

## Review Article

# Psychometrics of the PERCI: Where Research and Clinic Meet

Sarah Ransdell

Nova Southeastern University, USA

\*Corresponding author: Sarah Ransdell, Nova Southeastern University, USA. Tel: +19542621208; E-Mail: ransdell@nova.edu.

**Citation:** Ransdell Sarah (2017) Psychometrics of the PERCI: Where Research and Clinic Meet. Educ Res Appl 2017: J117. DOI: 10.29011/2575-7032/100017

**Received Date:** 03 May, 2017; **Accepted Date:** 21 May, 2017; **Published Date:** 28 May, 2017

## Introduction

Parents respond to teens differently than they do children of other ages. Younger children are often compliant and sweet. Older children often become, for a time, recalcitrant teens. Merriam-Webster defines recalcitrant as

- Obstinate defiance of authority and restraint.
- Difficult to manage.

Parents often question whether their millennial teen is in need of a clinical observation, or is developing normally. Normal is a spectrum and most teens are in the nonclinical or the relatively innocuous behavior range. The emotional intelligence that must be acquired by millennial teenagers is extensive [1-3].

This research replicates a test of parent response to typical and a typical teen behavior. The PERCI measures adolescent behavior that has many attributes with Attention-Deficit Hyperactivity Disorder (as defined by the DSM5 and ICD-10). As with all clinical disorders, there is a spectrum along which normality is also symptomatic (see Figure 1 Here). The PERCI was first developed in Denmark by Lambek, Sonuga-Barke, Psychogiou, Thomsson, Tannock, Daley, Dammand Thomsen (2014) [4] as a way to measure parents' self-reported response to typical and a typical adolescent behavior. A typical behavior, such as excessive talking and motor twitches, lie on one end of the spectrum of ADHD-like symptoms. The teen's life is very difficult. And so is the parent who loves, but must govern. The purpose of the present research is to test the reliability and validity of the PERCI in an American replication. The replication will also reveal the underlying structure of the PERCI and show that it resembles the clinical symptomatology as in it described and defined in the DSM5 and the ICD-10.



**Figure 1:** Spectrum along which normality is also symptomatic.

The PERCI measures two factors with reliable Eigen values in a principal components factor analysis with Varimax rotation. Typical Behavior or T B explains a reliable 33% of the variance in the PERCI. Typical behaviors include school work problems, (Q27, 7, 21); interrupts people (Q2); poor delay of gratification (Q3, 11); poor listening (Q4, 10, 26); impatient (Q5); poor in planning (Q6, 9); and in appropriate loudness (Q18). Many Danish, and as it turns out, middle-class American teens living in South Florida, exhibit a large number of these behaviors, but without clinically debilitating symptoms: They are typical. A second factor, Atypical Behavior or AT explains a second 12% variance in the PERCI total score. This AT includes behaviors as if driven by a motor (Q24), and talks excessively (Q22). Driven by a motor and talks excessively are clinical symptoms of ADHD in both the DSM5 and the ICD-10.

American, DSM5, and International ICD-10) expert clinicians and researchers have met. Clinicians and now parents, the PERCI, predict the same 2 factor structure.

## Method

### Participants

One-hundred parents were asked to reply to an IRB-approved

al email requesting responses to a short questionnaire, the PERCI. A high percentage of this middle to upper middle-class sample of parents responded to the requests by submitting their responses to the research team.

### Instrument

The instrument, the PERCI (Lambek et al., 2014) [4] was obtained from Lambek's lab in Denmark, along with permission to conduct IRB-approved research using it.

### Results and Discussion

Two significant factors, Typical Behavior (TB) 33%, and Atypical (AT) 12%, were found in this American replication of Lambek et al.'s (2017) [4] study in Aarhus, Denmark. Lambek et al.'s (2017) [4] research found a similar structure. A number of differences, some understood, some not, make a direct comparison of Aarhus, Denmark teens and Ft. Lauderdale, Florida teens quite limited. Even so, the research finding in two groups of millennials is very similar to that found in the most trusted manuals in modern clinical diagnosis (DSM5 and ICD-10). Research and clinic meet in a well-designed and important collaboration. Adolescents exhibit ADHD-like symptoms, but only the truly disordered also experience hyper motility and verbosity.

The two factors, TB and AT reflect current understanding of ADHD-related behaviors in teens who are clinically diagnosed. But of course, typical behaviors mimic, but do not indicate the presence of, ADHD. Teens talk a lot and are impulsively poor planners, relative to older, and sometimes younger, peers. Teens are challenged by prefrontal growth pains. Parents are challenged to adjust to this new developmental stage and wait for their children to obtain emotional intelligence [5,6].

In fact, Goleman's theory of emotional intelligence is helpful in understanding the two factors revealed by the PERCI in the present study. Goleman (2001) [6] present a 2X2 model of emotional intelligence or EI. Personal competence includes self-awareness, are cognition skill, and self-management, a regulation skill. Self-awareness include accurate self-assessment and confidence and is

primary to other aspects of the model. Self-management is a result of good self-awareness and includes emotional self-control, adaptability and achievement drive. Teens who are aware of their own emotional strengths and weaknesses must then apply that knowledge in order to adapt and achieve in the emotional realm. Social competence includes recognition of others and managing those relationships. Social awareness arises from empathy, service orientation, and organizational awareness. Relationship management includes along list of regulatory skills like conflict management, building bonds, and team work and collaboration. All must be navigated as teens join the adult world.

A typical behaviors, or AT symptoms of motor and verbal hyper-fluency in the present research, do not appear often in teens who are not clinically diagnosed. Presumably it is also a good sign for the cohort of teens who were born between about 1990 and 2005. The millennials are mostly doing ok despite exhibiting some behaviors that might not be successful. Future research must consider cohort effects like that seen by the millennial generation in a large number of domains.

### References

1. Stewart S, Lim D, Kim J (2015) Factors influencing college persistence for first-time students. *Journal of Developmental Education* 38: 12-20.
2. Wyatt JB, Bloemker GA (2013) Social and emotional learning in a Freshman Seminar. *Higher Education Studies* 3: 106-114.
3. Parker JD, Hogan M, Eastabrook J, Oke A, Wood L (2006) Emotional intelligence and student retention: predicting the successful transition from high school to university. *Personality and Individual Differences* 41:1329-1336.
4. Lambek R, Sonuga-Barke, Psychogiou L, Thompsom M, Tannock R, et al. (2017) The Parental Emotional Response to Children Index: A questionnaire measure of parents' reactions to ADHD. *Journal of Attention Disorders*.
5. Goleman D (1995) *Emotional intelligence*. New York: Bantam.
6. Goleman D (2001) An EI-based theory of performance In Chapter 3: *The Emotionally Intelligent Workplace* In: Cherniss & Goleman (Eds.) Josey-Bass Goleman D 2006 *Emotional intelligence: Why it can matter more than IQ*. New York: Bantam.