

# Fact or Fiction: School Psychologists' Beliefs about Myths in Child Psychology

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There are a great many ideas in child psychology that have been largely discredited by research (e.g., divorce ruins most kids' lives, bedwetting is a sign of serious emotional problems, Dyslexia's defining feature is letter reversal) and there has been recent interest in understanding beliefs about these ideas (Furnham, 2018; Hupp & Jewell, 2015). Survey research indicates widespread prevalence of beliefs about child-focused misconceptions and myths (i.e., beliefs held to be true despite accepted empirical evidence). Two recent studies found high levels of misconceptions (i.e., endorsing myths as true) about child psychology among college students and parents (Furnham, 2018; Hupp, Stary, & Jewell, 2017). This research is consistent with other research investigating the general public's beliefs about myths related to the brain, development, memory, emotion and personality, mental illness, and psychological intervention (Furnham & Hughes, 2014; Macdonald, Germine, Anderson, Christodoulou, & McGrath, 2017).

School psychologists are, of course, not immune to misconceptions. A 1997 special issue of *School Psychology Review* was devoted to dispelling commonly held myths about students with behavioral and learning difficulties (see Berninger, 1997). This issue covered the presumed neurobiological etiology of Attention Deficit/Hyperactivity Disorder, standardized academic achievement tests' capacity to inform instructional practices, the recommendation that beginning readers should use context and pictures when reading, and talking about suicide encourages suicidal behavior. Moreover, many of the myths described in the *Great Myths of Psychology* book series, especially those related to child psychology and education, are relevant for school psychologists (see Holmes, 2016, Hupp & Jewell, 2015). For example, the myths that facilitative communication is effective for children with autism, minimally directive instruction produces better academic outcomes than direct instruction, brief time-outs are ineffective at decreasing behavior problems, and high self-esteem is necessary for high student academic achievement are all relevant for the work school psychologists do with students, teachers, and parents.

This study's purpose was to offer a descriptive examination of school psychologists' beliefs about common child-focused myths. Specifically, the study sought to identify specific child psychology myths and research supported statements with which school psychologists agree and disagree. Knowing the myths that school psychologists are prone to believing and research supported ideas that school psychologists fail to acknowledge as fact has the potential to guide professional development efforts and graduate education curricula.

## Method

### Participants

An email with a link to an online survey was distributed to all members of three Midwestern state school psychology associations. A total of 133 surveys were completed, yielding a return rate of slightly under 15%. The majority of subjects were experienced (i.e., 15+ years in the field), full-time practitioners working in multiple practice settings (i.e., elementary, middle, and/or high school). In addition, an overwhelming majority of the sample (i.e., 88%) were trained at the Educational Specialist level.

### Instrument

The *Opinions About Kids Scale* (OAKS) was used to investigate school psychologists' beliefs about child-focused myths and research-supported statements. The OAKS is a 52-item scale with 26 statements involving myths in child psychology and 26 research-supported child psychology statements. Survey items were rated on a 4-point Likert scale with the following response options: *Disagree*, *Somewhat Disagree*, *Somewhat Agree*, or *Agree*. Subjects were not required to respond to all items. Items left blank were categorized as *No Response*. The OAKS has previously been used in similar research investigating beliefs about myths and research-supported statements in child psychology (see Hupp, Stary, & Jewell, 2017). The items are based on myths presented in *Great Myths of Child Development* (Hupp & Jewell, 2015). No data were available on the psychometric properties of the instrument. The original OAKS is a paper and pencil survey. For this study, the OAKS was converted to an online version in the *Qualtrics* online survey medium. The survey also asked subjects to provide demographic information related to level of training (i.e., doctoral, non-doctoral), years of experience as a school psychologist, status as a psychologist (i.e., full-time, part-time, not currently practicing), and primary level of practice (i.e., preschool, elementary school, middle school, high school).

### Procedure

Before conducting the study, the researchers obtained Institutional Review Board approval. The researchers also received permission from each of the three school psychology state associations to survey the membership. An e-mail containing a summary of the research study, an informed consent statement, and a link to the survey was sent to all members of the three state school psychology associations. Subjects were initially informed that the study's purpose was to investigate school psychologists' beliefs about child psychology and that the results would help school psychology training programs develop curricula emphasizing evidence-based practices. Subjects were debriefed at the conclusion of the survey with a statement indicating the study's purpose was to examine school psychologists' beliefs about child psychology myths.

### Data Analysis

For item level analyses, *Agree* and *Somewhat Agree* were considered correct responses to research supported statements and incorrect responses to statements involving myths. Conversely, *Disagree* and *Somewhat Disagree* were considered correct responses to statements involving myths and incorrect responses to research supported statements. Frequencies (i.e., percentages) were used to assess school psychologists' beliefs about child psychology myths and research supported statements.

## Results

Table 1 provides the percent of school psychologists' responses to the survey items containing research supported statements. Over 80% of subjects correctly *Agreed* or *Somewhat Agreed* with 24 out of the 26 statements. Additionally, 99% of school psychologists in the sample *Agreed* or *Some-*

what *Agreed* with the following statements: “daily physical activity is important for children’s health,” “breastfeeding is a healthy way for babies to get nutrition,” “it is a good idea for parents to read every day with toddlers,” and “it is important for mothers to eat a balanced diet while pregnant.” A large number of school psychologists in the sample were also able to correctly identify research supported statements involving the treatment of psychological problems. For example, 96.3% of subjects *Agreed* or *Somewhat Agreed* that “Applied Behavior Analysis can be helpful for children with Autism” and 94.8% of subjects *Agreed* or *Somewhat Agreed* that “Cognitive-behavior therapy can be helpful for children with clinical depression.” Less than 75% of school psychologists *Agreed* or *Somewhat Agreed* with two research supported statements: “the average boy tends to be more aggressive than the average girl” (66.2%) and “the vision of most babies is worse than the vision of most adults” (69.9%).

Table 2 provides the percent of school psychologists’

responses to the survey items containing child-related myths. Over 80% of subjects correctly *Disagreed* or *Somewhat Disagreed* with 6 out of the 26 statements and over 90% of subjects correctly *Disagreed* or *Somewhat Disagreed* with 5 out of the 26 statements. Close to 99% of subjects correctly *Disagreed* or *Somewhat Disagreed* with the following myths: “when kids are never spanked for their misbehavior they are likely to be spoiled” (98.6%) and “vaccines have been a common cause of Autism” (97.8%). More than half of school psychologists incorrectly *Agreed* or *Somewhat Agreed* with the following myths: “the Attachment Parenting approach strengthens the mother-infant bond” (67.6%), “most toddlers go through a terrible two’s stage” (62.4%), “the sex chromosomes of all girls are XX and of all boys are XY” (59.3%), “within about an hour after birth, babies need to bond with their mothers so that attachment is strong over time” (58.6%), and “a child’s drawings provide insight into the subconscious cause of their problems” (52.7%).

**Table 1**

*Percent of school psychologists’ responses to survey items containing research-supported statements*

Statement	A	SA	SD	D	NR
The average boy tends to be more aggressive than the average girl.....	20.3	45.9	19.8	12.8	1.5
It is common for children to make grammatical mistakes when learning to talk.....	72.2	22.6	3.8	0	1.5
Daily physical activity is important for children’s health.....	98.5	0.8	0.8	0	0
Breastfeeding is a healthy way for babies to get nutrition.....	84.2	15.8	0	0	0
It is a good idea for parents to read every day with toddlers.....	91.0	8.3	0	0	0.8
Verbal teasing can be more harmful than physical bullying.....	38.3	49.6	8.3	3.8	0
Intelligence is influenced by genes.....	39.8	50.4	6.8	1.5	1.5
Children can be diagnosed with depression.....	50.4	38.3	7.5	3.0	0.8
Most people don’t remember much before the age of about three-years.....	30.1	52.6	12.0	4.5	0.8
Kids usually develop friendships with others that are similar to them in some way..	25.6	58.6	13.5	2.3	0
Fathers often have a big influence on their children’s emotional development.....	65.4	27.1	5.3	1.5	0.8
Teachers should report a parent if they see the parent abuse a child.....	98.5	0	0.8	0	0.8
It is common for siblings to have disagreements with each other.....	85.0	13.5	0.8	0	0.8
Physical abuse can be harmful to children’s emotional development.....	95.5	3.0	0.8	0.8	0
Often a physical trait is influenced by more than one gene.....	49.6	44.4	3.0	3.0	0
It is important for mothers to eat a balanced diet while pregnant.....	88.0	11.3	0	0	0.8
It is common for children who have been adopted to live happy and successful lives.....	58.6	33.1	7.5	0	0.8
Drug use during pregnancy can be harmful to the developing fetus.....	94.0	3.8	0.8	0	1.5
When babies are born they already have many reflexes.....	82.7	15.8	1.5	0	0
Most children need more sleep than adults.....	84.2	14.3	0.8	0	0.8
The vision of most babies is worse than the vision of most adults.....	36.1	33.8	21.8	6.8	1.5
Applied Behavior Analysis can be helpful for children with Autism.....	75.2	21.1	3.8	0	0
Children sometimes need to learn to “face their fears”.....	34.6	57.1	6.8	0.8	0.8
Most young babies can perceive different speech sounds.....	64.7	30.1	6.7	0	2.3
Cognitive-behavior therapy can be helpful for children with clinical depression...	67.7	27.1	3.8	0.8	0.8
It can be helpful for children who experience a lot of anger to see a therapist.....	56.4	35.3	7.5	0	0.8

Note. A = Agree, SA = Somewhat Agree, SD = Somewhat Disagree, D = Disagree, NR = No Response

**Table 2**  
*Percent of school psychologists' responses to survey items containing myths*

Statement	A	SA	SD	D	NR
Having a baby sleep in the mother's bed promotes the baby's secure attachment.....	2.3	21.8	38.3	37.6	0
The sex chromosomes of all girls are XX and of all boys are XY.....	39.8	19.5	18.0	20.3	2.3
The Attachment Parenting approach strengthens the mother-infant bond.....	16.5	51.1	15.0	4.5	12.8
Letting one-year olds "cry it out" at bedtime hurts their emotional development.....	0.8	12.8	53.4	32.3	0.8
Divorce tends to ruin the lives of most children that have to go through it...	0.8	6.0	29.3	63.2	0.8
Some identical twins can feel each other's physical pain.....	7.5	30.8	37.6	22.6	1.5
Baby walkers help young children learn to walk.....	3.8	35.3	27.8	27.8	5.3
Too much sugar causes most children to be hyperactive.....	2.3	24.8	39.8	31.6	1.5
Within about an hour after birth, babies need to bond with their mothers so that attachment is strong over time.....	12.0	46.6	26.3	12.8	2.3
If a child has an imaginary friend, the child is usually less sociable with real kids...	0.8	3.0	36.8	56.4	3.0
Showing cognitively stimulating videos to infants boosts their intelligence.....	4.5	25.6	37.6	30.1	2.3
When Mozart's music is played to infants the music boosts their intelligence.....	5.3	31.6	33.1	30.1	0
Using "baby talk" with infants delay their ability to speak normally.....	4.5	21.1	32.3	39.8	2.3
Vaccines have been a common cause of Autism.....	0	1.5	9.8	88.0	0.8
The shape of a mother's belly is one factor that can help doctors predict the sex of a fetus.....	0	3.8	18.8	75.9	1.5
Most antidepressants used for kids are approved by the FDA.....	12.0	12.8	30.8	41.4	3.0
Children who frequently wet the bed usually have underlying emotional issues.....	1.5	9.8	49.6	37.6	1.5
Most toddlers go through a "terrible two's" stage.....	12.0	50.4	30.8	3.8	3.0
Being in daycare interferes with the attachment between children and their parents...	0	3.0	31.6	63.2	2.3
A child's drawings provide insight into the subconscious cause of their problems...	5.3	47.4	31.6	15.8	0
Brief "time-outs" are too weak to help decrease real behavior problems in toddlers...	3.0	5.3	27.1	62.4	2.3
Programs liked "Scared Straight" help prevent youth from breaking the law .....	2.3	21.1	37.6	38.3	0.8
Most "only children" (without siblings) are more likely to be selfish and spoiled.....	0.8	13.5	39.1	44.4	2.3
When kids are never spanked for their misbehavior they are likely to be spoiled.....	0	0.8	19.5	78.9	0.8
Couples that struggle with fertility have an increased chance of getting pregnant after they adopt a child.....	0.8	24.1	25.6	48.1	1.5
Breastfeeding a baby for more than two years helps strengthen the attachment between the mother and child.....	3.3	20.3	33.1	42.1	0.8

Note. A = Agree, SA = Somewhat Agree, SD = Somewhat Disagree, D = Disagree, NR = No Response

### Discussion

Results from the current study indicated that school psychologists were generally able to correctly identify research supported statements and myths in child psychology. Specifically, most school psychologists in this study agreed or somewhat agreed with research-supported statements about child psychology and disagreed or somewhat disagreed with child psychology myths. These findings are not surprising, as both the American Psychological Association (APA) and

the National Association of School Psychologists (NASP) require accredited or approved programs to cover basic content areas that include foundational knowledge in psychology and education, and advanced scientific knowledge of discipline-specific content (APA, 2018; NASP, 2010). Consequently, most school psychology graduate programs require coursework covering many domains in child psychology, such as child and adolescent development, biological and cognitive aspects of behavior, and learning theory. Most

programs also include courses in evidence-based assessment and intervention practices, research methods, and ethical and legal standards.

Although school psychologists were generally able to correctly identify myths and research supported statements related to child psychology, there were five myths in which more than half of the sample incorrectly identified as true (i.e., “the Attachment Parenting approach strengthens the mother-infant bond,” “most toddlers go through a terrible two’s stage,” “the sex chromosomes of all girls are XX and of all boys are XY,” “within about an hour after birth, babies need to bond with their mothers so that attachment is strong over time,” and “a child’s drawings provide insight into the subconscious cause of their problems”). Interestingly, Hupp and colleagues (2017) found these same five myths were incorrectly identified as true by over 80% of college students and parents suggesting widespread acceptance of these specific myths. This might help explain why school psychologists were more prone to believing these myths than others in the survey. People, including school psychologists, might be more vulnerable to believing these five myths, as they are frequently promoted through word-of-mouth (e.g., many people are familiar with the catchy phrase “terrible twos”), expert and celebrity endorsements (e.g., several notable pediatricians and actors claim attachment parenting encourages stronger parent-child relationships), and attempts to simplify complex concepts (e.g., it is easier to conceptualize all boys has having one X and one Y chromosome than consider the true range of all possibilities; Hupp & Jewell, 2015; Lilienfeld, Lynn, Ruscio, & Beyerstein, 2010). Moreover, belief in these myths did not differ across relevant demographic variables including education level. School psychologists trained at the doctoral level were no more or less likely to believe these myths than those trained at the Educational Specialist level suggesting more education might not insulate school psychologists from believing certain child psychology myths.

Perhaps the most important finding was that slightly more than half of school psychologists reported believing that a child’s drawings can provide insight into the subconscious causes of their problems. The myth is based on the idea that children’s drawings contain specific details helpful in identifying psychological problems and diagnosing psychological disorders (Hupp & Jewell, 2015). Assessment practices involving the use of children’s drawings have been rebuked by scholars in the field of school psychology, largely because of their limited psychometric properties, poor incremental and predictive validity, and questionable usefulness for intervention (Miller, 2010; Motta, Little, & Tobin, 1993). Yet, high percentages of school psychologists have reported using children’s drawings to make diagnostic and special education eligibility decisions, plan interventions, and develop hypotheses (see Hojniski, Morrison, Brown, & Matthews, 2006; Shapiro & Heick, 2004). Gresham (1993) suggested the assessment technique’s popularity among school psychologists might be due to an illusory correlation (i.e., perceiving a false relationship between child’s drawing and his or her underlying psychological problems). This perception is based on a superficial similarity between a drawing and specific psychological characteristics (e.g., children who draw human figures with large heads are narcissistic and self-centered; Lilienfeld et al., 2010). While it is largely unknown whether currently practicing school psychologists continue to include children’s drawings as part of their assessment procedures, the current study does suggest the be-

lief that children’s drawings can provide important diagnostic information remains popular among school psychologists. Furthermore, the study’s results indicated that years of experience was unrelated to a tendency to believe this myth. That is, more recently trained school psychologists were not less likely to believe that children’s drawings provide insight into the subconscious cause of their problems when compared to veteran school psychologists.

These specific findings are problematic, as school psychologists are often responsible for using assessment data to help make eligibility and treatment decisions. Not surprising, training likely impacts practitioners’ selection of assessment approaches (Hojnoski et al., 2006). School psychology graduate education programs are encouraged to stress the use of reliable and valid assessment instruments, especially when responding to referral questions involving behavioral, emotional, and social functioning, and explicitly expose graduate students to research demonstrating why using children’s drawings and other projective assessments to make decisions or inform intervention is not considered best practice. In addition, professional development promoted at the state and national levels might consider specific programming designed to debunk the myth that children’s drawings are useful in identifying underlying causes of their problems and address the inadequacies of projective assessments. More broadly, professional development for school psychologists could emphasize best practices approaches to assessment including research on the reliability and validity of specific assessment practices.

### Implications

Again, school psychologists were not entirely immune to believing child psychology myths. For most myths, at least 25% of school psychologists incorrectly agreed with the statement. While some of these myths might not necessarily impact practice (e.g., “some identical twins can feel each other’s physical pain”), many are related to areas of learning (e.g., “when Mozart’s music is played to infants the music boosts their intelligence”), development (e.g., “most toddlers go through a terrible two’s stage”), and intervention (e.g., “programs like Scared Straight help prevent youth from breaking the law”). Several scholars have provided evidence of a research-practice or scholar-practitioner gap existing in school psychology (e.g., Forman, Fagley, Steiner, & Schneider, 2009; Lilienfeld, Ammirati, & David, 2012). This gap describes the disconnect between the scientific evidence available to guide assessment and intervention practices and what school psychologists do in their everyday approaches to solving students’ problems. While lack of knowledge about research-supported practices and inadequate training clearly contribute to this gap, misconceptions about ideas in child psychology (i.e., believing myths) might also play a role. School psychology training programs are, of course, encouraged to emphasize critical and scientific thinking in required research methods courses but also infuse principles of critical and scientific thinking across the curriculum and within practicum experiences. Furthermore, in-service and pre-service school psychologists are urged to consider Lilienfeld and colleagues’ (2012) ten recommendations for improving school psychology practice and research: (1) search for disconfirming evidence, (2) do not become wedded to your own hypotheses, (3) consider competing hypotheses, (4) consider all relevant data, not just data that support your own hypotheses, (5) rigorously evaluate your hunches, (6) rigorously evaluate clinical wisdom, (7) be

aware of your own “blind spots,” (8) encourage different clinical interpretations and conceptualizations, (9) use data to make decisions, and (10) maintain a self-critical stance. Finally, healthy skepticism inspires practitioners to maintain an open mind while requiring objective evidence to support claims.

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## WSPA Long Range Planning (LRP) 2019

By Kisten Gillespie

The WSPA board spent another lovely couple of days together at the Cedar Valley Retreat Center near West Bend, Wisconsin. The time was spent in community building activities, hammering out action plans, and working toward making WSPA a board that is as relevant and available to as many school psychologists in Wisconsin as possible!

Time was given for break-out workgroups to plan around several different areas, including guidelines for the School Psychologist Rubric of DPI’s Wisconsin Pupil Services Evaluation System. Some of the concerns that were voiced included questions about school psychs being evaluated by administrators who are not trained in our field, and the potential for psychs to be evaluated on areas they are not currently practicing based on their job description. Other considerations included psych to student ratios and completing a guidance document for the WSPA website. A link to the rubric can be found here: <https://dpi.wi.gov/sites/default/files/imce/sspw/pdf/psschoolpsychrubric.pdf>

The Membership Survey group sat down to hash out relevant questions a statewide survey could include, and what important items should be included. Ideas that were generated by the group included asking who is evaluating

school psychologists in districts, what the ratios are, and whether there should be a member versus non-member survey.

In the area of technology, the discussion focused on the morphing landscape and how can we change what we do to advertise WSPA to become more relevant to the Wisconsin school psychology community. The idea of an interactive newsletter was one of many ideas generated by the workgroup.

The legislative committee worked on an application through NASP for training in the area of Government and Public Relations, and whether this would be something that could be opened up to school psychologists through a convention training. The board also adopted most of the NASP position papers to utilize when members want to contact state or federal legislators on important issues facing public education.

Overall the board meeting was a success! Actions plans were approved, as was the budget. Ideas were generated and plans were made on how we will continue to work toward forwarding the field of school psychology in the state. Hopefully we will see YOU next year!