsets of these adult children will be distinguished: the first group behaves according to their cultural norms (e.g., living with one’s parents in a symbiotic relationship and sometimes later caring for one’s parents in the parental home), while the second group appears to be highly dependent upon their parents to the extent that it violates cultural norms.
norms. The latter are known by a host of different names: *Kids in Parents Pockets* (KIPPERS) in England, *Boomerang Children* in Canada, *Kangurus* in South Korea, *Bamboccioni* in Italy, *Mama’s Hotel Children* in Austria, and *Hikikomori* in Japan (Finlay, Sheridan, McKay, & Nudzor, 2010; Janne, 2007; Lebowitz, Dolberger, Nortov, & Omer, 2012; Settersten, Furstenburg, & Rumbaut, 2005; Teo, 2009). In the USA, this phenomenon has been dubbed *Adult Entitled Dependence, Failure to Launch, Full Nest Syndrome, Returning Young Adult Syndrome, Incompletely Launched Young Adults*, and *Returning Young Adults* (e.g., Lebowitz et alii, 2012; Lebowitz, 2016; Schnaiberg & Goldenberg, 1989). The condition usually involves an adult child living with at least one parent who accommodates the adult child’s pattern of dependence by providing age-inappropriate services like food, money, and housing. This accommodation may appear to be excessive in light of the adult child’s apparent capacity to function normally (i.e., they do not exhibit any clear behavioral, cognitive, or physical deficits that might otherwise impede their functioning). These highly dependent adult children (HDAC) may also refuse further education, remain unemployed or avoid employment, while making demands for food, money, and other help. HDAC may immerse themselves in online computer activities and invert the diurnal cycle. In extreme cases, some HDAC may react violently, either toward their parents or toward themselves, when their demands are challenged, a constellation of maladaptive behaviors defined as *Adult Entitled Dependence* (AED; Lebowitz et alii, 2012). As an alternative example, Schnaiberg and Goldenberg (1989) offered four general conditions that describe their *Returning Young Adult Syndrome*, a dysfunctional form of co-residency involving HDAC: (1) The children’s failure to successfully reach functional autonomy, and the resultant economic dependency on the parent’s income; (2) Deviance from the parental expectations that children would physically separate from parents during young adulthood; (3) One or more returns to the parental home after having failed to reach functional autonomy; and (4) An anomic context (i.e., outside the cultural norms) for household labor organization and allocation of family resources resulting in anger experienced by the parent(s) and/or child.

This phenomenon has grown so ubiquitous as to be featured in self-help books, on film, and the evening news – recently, parents in Syracuse, New York were forced to file a lawsuit against their 30-year old son who repeatedly refused to honor their request to leave home (“Judge Orders 30-year-old Son to Move Out After Parents File Lawsuit,” 2018). Thus, HDAC remain a topic of public concern and clinical relevance. While HDAC have been studied for the past three decades, much of the work has been produced by economists, sociologists, and family therapists (e.g., Mitchell, 2006; Schnaiberg & Goldenberg, 1989; Goldscheider & Goldscheider, 1998, 1999; Bell, Burtless, Gornick, & Smeeding, 2007; White, 1994; Settersten & Ray, 2010; South & Lei, 2015; Lebowitz et alii, 2012). However, it is important to note that these nomothetic studies of HDAC often minimize or ignore psychological states and genetic predispositions and tend to focus on external rather than internal factors.

One previously noted form of HDAC which has been studied in greater detail is the Japanese phenomena of Hikikomori. Teo (2009, 2010) describes an epidemic – unknown prior to 1970, perhaps reaching hundreds of thousands of cases – wherein Japanese adolescents and young adults (4:1 preponderance of males) become recluses in their parents’ homes, withdrawing from friendships, contact with family, education, and employment. Average age at first presentation has been reported at 20-years-old in one small study and 27-years-old in a large government study (Kondo, 1997; Ministry of
Bullying, or other childhood trauma, has been reported in cases of Hikikomori, along with difficulty in school and shunning by peers. According to Kobayashi, Yoshida, Noguchi, Tsuchiya, and Ido (2003), Hikikomori are known to barricade themselves in their rooms and exhibit violent outbursts, with 20% admitting to property destruction and assault upon family members. Disrupted family dynamics have also been reported. Family members report that Hikikomori tend to be rejecting and authoritative toward at least one family member, acknowledge a profound sense of apathy bordering on nihilism, and lack the motivation to engage with the world (Nabeta, 2003). They also have trouble describing their own identity (which may be a borderline personality disorder trait or a symptom of alexithymia). When asked to describe their feelings, thoughts, and interests, they respond with “I don’t know.” They may also express a desire to go against society but feel an intense anxiety about doing so (Ogino, 2004). They may also experience intense feelings of inadequacy. It appears that their isolating behavior varies: some never leave their room or bathe and relieve themselves in empty cans or containers. Others are willing to emerge at times when they are unlikely to encounter others.

In the Diagnostic and Statistical Manual of Mental Disorders (DSM-I & DSM II; American Psychiatric Association, 1952, 1968), two personality disorders were described that may have heralded some of the symptoms associated with HDAC. In the original DSM, the inadequate personality disorder was introduced as one of four cardinal personality types (cardinal because they were described as rarely altered by any form of therapy). People suffering from inadequate personality disorder were characterized as having “inadequate response to intellectual, emotional, social, and physical demands. They are neither physically nor mentally grossly deficient on examination, but they do show inadaptability, ineptness, poor judgment, lack of physical and emotional stamina, and social incompatibility” (p. 35). DSM-II retained the inadequate personality disorder diagnosis, and presented a new personality disorder asthenic personality disorder, “…characterized by easy fatigability, low energy level, lack of enthusiasm, marked incapacity for enjoyment, and oversensitivity to physical and emotional stress” (p. 43). Both personality disorders were eliminated from DSM-III (APA, 1980).

According to Teo (2009), the Hikikomori have been diagnosed with withdrawal neurosis, social anxiety and withdrawal, and avoidant personality disorder. Teo (2009) also suggested possible diagnoses of schizoid personality disorder, anxiety disorder, social anxiety disorder, dysthymia, and major depressive disorder. Others (e.g., Lebowitz et alii, 2012) have suggested comorbid diagnoses of dependent personality disorder, obsessive-compulsive disorder, conduct disorder, and attention deficit hyperactivity disorder. As yet unexplored, another possible comorbidity in HDAC is executive dysfunction of the frontal lobes (e.g., Luria, 1966; Hoffman, 2016). Patients with frontal lobe dysfunction frequently exhibit poor planning, difficulty making decisions, task completion difficulties despite an ability to do so, and problems with inhibition. These executive dysfunction symptoms appear to resemble some of the behavioral features of HDAC. While the phenomenon of Hikikomori has been reviewed in the psychiatric and psychological literature (e.g., Teo, 2009; Kondo, 1997; Saito, 1998; Kobayashi, Yoshida, Noguchi, Tsuchiya, & Ido, 2003; Nabeta, 2003; Sakamoto, Martin, Kumano, Kuboki, & Al-Adawi, 2005; Ogino, 2004; Malagón Amor, Córcoles Martínez, Martín López, & Pérez Solà, 2015), there remains a lacuna of empirical investigations regarding the personality features of HDAC, theoretical constructs of HDAC, comorbid personality disorders, or personality disorder traits. While other nomothetic factors (family systems dysfunction,
socioeconomic pressures, technology that provides a sense of social connection at a distance, etc.) could contribute to the recent global emergence of HDAC, most young adults are exposed to similar challenges and do not become highly dependent. Therefore, additional examinations of individual differences may elucidate the underlying personality factors that result in the behaviors associated with HDAC. Prior to this study, a well-validated assessment measure of the HDAC construct was lacking. In order to quantify the degree to which an individual exhibits HDAC traits, to analyze the underlying principle components of the construct, and the relationship between HDAC symptomology and other psychopathological constructs, a measure of the HDAC construct was necessary. Thus, the purpose of the present study was to design and evaluate the HDAC scale and establish its psychometric properties, investigate the principal components of the HDAC construct, and to explore the relationships between HDAC and other forms of psychopathology.

The present study was divided into two parts. Part 1 consisted of a pilot study focused on creating, norming, and validating a psychometric scale designed to measure HDAC symptomology, and a principle component analysis to examine the underlying theoretical structure of the symptomology exhibited by HDAC. Next, a clinical study focused on the relationships between the HDAC scale and associated psychopathology, specifically 14 personality disorders and executive function deficits. The study was approved by the Institutional Review Board of the authors’ university.

**PART 1**

**METHOD**

**Participants and Procedure**

Undergraduate psychology majors were granted extra credit in exchange for their participation. Additionally, adult participants were recruited via social media (e.g., Facebook), flyers posted on campus, and word-of-mouth. All participants were directed to an online research platform Qualtrics (Qualtrics, Provo, UT) where they first provided informed consent, completed the HDAC scale on an adult (required criteria: sibling, friend, family member, or close acquaintance, 22 years or older, who is not their parent, and not mentally or physically disabled), a demographics form, after which they were presented with a debriefing statement. These participants were not asked to identify a highly dependent adult child, but only to complete the HDAC scale about any adult who fits the aforementioned criteria. After screening for incomplete data, the sample of participants (the reporters who reported on an adult) was N= 665; 484 women (3 gender unreported), with a mean age of 29.8 years (SD= 15.9 years; range 17 to 87 years). Participant ethnicity was 73% White, 8% Hispanic, 3% Asian/Pacific Islander, 2% African American, 1% American Indian/Alaskan Native, and 13% other.

The sample of targets (the subjects reported by the aforementioned participants) was 665 (356 women, 6 gender unreported) with an age range from 22 years to 41 years or older (with 67% of the targets aged 22 to 40 years). Target ethnicity was 76% White, 9% Hispanic, 3% African American, 3% Asian/Pacific Islander, 1% American Indian, and 8% other. Regarding the participants’ relationship to the targets, 41% of the participants described the target as a family member, 33% as a friend, 17% as a partner, 3% as an acquaintance, and 5% as other.
Instruments

Highly Dependent Adult Children (HDAC). A 32-item scale created to assess the symptomology associated with HDAC. Keyword Internet searches were conducted using Google, Google Scholar, and the online subject database search engines provided by the Kraemer Family Library, University of Colorado, Colorado Springs (UCCS) to retrieve the relevant literature describing the symptomology of HDAC. Search terms included failure to launch, returning young adults, full nest syndrome, incompletely launched young adults, hikikomori, boomerang children, kangurus, KIPERS, adult entitled dependence, and highly dependent adult children. The relevant peer-reviewed literature was examined from which 32 behavioral sequelae of HDAC were identified within the literature. These symptomatic behaviors of HDAC were then formatted into a significant-other report (e.g., “This person is socially inept”) and used to create the scale items. Each item on the HDAC scale was rated on a Likert-type scale from 1 to 4 (1= Hardly ever, 2= Sometimes, 3= Frequently, 4= Almost always).

RESULTS

The mean on the 32-item HDAC scale for the normative sample (N= 665) was 49.8 (SD= 13.9), and it had excellent internal reliability (Cronbach’s α= .93). Examination of the corrected-item total correlations revealed that 21 of 32 items had correlations of .50 or greater with seven of the items correlating at .60 or greater. The single best item was #11: “This person blames others for his/her mistakes” (r= .70), followed by #10: “This person claims to be a victim of circumstances outside his/her control” (r= .69). A principal component analysis (PCA) with varimax rotation was performed on the HDAC scale’s 32 items (N= 665), which produced six components with eigenvalues greater than 1.00, with a total of 55% of the variance explained (additional PCAs were conducted by forcing 2, 3, 4, and 5 component solutions, however, the 6 component solution was deemed most interpretable).

The six components were named based on their individual items loadings. They included alexithymia, blaming/inadequacy, default dependency, aggression, somatization, and limited socialization. A summary of these PCA results, including the number of items, eigenvalues, variance accounted for, and Cronbach’s α, appears in Table 1.

<table>
<thead>
<tr>
<th>Construct</th>
<th>Items</th>
<th>Eigenvalue</th>
<th>Component Variance</th>
<th>Cumulative Variance</th>
<th>α</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alexithymia</td>
<td>8</td>
<td>10.64</td>
<td>11.8%</td>
<td>11.8%</td>
<td>.86</td>
</tr>
<tr>
<td>Blaming/Inadequacy</td>
<td>5</td>
<td>2.003</td>
<td>11.1%</td>
<td>23.0%</td>
<td>.84</td>
</tr>
<tr>
<td>Default Dependency</td>
<td>7</td>
<td>1.584</td>
<td>10.5%</td>
<td>33.5%</td>
<td>.79</td>
</tr>
<tr>
<td>Aggression</td>
<td>6</td>
<td>1.323</td>
<td>8.4%</td>
<td>41.8%</td>
<td>.70</td>
</tr>
<tr>
<td>Somatization</td>
<td>3</td>
<td>1.093</td>
<td>7.2%</td>
<td>49.0%</td>
<td>.60</td>
</tr>
<tr>
<td>Limited Socialization</td>
<td>3</td>
<td>1.041</td>
<td>6.3%</td>
<td>55.3%</td>
<td>.65</td>
</tr>
</tbody>
</table>

PART 2

METHOD

Participants and Procedure

The second part of the study was conducted with a sample of convenience of undergraduate psychology students, who were asked to identify a potentially highly dependent adult child, according to the following description:
Think of a working age adult (22 years or older) you know that has no physical or mental disability, but he or she is highly dependent on their parents: not enrolled in college or vocational training, possibly unemployed, and living with and supported by their parents for at least one year.

Participants who claimed to know a HDAC who met the above criteria offered verbal informed consent, completed the HDAC scale describing the HDAC target, a demographic form, and the significant-other version of the CATI describing the HDAC target. The participants also completed the 32-item HDAC scale again, a week later (as a measure of test-retest reliability). On both occasions, they completed the HDAC scale about the same target. Further, upon the re-testing of the HDAC scale, the participants were asked to complete the HDAC scale about an adult who did not meet the previously stated criteria for a highly dependent adult child, in order to test the HDAC scale for discriminant validity. Participants were then verbally debriefed in the classroom.

The undergraduate participants in Part 2 (N = 104; 84 women) had a mean age of 24.2 years (SD = 7.8 years; range 17 to 56 years). Their reported ethnicity was 69% White, 8% Hispanic, 5% African American, 2% Asian/Pacific Islander, 1% American Indian/Alaskan Native, and 15% other. The mean length of time participants had known the study target was 175 months (SD = 108.6 months), with a range of 4 to 468 months.

The HDAC targets (N = 104; 36 women) had a mean age was 29.9 years (SD = 9.9 years; range 21 to 68 years). Their reported ethnicity was 65% White, 14% Hispanic, 6% African American, 1% Asian/Pacific Islander, 1% American Indian/Alaskan Native, and 13% other. The reported targets’ length of dependence was as follows: 58% had been highly dependent for over 5 years, 34% percent for 2 to 5 years, and 9% had been dependent for 1 to 2 years. With regard to the participants’ relationship to the HDAC targets, they reported that 61% were family, 21% were friends, 8% were acquaintances, 6% were romantic partners, and 5% were other types of relationships.

**Instruments**

*Highly Dependent Adult Children Scale (HDAC). See the description in Part 1.*

*Coolidge Axis II Inventory (CATI; Coolidge, 2013; Coolidge, Burns, & Mooney, 1995).*

A 250-item, significant-other form describing the target (the HDAC) identified by the participants. The CATI scales of interest were: (1) 14 personality disorders – 10 from DSM-5 (APA, 2013), 2 from the appendix of DSM-IV-TR (depressive and passive-aggressive), and 2 from DSM-III-R (sadistic and self-defeating), and (2) 16-item Executive Dysfunction of the Frontal Lobes scale, which measures poor planning, decision-making difficulties, and task completion problems. The items on the CATI are rated on a Likert-type scale from 1 to 4 (1 = Strongly false, 2 = More false than true, 3 = More true than false, 4 = Strongly true). The 14 CATI personality disorder scales have a median internal scale reliability (Cronbach’s α) of .76 (range: Dependent personality disorder scale .87; Obsessive-Compulsive personality disorder scale .68) and a mean test-retest reliability of r = .90 (one-week interval; Coolidge, 2013; Coolidge & Merwin, 1992). The CATI personality disorder scales had a median concurrent validity with the personality disorder scales of the Millon Clinical Multiaxial Inventory (Millon, 1987) of r = .52 (Coolidge & Merwin, 1992).

**RESULTS**

The HDAC scale test-retest reliability over the one-week interval (N = 104) was very high (r = .84, p < .001). A test of discriminant validity was performed between the
HDAC scale completed on an adult identified as highly dependent and then on an adult who was not highly dependent. An independent t test revealed that the mean HDAC scale sum for the highly dependent adults (M= 81.3, SD= 15.4) was significantly higher than the mean for non-dependent adults (M= 44.0, SD= 10.0; t(206)= 23.73, p < .001), with a very large effect size (Cohen’s d = 2.87).

Pearson product-moment correlations were conducted between the HDAC scale score and the 14 CATI personality disorder scale scores (N= 104). The HDAC scale correlated moderately or strongly with 13 of the 14 CATI personality disorder scales, all in the positive direction (as expected). The median correlation for the 14 personality disorder correlations was r = .55 (range .28 to .68). See Table 2.

Table 2. HDAC and 14 CATI Personality Disorder Scale Means (SDs) and Correlations between HDAC and CATI Personality Disorder Scales (N= 104).

<table>
<thead>
<tr>
<th>Scales</th>
<th>M (SD)</th>
<th>r</th>
</tr>
</thead>
<tbody>
<tr>
<td>HDAC</td>
<td>81.3 (15.4)</td>
<td></td>
</tr>
<tr>
<td>Passive-Aggressive</td>
<td>67.5 (7.7)</td>
<td>.68*</td>
</tr>
<tr>
<td>Borderline</td>
<td>61.3 (11.6)</td>
<td>.59*</td>
</tr>
<tr>
<td>Paranoid</td>
<td>54.8 (10.0)</td>
<td>.58*</td>
</tr>
<tr>
<td>Narcissistic</td>
<td>73.3 (12.3)</td>
<td>.57*</td>
</tr>
<tr>
<td>Obsessive-Compulsive</td>
<td>71.0 (8.5)</td>
<td>.57*</td>
</tr>
<tr>
<td>Sadistic</td>
<td>40.5 (10.0)</td>
<td>.56*</td>
</tr>
<tr>
<td>Antisocial</td>
<td>113.6 (24.1)</td>
<td>.55*</td>
</tr>
<tr>
<td>Schizotypal</td>
<td>50.4 (9.1)</td>
<td>.55*</td>
</tr>
<tr>
<td>Depressive</td>
<td>17.0 (3.9)</td>
<td>.50*</td>
</tr>
<tr>
<td>Self-Defeating</td>
<td>52.3 (5.3)</td>
<td>.41*</td>
</tr>
<tr>
<td>Avoidant</td>
<td>44.7 (9.6)</td>
<td>.40*</td>
</tr>
<tr>
<td>Schizoid</td>
<td>19.4 (9.1)</td>
<td>.38*</td>
</tr>
<tr>
<td>Dependent</td>
<td>69.4 (10.2)</td>
<td>.33*</td>
</tr>
<tr>
<td>Histrionic</td>
<td>79.4 (11.6)</td>
<td>.28*</td>
</tr>
</tbody>
</table>

Note: *= p < .01

The passive-aggressive personality disorder scale had the single highest correlation with the HDAC scale (r = .68). The four strongest individual CATI items on the passive-aggressive scale were: “It takes very little to irritate him/her” (r = .50); “He/she almost always gets angry when people criticize him/her” (r = .48); “He/she almost always feels like people make unreasonable demands of him/her” (r = .47); and “He/she sometimes works slowly or does a bad job on a task if it is something he/she does not want to do” (r = .46). The borderline personality disorder scale had the second highest correlation with the HDAC scale (r = .59). The four strongest individual CATI items on that scale were: “His/her moods change fairly quickly” (r = .55); “He/she is emotionally uncontrolled” (r = .53); “He/she has more than his/her fair share of temper tantrums” (r = .43); and “His/her anger gets out of control easily” (r = .43). The paranoid personality disorder scale had the third highest correlation with the HDAC scale (r = .58). The four strongest individual CATI items on that scale were: “He/she thinks people are out to get him/her, harm him/her, or ruin him/her in some way” (r = .55); “He/she suspects people go out of their way just to annoy him/her” (r = .53); “He/she tends to be suspicious of other people” (r = .47); and “He/she questions the faithfulness of his/her spouse/partner” (r = .45). Finally, the narcissistic personality disorder scale had the fourth highest correlation with the HDAC scale (r = .57). The four strongest individual CATI items on that scale were: “He/she thinks it’s a fact of life that sometimes he/she has to step on people or hurt them to get what he/she really wants” (r = .51); “He/she acts like he/she is better

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than other people” ($r = .49$); “He/she would lie to hurt someone if he/she feels they deserve it” ($r = .46$); and “He/she is self-centered” ($r = .46$).

The HDAC scale was positively but only moderately correlated with the CATI’s executive dysfunction scale, $r = .34$, $p < .01$.

A standard linear multiple regression (SPSS enter method) was used to evaluate how the HDAC scale (dependent variable) would be predicted by the CATI’s 14 personality disorder scales (independent variables). This analysis indicated that the 14 personality disorder scale scores significantly accounted for HDAC levels, $F(14, 89) = 14.44$, $p < .0005$; $R = .83$, $R^2 = .69$, Adjusted $R^2 = .65$. Four significant predictors emerged in the model, all in the positive direction, including the antisocial, passive-aggressive, obsessive-compulsive, and schizoid personality disorder scales. See Table 3.

### Table 3. Multiple Regression: Standardized $\beta$ Coefficients and $p$ Values.

<table>
<thead>
<tr>
<th>Personality Disorder</th>
<th>$\beta$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antisocial</td>
<td>.43</td>
<td>.01</td>
</tr>
<tr>
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**Discussion**

The present study attempted to create and establish the psychometric properties of a new measure to assess the symptomology of highly dependent adult children, the HDAC scale. The new measure had excellent internal reliability of scale scores ($\alpha = .93$) and good test-retest reliability ($r = .84$), thus, demonstrating its preliminary psychometric reliability. An initial test of discriminant validity of the HDAC scale between those who were identified as highly dependent adults ($N = 104$) and those who were not revealed that the mean for the highly dependent adults was significantly greater than the mean of those who were not highly dependent with a very large effect size. The latter finding attests to the preliminary discriminant validity of the new scale, although admittedly the process of identifying highly dependent adults from those who do not meet those criteria may have suffered from detection bias.

A principal component analysis (PCA) suggested that the HDAC construct appeared to encompass six reliable and stable components: alexithymia, blaming/inadequacy, default dependency, aggression, somatization, and limited socialization. People with alexithymia have great difficulty identifying and distinguishing between feelings and bodily sensations and difficulty communicating their feelings (e.g., Sifneos, 1973). As alexithymia accounted for the greatest variance in the PCA, it is interesting to note that Teo (2009) reported Hikikomori were frequently unable to respond to questions regarding how they felt. If
HDAC are alexithymic, their inability to distinguish between their own feelings and bodily sensations may seriously impede their ability to understand emotions in other people. Further, they may have trouble comprehending and predicting the attitudes, thoughts, and feelings of others, thereby impeding their own ability to behave in a prosocial manner. HDAC may become overwhelmed by their own inadequate interpretation and response to the dynamic and evolving emotional landscape of interpersonal bonds—ties that form the socioeconomic hierarchies necessary to autonomously procure, accumulate, and secure resources. This inability to understand and act upon one’s own emotions and the emotions expressed by others may be one of HDAC core deficits from which the concomitant maladaptive responses emanate. Further research should be conducted with validated self-report measures of alexithymia in order to confirm the present findings.

The second PCA component appeared to encompass blaming/inadequacy. This second strong component of the HDAC scale does raise the issue of the label “entitled” used by Lebowitz et alii (2012). The term entitled does have the connotation of a conscious, willful behavior between an adult child and their parents. If the highly dependent behavior is a byproduct of a constellation of personality disorder features, many of which are egosyntonic, then the term entitled may be inappropriate. Curiously, Lebowitz et alii (2012) did not explicitly state their definition of entitled, however, it may be assumed that they used the term because they presumed HDAC felt they deserved special privileges, including the right to remain physically and financially dependent upon their caregivers. However, if their dependence was primarily a function of egosyntonic personality disorder traits, alexithymic traits, and executive dysfunction, then the underlying logic of the term entitled may be strongly questioned. Clearly, additional research into this specific issue of the appropriateness of the term Adult Entitled Dependence is warranted.

The third component appeared to incorporate default dependency. As noted, a defining characteristic of the HDAC construct appears to be an interpersonal inadequacy that requires overwhelmed HDAC to return to a default state of dependency upon the financial and physical resources of their parents. Considering the first principal component, alexithymia, without a coherent emotional landscape, HDAC may have difficulty functioning in a prosocial manner, essential to forming and maintaining the relationships necessary to autonomously acquire and maintain resources. Without the prosocial behavioral skills necessary to provide for themselves, HDAC may be unable to maintain extended employment and return home to rely on their parents’ resources.

The fourth component appeared to feature aggression – either active or passive – towards their caregivers. To ensure access to necessities they cannot provide for themselves, HDAC may attempt to directly or indirectly threaten their caretakers, resulting in these aggressive acts. Further, these aggressive acts may explain the difficulties HDAC have with their siblings and other family members. As mentioned earlier, other observers such as family members may interpret their behaviors as part of a kind of narcissistic entitlement, when the underlying pathology may have little to do with the primary narcissistic symptoms of grandiosity, fantasies of power, uniqueness/specialness, requiring excessive admiration, or arrogance. This misinterpretation of the underlying motivations of HDAC may extend to mental health providers (e.g., Leibowitz et alii, 2012). Importantly, if narcissistic traits are not causal factors in AED, then the term entitled (e.g., Adult Entitled Dependence) may be inappropriate.

The fifth component appeared to feature somatization. The three items from the HDAC scale describing health worries, lethargy, and physical symptoms under duress,
may again be traced to the primary symptoms of alexithymia. HDAC, possibly alexithymic and unable to distinguish their emotions from bodily sensations, may experience the psychological dissonance associated with stressful situations as chronic pain, nausea, or other physiological disturbances. This may be reflected in the early findings of researchers such as Ruesch (1948), who observed impaired verbalization in psychosomatic patients and attributed it to a continuation of “infantile personality” into adult life.

The sixth component appears to feature limited socialization. The zero-order correlations between the HDAC scale and avoidant and schizoid personality disorders were nearly identical ($r = .40$, and $r = .38$), respectively. However, the results of the multiple regression showed that schizoid personality disorder was a significant predictor whereas avoidant personality disorder was not. Although not seen in the zero-order correlations, if subsequent investigations with multiple regression confirm this finding, then the HDAC are passively avoiding social relationships and interactions, consistent with schizoid personality disorder traits. Further, it has been demonstrated that schizoid personality disorder is a highly genetic trait (e.g., Coolidge et alii, 2001, 2004) which onsets early in childhood/adolescence. Again, this reinforces the hypothesis that the word entitled is inappropriate, and these adult children may merely be acting consonantly with their strong genetic predispositions to not only avoid others but to be alone.

The Pearson correlations between the HDAC scale and the 14 CATI personality disorder scales were particularly revealing. Thirteen of the 14 personality disorder scales correlated with the HDAC scale at $r > .33$, with nine of the personality disorder scales correlated at $r > .50$. As noted earlier, the four strongest personality disorder scale correlations with the HDAC scale were passive-aggressive, borderline, paranoid, and narcissistic scales, although it appeared that those identified as HDAC had characteristics of virtually all of the personality disorder scales, perhaps, with the exception of the histrionic scale – which makes conceptual sense as HDAC living with their parent(s) would be unlikely to seek public attention through dramatic actions, dress, or other public attention-grabbing behaviors.

The strength of the correlation with the CATI’s passive-aggressive personality disorder scale may lend support to the suggestion that highly dependent adults may exhibit a subtype of passive-aggressive personality disorder. DSM-I divided the passive-aggressive diagnosis into three subtypes: passive-dependent (helpless, indecisive, clinging), passive-aggressive (displaying pouting, stubbornness, procrastination, inefficiency, and obstructionism), and aggressive (displaying irritability, temper tantrums, resentment, and destructive behavior in response to frustration). Interestingly, “a deep dependency is usually evident” in the aggressive type (p. 37). In DSM-II (APA, 1968), the passive-aggressive personality disorder was characterized as: “one expression of the patient’s resentment at failing to find gratification in a relationship with an individual or institution upon which he [sic] is over-dependent” (p. 44). With DSM-III (APA, 1980), the passive-aggressive diagnosis was expanded to include unreasonable criticisms, unjustifiable protestations, obstructionism, resentment toward suggestions and an inflated sense of one’s own productivity. These revisions resulted in an increase (as much as 50%; Morey, 1988) in its diagnostic frequency. For DSM-IV (APA, 1992), a controversial decision was made to remove passive-aggressive personality disorder from the Axis II disorders.

With such an apparent intimate relationship between HDAC and the passive-aggressive personality disorder, it is possible that HDAC may exhibit a subtype of passive-aggressive personality disorder, or more intriguingly, it might represent a unique personality disorder. To evaluate the relationship between the HDAC scale and the different
Highly dependent adult children scale

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items on each of the strongly correlated CATI personality disorder scales, a series of post hoc exploratory correlations between the HDAC scale scores and the individual items on the nine strongly correlated personality disorder scales were performed. A closer examination of the individual passive-aggressive personality disorder scale items shows a stronger relationship between the negative-affect (anger, resentment, persecution) and retribution (delay, obstruction, or inaction as a form of revenge) components and a weaker relationship with the employment/task-oriented items, as one might expect in HDAC whom appear very angry and resentful but make no attempt to achieve autonomy through gainful employment. Interestingly, Becker, Grilo, Edell, and McGlashan (2000) found that adolescents diagnosed with borderline personality disorder had significant levels of comorbidity with passive-aggressive and schizotypal personality disorders, reflecting a similar pattern shown in the present study. Additionally, Small, Small, Alig, and Moore (1970), using a 15-year longitudinal design, found that 100 patients diagnosed with passive-aggressive personality disorder developed emotional disturbances in adolescence, followed by interpersonal strife, verbal aggressiveness, outbursts of rage, impulsivity, manipulative behavior, along with a multitude of somatic complaints, a constellation of symptoms typical of the Hikikomori and others displaying behavior associated with HDAC.

A detailed examination of the individual borderline scale items revealed a stronger relationship between the emotional dysregulation and violence items and a weaker relationship with the more ambiguous “display of emotion” items. This absence of a relationship between the HDAC construct and the display-of-emotions items may be due to the ambiguous valence of the term “emotional” in an item such as “He/she shows strong emotional feelings” or “He/she is an unemotional person” in which “emotional” could also include displays of warmth, joy, sadness, or tenderness, resulting in a weak correlation due to the range (and both positive and negative valence) of possible interpretations. The individual paranoid scale items show a stronger relationship between jealousy, wariness, and interpersonal coldness items and a weaker relationship with the withholding of tender affection and neuroticism. Again, this may be due to the ambiguity of the term “emotional.”

Correlations with the individual narcissistic scale items show a stronger relationship between the self-centeredness and lack of empathy components and a weaker relationship with grandiose, flamboyant, high-status, or attention-seeking aspects of narcissism. Note that the moderately correlated ($r = .49$) item “He/she acts like he is better than other people” may be an artifact of the significant other report: participants may have assumed that the HDAC targets felt that they “deserved” to rely upon parental resources because they are “better than” others when in fact, they may feel inferior, inadequate, and overwhelmed by the demands of autonomous living. This may speak to the assumption that outside observers may be misinterpreting the behavior of HDAC as entitled (in the sense that HDAC appear to project the sense that they are “above” earning a living for themselves) when in fact they may be incapable of establishing and nurturing the interpersonal relationships necessary to hold a job and maintain autonomy. Thus, additional research is required to understand this perceived “entitlement” as reported by significant others. Based on the historical inclusion of inadequate and asthenic personality disorder exhibiting similar face validity, as well as the current study’s significant relationships between HDAC symptomology and 8 of the 10 current as well as 4 former personality disorders, the maladaptive behaviors associated with the HDAC construct may qualify for consideration in Section III in future revisions of DSM-5, either as a newly derived,
unique personality disorder or possibly as a reemergence of the former passive-aggressive, inadequate, or asthenic personality disorders.

Interestingly, the HDAC scale was positively and moderately correlated with a measure of executive dysfunction. As previously noted, patients with frontal lobe damage frequently exhibit poor planning, difficulty making decisions, and completing tasks, despite an ability to do so. These symptoms of executive dysfunction would seem to embody many of the maladaptive behaviors of HDAC. Studies have confirmed that executive dysfunction can be comorbid in people with personality disorders (e.g., Coolidge, Thede, & Jang, 2001, 2004), with strong positive correlations between executive dysfunction and personality disorders, including passive-aggressive, borderline, dependent, histrionic, and depressive. Interestingly, Sarazin, Pillon, Giannakopoulos, Rancurel, Samson, and DuBois (1998) found that some subjects with damage to the prefrontal cortex associated with executive functions showed minimal deficits in laboratory settings, while exhibiting severe deficits in natural settings. They suggest that decision-making and planning in natural settings may include a social, and therefore affective, aspect that is absent from the laboratory evaluations of executive functions. This may provide additional support for the role of executive dysfunction in personality disorders as well as HDAC. This deficit in affective social functioning also supports the role of alexithymia in contributing to the interpersonal dysfunction associated with HDAC.

Additionally, the CATI’s 14 personality disorder scale scores significantly predicted HDAC scale level (see Table 3). Though it only achieved the sixth strongest correlation ($r = .55$) with HDAC scale scores, the antisocial personality disorder scale showed the strongest standardized beta coefficient (.43). However, as might be expected given its zero-order correlation ($r = .68$), the passive-aggressive scale was also a significant predictor ($\beta = .35$), along with obsessive-compulsive ($r = .57$, $\beta = .34$) and schizoid ($r = .38$, $\beta = .31$). The results should be interpreted with caution because the pattern of standardized beta coefficients could not be predicted from the zero-order correlation coefficients, which might be due to the multicollinearity between the predictors. As noted by Nathans, Oswald, and Nimon (2012) reliance on standardized beta coefficients may be standard practice, but in reality, may be highly suspect. Perhaps, future investigations with larger samples may provide additional clarity.

Clearly, there seems to be a unique relationship between HDAC, executive dysfunction, and personality disorders which bears additional investigation. Although the present study offers a promising alternative conceptualization of HDAC and the AED construct based on a possible confluence of alexithymia, personality disorders, and executive dysfunction (and perhaps other nomothetic influences), this evidence must be regarded as preliminary for several reasons. First, the lack of an inadequate personality disorder or asthenic personality disorder scale limits the ability to directly test the relationship between these two constructs and HDAC features, in spite of the face validity of the inadequate and asthenic personality disorders, which appear highly similar to AED and the behavioral features of HDAC. Also, a measure of alexithymia should be included in future studies to provide additional support for the initial evidence revealed by the PCA. Second, the high multicollinearity of the independent variables in the regression analyses may have impeded the understanding of HDAC from the perspective of personality disorders. Third, the clinical study could have benefitted from a preponderance of first-degree relationships, especially reports generated by daily caregivers (i.e. parents, direct family members, significant others, or other long-term, intimate relationships) rather than the greater range of relationships allowed in the present...
study. Fourth, the present study could have benefited from self-reports completed by HDAC themselves. Fifth, and one of the more serious confounding variables, was the design of the present discriminant validity test. The same participants were told to rate two different targets: a highly dependent adult as well as an adult who did not meet the dependence criteria. Thus, the significant differences between these two groups may have been biased a priori. Additional evidence of discriminant validity should be provided via alternative methods in further studies. Future studies may also wish to assess parents, siblings, and offspring of highly dependent adult children in order determine psychopathological patterns within families. The study could also be expanded to twins in order to determine the heritability of maladaptive dependence. As the ability to understand the thoughts, attitudes, and feelings of others is labeled Theory of Mind (e.g., Baron-Cohen, 2000), further research with highly dependent adult children in the latter area might also be productive. Finally, the HDAC component structure should also be corroborated by a confirmatory factor analysis.

In sum, the strength of the relationship with personality disorders, especially passive-aggressive personality disorder, provides multiple paths of support (descriptive, correlational, and predictive) for the general hypothesis that HDAC may exhibit traits associated with a personality disorder, with its concomitant enduring, pervasive, and inflexible pattern of inner experience and external behavior associated with distress or impairment. It remains an open question as to whether HDAC exhibit a recently emergent personality disorder, a modern reemergence of a former personality disorder (or one of its subtypes), a primary variant of alexithymia, or some combination of these, perhaps exacerbated by other nomothetic factors. The present study supports the 32-item HDAC scale as a valid and reliable measure for the maladaptive behaviors associated with HDAC, and that these behaviors may be related to the sequelae of alexithymia and other psychopathology (personality disorders, executive dysfunction, etc.) associated with HDAC. Based on the present findings, where personality disorders, executive dysfunction, and alexithymia clearly play a significant role in the behaviors associated with Adult Entitled Dependence, it appears that the word entitled may be an inappropriate attribution to these highly dependent adults – a misnomer that may adversely affect the understanding of the true nature of the behaviors associated with HDAC. Further, since clinical interventions have already been designed to address AED, their focus on the narcissistic or entitled behavior may be unwarranted.

REFERENCES

American Psychiatric Association (2013). *Diagnostic and Statistical Manual of Mental Disorders* (5th Ed.).
Washington, DC: Author.


Ruesch J (1948). The infantile personality: The core problem of psychosomatic medicine. Psychosomatic Medicine, 10, 134-144.


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