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A comprarison of scores on the RIAS and WISC-IV in a referred sample

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A COMPRARISON OF SCORES ON THE RIAS AND WISC-IV IN A REFERRED SAMPLE

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ABSTRACT

The purpose of this study was to examine whether or not the Reynolds Intellectual Assessment Scales (RIAS) and the Wechsler Intelligence Scale for Children – Fourth Edition (WISC-IV) measure the same type of intellectual abilities and if the two tests yield similar scores when administered to the same student. Archived data from counterbalanced administrations of each assessment tool were examined for twenty-nine students who were referred for a multi-factored evaluation to determine special education eligibility. Significant positive correlations were found between similar composite score pairs. The *t* tests indicated that the RIAS Composite Memory Index was significantly higher than the WISC-IV Working Memory Index (t=-2.29, $p<.05$). There were no other significant differences found between the other similar composite score pairs. These results indicate, with the exception of the memory composites, that examiners may be able to predict scores for one of these instruments based on the scores obtained from the other.

Chapter One

Literature Review

The history of intelligence testing started with Sir Francis Galton in 1884 when he began testing intelligence by measuring height, weight, reaction time, and sensory discrimination (Sattler, 2008). The idea of using an intelligence assessment has changed and evolved ever since. Today, intelligence scores play important roles in determining special education eligibility, help define a student's strengths and weaknesses, and help understand how to more effectively teach a student so that they can learn. Intellectual assessments are now part of comprehensive psychological evaluations.

It is important for school psychologists to know and understand how different intelligence tests relate to each other. Previous research has shown that different intelligence tests provide significantly different scores when administered to the same student (Law & Faison, 1996; Prewett & Matavich, 1994; Umphress, 2008; Wilson & Gilmore, 2012). Therefore, whether or not a student qualifies for special education services, for instance a program for students with a cognitive delay, might be more related to which intelligence test was given rather than the actual need of the student (Prewett & Matavich, 1994; Umphress, 2008).

It is crucial to know if the intelligence tests measure the same type of ability and if the tests yield similar scores when administered to the same student (Prewett & Matavich, 1994; Edwards & Paulin, 2007; Klanderman, Devine, & Mollner, 1985). Even though two tests might measure the same abilities, the tests might yield significantly different scores when administered to the same student (Flanagan, 2013). These

differences can be caused by the different narrow abilities measured within each broad ability, the task demands, and the way each task is measured and scored. Significant differences in ability scores could alter the placement decisions for special education based on which test was given. For instance, the Kaufman Adolescent and Adult Intelligence Test (KAIT) was found to result in fewer placements in special education than the Wechsler Intelligence Scale for Children – Third Edition (WISC-III) (Law & Faison, 1996).

School psychologists often administer brief measures of intelligence to help determine if a student should be referred for a complete evaluation for special education eligibility. In these cases, it is vital to know if the screener, or brief measure of intelligence, is a good predictor of the score the comprehensive measure of intelligence will provide (Prewett, 1995). The Reynolds Intellectual Assessment Scales (RIAS) has been described as a brief, full-scale IQ assessment that takes half the time to administer as the WISC-IV (Nelson, Canivez, & Lindstrom, 2007.)

The purpose of this study will look at whether or not the RIAS and the WISC-IV can be used interchangeably. Do the two tests yield similar scores and measure similar abilities?

Wechsler Intelligence Scale for Children-Fourth Edition (WISC-IV)

The *Wechsler Intelligence Scale for Children-Fourth Edition* (WISC-IV) is a comprehensive clinical instrument that is individually administered and used to assess the intelligence of children (Wechsler, 2004). The assessment results can also be used as part of a comprehensive psychological evaluation in which giftedness, mental

impairments, learning disabilities, and personal strengths and weaknesses are identified. The WISC-IV provides a measure of general intellectual function (FSIQ) and provides composite scores in four specified cognitive areas (i.e., Verbal Comprehension Index, Perceptual Reasoning Index, Working Memory Index, and Processing Speed Index).

Each composite, or Index, score consists of several core and supplemental subtests. The Verbal Comprehension Index (VCI) contains the core subtests of Similarities, Vocabulary, Comprehension, and the supplemental subtests of Information and Word Reasoning. The Perceptual Reasoning Index (PRI) contains the core subtests of Block Design, Picture Concepts, Matrix Reasoning, with a supplemental subtest of Picture Completion. The Working Memory Index (WMI) contains the core subtests of Digit Span and Letter-Number Sequencing, and Arithmetic as the supplemental subtest. The Processing Speed Index (PSI) contains the core subtests of Coding and Symbol Search, and a supplemental subtest of Cancellation. The Full-Scale IQ (FSIQ) is composited of all four composite, or Index, scores. Only the core subtests will included in this study.

The WISC-IV also provides a General Ability Index (GAI) score. The GAI is derived from the combined scores for the VCI and PRI. The GAI is recommended instead of the Full Scale IQ when one or both of the WMI or PSI are well below the PRI and VCI. The GAI is considered to be representative of general intellectual functioning, particularly higher order thinking skills.

The GAI can be substituted for the FSIQ under certain circumstances. This GAI score can be used when there are significant and unusual discrepancies between the

VCI and WMI, the PRI and PSI, the WMI and PSI, or when there is intersubtest scatter within the WMI and/or PSI (Raiford, Weiss, Rolfhus, & Coalson, 2005).

Validity has been tested by comparing scores on the WISC-IV with the WISC-III, WPPSI-III, WAIS-III, and WASI (O'Donnell, 2009). Scores on the WISC-IV have been showed to be 11.82 points lower than scores on the WAIS-III (Gordon, Duff, Davidson, & Whitaker, 2010). Gordon, Duff, Davidson, and Whitaker (2010) also found statistically significant differences between four of the WAIS-III and WISC-IV index scores when using paired sample *t* tests. It is important to note that this study was conducted on a sample of individuals that were in the Intellectually Disabled range. Flanagan and Kaufman (2009) stated that the correlation between the WAIS-III and WISC-IV Full Scale IQ scores was .89.

Reports within the WISC-IV Technical Manual (Wecshler, 2004) indicated that the WISC-IV and WPPI-III Full Scale IQs were correlated at .85. The verbal indexes (*r*=.76) and perceptual indexes (*r*=.74) also correlated. The manual reported that the WISC-III and the WISC-IV were highly correlated within the similar indexes with the correlations ranging from .73 in the perceptual indexes to .87 with the full scale indexes.

Reynolds Intellectual Assessment Scales (RIAS)

The *Reynolds Intellectual Assessment Scales* (RIAS) is an individually administered test of intelligence for children and adults (Reynolds & Kamphaus, 2009a). It has been defined as a stand-alone assessment that can assist in diagnosing intellectual disabilities (Umphress, 2008). The RIAS provides measures for verbal and nonverbal intelligence, general intelligence (composite IQ), and memory. The RIAS has

been described as becoming an attractive alternative for psychologists due to its relatively short administration time and cost efficiency (Nelson & Canivez, 2012).

Each index consists of two subtests. The Verbal Intelligence Index (VIX) consists of the subtests Guess What and Verbal Reasoning. The Nonverbal Intelligence Index (NIX) consists of the subtests Odd Item Out and What's Missing. The Composite Memory Index (CMX) consists of the subtests Verbal Memory and Nonverbal Memory. The Composite Intelligence Index (CIX) gives the Composite IQ score and is composed of the Verbal Intelligence Index and Nonverbal Intelligence Index. The Composite Memory Index is treated as a separate scale and not included in the Composite IQ score.

Previous Research

Edwards and Paulin (2007) compared the RIAS composite scores with the WISC-IV composite scores obtained by 48 students referred for psychoeducational evaluations due to academic problems or high academic achievement. The participants were between the ages of 6 and 12 years old. Results indicated high correlations (CIX-FSIQ r=.90, CIX-GAI r=.90, VIX-VCI r=.90; NXI-PRI r=.72) between conceptually similar composite scores. Although the correlations between CIX-FSIQ and CIX-GAI were statistically significant, results obtained through a paired t test showed that the RIAS composite intelligence scores were significantly higher than WISC-IV Full Scale IQ scores. Due to the significant difference between the mean composite scores, the authors stated that there were high variations around the mean differences, thus indicating that the performance on one test will not reliably predict scores on the other.

The authors cautioned that the mean score difference between the two tests, especially the mean IQ differences, may have important implications for educational decision making.

Three studies have compared the Wechsler Adult Intelligence Scale-Third Edition (WAIS-III) to the Reynolds Intellectual Assessment Scales (Reynolds & Kamphaus, 2009b; Smith, McChristian, Smith, & Meaux, 2009; Umphress, 2008). The Reynolds Intellectual Assessment Scales PowerPoint provided by the publisher discusses the correlations between the RIAS and WAIS-III. A study, which was reviewed by (Reynolds & Kamphaus, 2009b), contained 31 participants with the majority having average IQs. The correlations between the similar factors (VIQ/VIX, PIQ/NIX, and FSIQ/CIX) were 0.71, 0.71, and 0.75 respectfully, and were significant at $p \leq .05$.

Umphress (2008) conducted a study using a sample size of 20 subjects suspected of having intellectual disabilities. The results of this study found significantly high correlations between the RIAS CIX and the WAIS-III Full Scale IQ ($\underline{r}$ = .94), the RIAS VIX and the WAIS-III Verbal Scale IQ, VSIQ, (r=.89), and the RIAS NIX and WAIS-III Performance Scale IQ, PSIQ, (r = .88). The mean scores for the RIAS were VIX=66.10, NIX=76.35, and CIX=67.80. WAIS-III mean scores were VSIQ=65.75, PSIQ=66.05, and FSIQ=62.90. Using a t test, the data found significant differences between the CIX and FSIQ (t=3.75, p <.01) and between the NIX and PSIQ (t=5.60, p <.01). The NIX scores tended to be higher than the PSIQ, and the differences were large enough to make the overall IQs significantly different. The verbal scales of the RIAS and WAIS-III produced similar results (t=0.21, p <.84) Umphress mentioned that

even though the tests have a high correlation, they still have statistically different means and standard deviations.

A study conducted with 81 college students who had been diagnosed with a specific learning disability, Attention-Deficit Hyperactivity Disorder, or both found results similar to the Umphress study (Smith, McChristian, Smith, & Meaux, 2009). Results of the *t* tests on the similar composite score pairs indicated that the RIAS scores were significantly higher than some of the WAIS-III scores, and were also significantly correlated.

The *t*-tests indicated statistically significant differences between the similar composite score pairs of CIX-FSIQ, and NIX-PIQ (t=4.99, $p<.05$; and t=6.33, $p<.05$ respectfully). It was noted that although the scores were typically within the same range, the RIAS scores were typically higher.

The RIAS has been found to correlate significantly with the WAIS-III. The correlation between WAIS-III's FSIQ and RIAS's CIX was found to be .75 (Reynolds & Kamphaus, 2009_b). RIAS composite scores have been shown to be significantly higher in individuals with learning disabilities and attention-deficit hyperactivity than the WAIS-III even though both tests' scores were all in the average range (Smith, McChristian, Smith, & Meaux, 2009). The indexes of the RIAS and the total composite score on the Wechsler Individual Achievement Test (WIAT) have a correlation of .69.

Purpose of the Study

The purpose of this study is to examine whether or not the RIAS and the WISC-IV measure the same type of intellectual abilities and if the two tests yield similar scores when administered to the same students. This study will examine the correlations between the two tests and the mean score differences between the scores yielded by these tests. This information will be helpful in determining if the RIAS and WISC-IV can be used interchangeably. This study will be a replication of the research that has been conducted (Edwards & Paulin, 2007) and an extension to the research by adding in a comparison of the memory indexes.

Research Questions

1. What is the correlation between the WISC-IV FSIQ and the RIAS CIX?
2. Does the WISC-IV FSIQ and RIAS CIX yield comparable scores when administered to the same student?
3. What is the correlation between the WISC-IV GAI and the RIAS CIX?
4. Does the WISC-IV GAI and RIAS CIX yield comparable scores when administered to the same student?
5. What is the correlation between the WISC-IV VCI and the RIAS VIX?
6. Does the WISC-IV VCI and RIAS VIX yield comparable scores when administered to the same student?
7. What is the correlation between the WISC-IV PRI and the RIAS NIX?
8. Does the WISC-IV PRI and RIAS NIX yield comparable scores when administered to the same student?

9. What is the correlation between the WISC-IV WMI and the RIAS CMX?
10. Does the WISC-IV WMI and RIAS CMX yield comparable scores when administered to the same student?
11. What is the Standard Error of Estimate for the RIAS when predicting the WISC-IV FSIQ for referred students?

Chapter Two

Methods

Participants

The participants in this study consisted of elementary schools students from schools in a large urban school district in Midwestern U.S. state. All of the participants were referred for a multi-factored evaluation to determine special education eligibility and were enrolled between first grade through ninth grade. Intelligence scores from nineteen males and ten females were used. The mean age was 8 years 10 months, with an age standard deviation of 1 year, and the range from being from 6 years 4 months to 16 years.

Instruments

WISC-IV. The Wechsler Intelligence Scale for Children-Fourth Edition (WISC-IV) was published in 2003. It was normed with 2,220 subjects ranging from ages 6 years old to 16 years 11 months old. The subjects were divided into 11 age blocks with 200 subjects in each block. The sample was representative of the March 2000 U.S. Census in the areas of age, gender, geographic region, race/ethnicity, parent education level, and socioeconomic status (Flanagan & Kaufman, 2009). Scores are available in the format of standard scores, scaled scores, percentile ranks, and age equivalents.

The WISC-IV typically takes between 65 to 80 minutes to administer. The WISC-IV manual provides validity evidence for test content, response processes, internal structure, relationships with other variables, and consequences of testing. The

materials that are need are the Administration and Scoring Manual, Technical and Interpretive Manual, Stimulus Book, Record forms, Response booklets, Blocks, scoring templates, and a stop watch. The cost of the WISC-IV Basic Kit from Pearson Assessments ranges from $950-$1,006 (Flanagan & Kaufman, 2009). There is an optional Scoring Assistant for $228 and a Writer for $462.

The internal consistency of the WISC-IV is very good, with the composites having a higher internal consistency than the individual subtests (O'Donnell, 2009). The internal consistency coefficients range from .97 for Full Scale to .88 for Processing Speed for the composites and .90 for Letter-Number Sequencing to .70 for Cancellation Random for the subtest. Test-retest reliability has also been shown. Reliability coefficients range from .76 for Picture Completion to .92 for Vocabulary at the subtest level and from .86 for Processing Speed to .93 for Verbal Comprehension and Full Scale at the composite level. Interscorer agreement is excellent with reliability coefficient scores in the low to high .90s (Cohen & Swerdlik, 2005).

The Wechsler Intelligence Scale for Children-Fourth Edition has been compared to the Wechsler Individual Achievement Test-Second Edition (WIAT-II) for criterion-related validity (Konold & Canivez, 2010). The coefficients for the FSIQ ranged from .75 to .87 and large coefficients were shown across subgroups. These coefficients were also statistically significant (*ps* < .001).

The criterion-related validity of the ability factors has also been researched (Glutting, Watkings, Konold, & McDermott, 2006). The WISC-IV scores were compared to the WIAT-II reading and math achievement scores by using squared multiple

correlations and factor loadings. The FSIQ was shown to account for 60.2% of the variance in the reading achievement scores and 59.7% of the variance in the math achievement scores.

RIAS. The Reynolds Intellectual Assessment Scales (RIAS) was published in 2003. It is supposed to be a faster, cheaper way of administering a full scale intelligence test that is comparable to the other most widely used tests in the United States. The test is used for individuals' ages 3 to 94 years. The RIAS was normed using a sample of 2,438 participants between the ages of 3 and 94 in 41 states. The creators of the RIAS based their sample off of the 2000 U.S. Census in the areas of age, gender, ethnicity, educational level/parental education level, and geographic region, while oversampling minorities in some cells to prevent a cultural bias (Reynolds & Kamphaus, 2009_a).

The RIAS typically takes between 20-25 minutes to administer the main portion of the test. It typically takes an additional 10-15 minutes to administer the optional Composite Memory Index items. The Reynolds Intellectual Screening Test (RIST) can be administered in 10 minutes. The kit needed to administer the tests include a RIAS/RIST Professional Manual, 3-Volume Set of Stimulus Books, RIAS Record Forms, RIST Record Forms, and a soft-sided attaché case (PAR , 2012). This combination kit costs $490 from PAR, Inc.

Several types of validity for the Reynolds Intellectual Assessment scales have been researched. These types of validity include trait validity, concurrent validity, factor analysis, criterion-related reliability, and differential validity (Reynolds & Kamphaus, 2009_b). Some of the research has found mixed results. VIX scores have shown to have

convergent and discriminant validity, while the NIX scores did not (Nelson & Canivez, 2012).

The RIAS indexes and subtests have been shown to have acceptable internal consistency. Cronbach's alpha coefficients for the subtests are at or exceed .84 for every age group (Reynolds & Kamphaus, 2009_a). All test-retest uncorrected coefficients exceed .70 with six out of 10 corrected coefficients being between .83 and .91. RIAS has been reported having an inter-rater reliability of .95 to 1.0 since most of the items are scored without any subjectivity.

Procedures

The RIAS and WISC-IV were administered by a school psychologist as part of a multi-factored evaluation to determine special education eligibility to each participant. To control for any order effect, the RIAS and WISC-IV were administered in a counterbalanced order by the examiner, with half of the participants being administered the RIAS first and the other half being administered the WISC-IV first. All identifying information was removed before the analysis of the results. This study was evaluated by the Institutional Review Board (IRB) and deemed not human subject research. This letter from the IRB is in the appendix.

Chapter Three

Results

Scores were obtained and compared for all 29 students. The ranges, means, and standard deviations are presented in Table 1. The Index and IQ scores ranged from 61 to 131. The study is comprised of students that were referred to determine special education eligibility.

Pearson product-moment correlation coefficients (*r*) were computed among the RIAS Index scores and WISC-IV Index scores. Results of two-tailed tests indicated significant correlations exists between similar composite score pairs (Table 2). Correlations ranged from .60 among the memory composites to .78 among the IQ composites.

Results of the two-tailed paired *t* test indicate a significant difference ($p<.05$) between the similar composite score pair of Working Memory Index and Composite Memory Index (Table 3). There were no significant differences between the other similar composite score pairs. All of the effect sizes examined between similar composite score pairs are considered small (Cohen, 1988). Given the sample size, range, and distribution of scores, caution must be exercised while interpreting these results.

When looking at the critical scores for special education placement, two of the twenty-nine students had WISC-IV scores that placed them in the mild intellectually disabled range, where the RIAS scores did not. The first placement difference only varied by 2 points, while the second placement difference varied by 13 points.

The Standard Error of Estimate (SeEst) was calculated for the similar composite index score pairs. Based on those calculations, the WISC-IV FSIQ estimate based on the RIAS CIX would be the obtained score + or – 7. The SeEst is also + or – 7 for the GAI-CIX composite score pair. The SeEst for the WISC-IV and RIAS composite pairs ranges from + or – 7 to + or – 9.

Table 1

Range, Means, and Standard Deviations for RIAS and WISC-IV Scores

Construct	*N*	*Range*	*Mean*	*SD*
WISC-IV				
FSIQ	29	67-117	87.4	11.4
GAI	29	67-126	90.4	13.7
VCI	29	61-126	89.0	13.1
PRI	29	69-125	93.0	13.4
WMI	29	62-104	84.6	10.3
PSI	29	73-125	92.4	12.0
RIAS				
CIX	29	71-117	89.1	11.2
VIX	29	68-116	85.9	10.5
NIX	29	71-131	95.7	13.4
CMX	29	76-105	88.5	8.2

Note. FSIQ = Full Scale IQ; GAI = Global Ability Index; VCI = Verbal Comprehension Index; PRI = Perceptual Reasoning Index; WMI = Working Memory Index; PSI = Processing Speed Index; CIX = Composite Intelligence Index; VIX = Verbal Intelligence Index; NIX = Nonverbal Intelligence Index; CMX = Composite Memory Index.

Table 2

Correlations Among Similar Composite Score Pairs

Similar Composite Score Pairs	*Pearson r*
FSIQ-CIX	.78*
GAI-CIX	.78*
VCI-VIX	.71*
PRI-NIX	.74*
WMI-CMX	.60*

*. Correlation is significant at the 0.01 level (2-tailed)

Table 3

Similar Composite Score Pair *t* Values and Effect Size

Similar Composite Score Pairs	*Paired Difference Mean*	*Paired Difference Standard Deviation*	*df*	*t*	Signficance (2-tailed)	Cohen *d*
FSIQ-CIX	-1.65	7.48	28	-1.19	.24	.22
GAI-CIX	1.34	8.47	28	.85	.40	.15
VCI-VIX	3.03	9.27	28	1.76	.08	.32
PRI-NIX	-2.65	9.71	28	-1.47	.15	.27
WMI-CMX	-3.93	8.84	28	-2.29	.01*	.44

*. significant at the 0.05 level (2-tailed)

Chapter Four

Discussion

Assessing the RIAS as an alternative comprehensive measure of intelligence for the WISC-IV was the purpose of the present study. Significant correlations were found between the similar scales and composite IQ scores on the WISC-IV and RIAS. The magnitude of these correlations indicates that the two tests measure similar abilities in the general ability, verbal ability, and nonverbal/perceptual ability domains, which is consistent with the previous research (Edawrds & Paulin, 2007). The .60 correlation between the memory indexes indicated that these memory scales appear to be measuring somewhat different types of memory.

The similar composite pair scales and IQ scores, with the exception of the memory indexes (t= -2.29, $p<.05$), yielded similar mean scores. These results suggest that examiners may be able to predict scores for one of these instruments based on the scores obtained on the other instrument. These results are different than the previous research (Edwards & Paulin, 2007). This may be due to the differences in the referred samples' normality.

Only two of the twenty-nine participants, approximately 7%, would receive different placement based on the assessment given. The largest composite index score difference in the sample was 28 points between the PRI and NIX. These results would suggest that practitioners' may be able to use these assessment tools interchangeably.

Some limitations associated with this study include that the participants were all referred for special education eligibility. The participants were all from one district in a

single state, which can have implications on generalization. These two instruments have not been standardized together for direct comparisons.

There are not many research studies that look at these two instruments. Future research should focus on different samples from different geographic, economical, and ethnic compositions. Research should look at the difference between clinical and non-clinical samples. Research needs to look at the differences between scores given for the difference intellectual ability levels. Future research should also evaluate the use of the Reynolds Intelligence Screening Test (RIST).

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APPENDIX

MARSHALL UNIVERSITY
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Office of Research Integrity

April 29, 2014

Sandra S. Stroebel Ph.D. NCSP
Associate Dean/Program Director/ Professor
College of Education and Professional Development
Marshall University

Dear Dr. Stroebel:

This letter is in response to the submitted thesis abstract for Racheal Gliniak to evaluate de-identified data provided from a school psychologist. After assessing the abstract it has been deemed not to be human subject research and therefore exempt from oversight of the Marshall University Institutional Review Board (IRB). The Code of Federal Regulations (45CFR46) has set forth the criteria utilized in making this determination. Since the information in this study does not involve human subjects as defined in the above referenced instruction it is not considered human subject research. If there are any changes to the abstract you provided then you would need to resubmit that information to the Office of Research Integrity for review and a determination.

I appreciate your willingness to submit the abstract for determination. Please feel free to contact the Office of Research Integrity if you have any questions regarding future protocols that may require IRB review.

Sincerely,

Bruce F. Day, ThD, CIP
Director

Racheal Renee Gliniak

1022 Elizabeth Street Oak Hill, WV 25901 gliniak@marshall.edu home: (304) 881-0344 cell: (301) 814-0564

Objective:

To obtain a school psychologist position and utilize my diagnostic, counseling, and intervention skills for the 2014-2015 school year

Education:

Marshall University Graduate College, South Charleston, WV
Education Specialist Degree in School Psychology,
Expected May 2014; GPA:3.93

Marshall University Graduate College, South Charleston, WV
Masters of Arts in Psychology with a School Psychology Emphasis,
May 2013; GPA: 3.93

West Virginia University Institute of Technology, Montgomery, WV
Bachelors of Arts in Psychology,
August 2011, Overall GPA: 3.19, Major GPA: 3.81

Certification/ Licensure:

Temporary School Psychology certificate
Eligible for NCSP (May 2014)
CPR-Adult
Standard First Aid
CPI certified in Nonviolent Crisis Intervention

Professional Experience:

Nicholas County School District, Summersville, WV
Internship Student (August 2013- June 2014)
Nicholas County Schools

- provided individual counseling and group therapy
- assist in conducting curriculum-based assessments and benchmarking
- perform consultation services with teachers and parents
- participated in grade-level teams, student assistance teams, and multi-disciplinary teams
- provided systems-level intervention through program evaluation and staff training
- administered cognitive, achievement, behavior rating scales, and adaptive behavior scales
- completed Functional Behavior Assessments and implemented Positive Behavior Interventions
- conducted quantitative and qualitative observations
- crisis intervention

Stonewall Jackson Summer Enrichment Program, Charelston, WV
Practicum Student (May 2013 – July 2013)
Team 7

- Conducted psycho-educational evaluations
- conducted individual and group therapy
- provided parent training
- participated in daily and weekly team reflections
- engaged in volunteer activities for the program
- aided in administering Tier I progress monitoring through DIBELS and AIMSweb and charting data using Goal Attainment Scaling

Related Experience:	**Prestera Center Innerchange Program,** Charleston, WV *Intern* (May 2011- July 2011) • aided in children group therapy, family therapy, individual sessions and self-esteem building tasks • participated in program intakes and client supervision • worked with a token economy, reminded clients to take their medication, and was in charge of consequences **West Virginia Department of Environmental Protection- Abandoned Mine Lands,** Oak Hill, WV *Secretary Assistant through Governor's Internship Program* (May 2010 – November 2010) • Uploaded confidential documents into computer programs • organized and filed paperwork • updated information in computer systems
Honors/Awards:	Academic Scholarship Award, Promise Scholarship Award, Non-Traditional Student Award
Professional Membership:	•West Virginia School Psychologists Association (W.V.S.P.A.) – member since 2012 •National Association of School Psychologists (N.A.S.P.) – member since 2011 •Maryland Association for Behavior Analysis (M.A.B.A.) – member from 2010 to 2011
Activities:	•WVU Tech Psychology Club, member from 2009-2011 •Society of Automotive Engineers, Baja (S.A.E. Baja), member from 2007-2009 •WVU Tech Marching Band, member 2007-2008 •WVU Tech Players, member in 2007
Skills:	Assessments, Intervention, Consultation, Individual and Group Therapy, Research, Training, Photoshop, AutoCAD, PowerPoint, Excel, Word, SPSS
References:	**Sandra Stroebel, Ph. D, NCSP** Associate Dean, Program Director, Professor, Marshall University Graduate College, Department of School Psychology Email: stroebel@marshall.edu Phone: (304) 746-2074 **Stephen O'Keefe, Ph. D** Professor, Marshall University Graduate College, Department of Psychology and School Psychology Email: sokeefe@marshall.edu Phone: (304) 442-3260 **Kathy Sibbett** Special Education Director, Nicholas County Board of Education Email: ksibbett@access.k12.wv.us Phone: (304) 872-3611 Ext. 252 **Lydia Young** Special Education Coordinator, Nicholas County Board of Education Email: leyoung@access.k12.wv.us Phone: (304) 872-3611 Ext: 242