Ouachita Baptist University

Scholarly Commons @ Ouachita

Honors Theses

Carl Goodson Honors Program

4-14-2021

Advocacy in the Youth Justice System as a Speech-Language **Pathologist**

Jennifer Johnson Ouachita Baptist University

Follow this and additional works at: https://scholarlycommons.obu.edu/honors_theses



Part of the Criminology and Criminal Justice Commons, and the Speech Pathology and Audiology

Commons

Recommended Citation

Johnson, Jennifer, "Advocacy in the Youth Justice System as a Speech-Language Pathologist" (2021). Honors Theses. 789.

https://scholarlycommons.obu.edu/honors_theses/789

This Thesis is brought to you for free and open access by the Carl Goodson Honors Program at Scholarly Commons @ Ouachita. It has been accepted for inclusion in Honors Theses by an authorized administrator of Scholarly Commons @ Ouachita. For more information, please contact mortensona@obu.edu.

ADVOCACY IN THE YOUTH JUSTICE SYSTEM AS A SPEECH-LANGUAGE PATHOLOGIST

AN EVALUATIVE REVIEW OF LANGUAGE DISORDERS IN THE YOUTH OFFENDER POPULATION AND ITS SUBSEQUENT IMPLICATIONS FOR THE SPEECH-LANGUAGE PATHOLOGIST'S SCOPE OF PRACTICE

A THESIS PRESENTED TO THE CARL GOODSON HONORS PROGRAM AT OUACHITA BAPTIST UNIVERSITY

BY JENNIFER JOHNSON

MAY 2021

- I. Why I'm Here
- II. Introduction
- III. Methods
- IV. Findings
 - a. Established Evidence of the Higher Prevalence of Language Impairments in Youth Offenders
 - b. Why Higher Rates of Language Disorders in the Youth Offender Population Need to Be Addressed
 - c. Is There Evidence That Identification and Intervention Make a Difference?
- V. Discussion of Implications
 - a. Improving Early Identification and Intervention Efforts
 - b. Literacy Intervention Within Schools and Custodial Facilities
 - c. Increasing Accessibility of SLP Expertise in Police and Court Proceedings
- VI. Conclusion

Riding in the van with Natalie, one of my coworkers for the summer, the topic of why we chose our majors arose. It was the summer after my freshman year, and I had just changed my major to communication sciences and disorders (CMDS). After a grueling journey as a biology and chemistry double major, I knew that path was not for me. I enjoyed the classes well enough but knew before long I did not desire to make a career out of it. So, after the typical freshman year "college major" crisis, I changed my major to pursue speech-language pathology. Within this career lay the jackpot combination of science, teaching, and meaningful clinician-client relationships; it was exactly what I wanted.

As I discussed all of this with Natalie, who also happened to be a CMDS major, she expressed sharing the same sentiments toward the field. She then began describing her graduate school plans. What Natalie described next changed my perspective of speech-language pathology as a whole and of my own career plans. After graduating from her master's program, she wanted to work as a speech-language pathologist (SLP) in juvenile detention centers or in a school located in a community with a higher population of children at-risk for encountering the youth justice system. This facet of speech pathology was entirely foreign to me, but this encounter served as an introduction to a topic that would become particularly meaningful to me and heavily influence my plans for the future.

Flash forward to my junior year. While taking a language development class in the fall and language disorders in the spring, studying the impact of developmental language disorders (DLDs) caused this topic to resurface. I vividly recall being unable to sleep one night, thinking about the future and wondering what I would do as an SLP – the scope of practice is overwhelmingly broad. I thought back to my conversation with Natalie from almost two years before and began late-night researching. My mind began reeling after reading several articles

about language disorders, their high prevalence in youth offender populations, and the fact that many individuals who enter confinement without the necessary resources to effectively treat language disorders (Stanford, 2019). I thought, "This is why I'm doing this. This is what I want to do; here is a need I can be equipped to address." Once I realized I could practically address this failing of the justice system and help mitigate the school-to-confinement pipeline as an SLP, there was no turning back.

Following the late-night researching, I read many more articles over the topic, and during the spring of my junior year, I decided to conduct my thesis over the topic. At the time I knew I wanted juvenile forensic speech pathology to be a part of my career, but I was uncertain of how to make that happen. While finding articles for my research, I encountered the work of Dr. Shameka Stanford, a professor at Howard University who is one of the few (if not the only) juvenile forensic SLPs in the United States. Not only has her effort in this field been integral to my thesis, but it has also given me greater direction for my post-graduate career.

It is my goal for this essay to give the reader a compassion for and deeper understanding of how language disorders affect individuals either at risk for, or already in, the school-to-confinement pipeline. This essay also aims to reveal where an SLP can, and should, intervene in the various settings where at-risk individuals need resources or consultation.

From one conversation during an unplanned car ride in the summer came all this: a thesis, a future career, and the anticipation of meaningful work. To me, the SLP's role in the youth justice system is work in advocacy and an effort toward equality. That being said, this thesis is much more than a topic of interest; it is where I plan to invest my future.

There has been an increasing amount of attention and research given to communication and developmental disabilities within the youth offending population over the past two decades. Because of this, there is now a substantial body of evidence revealing higher rates of developmental language disorders, along with other communication vulnerabilities, among youth offenders. Until recently, speech-language pathology as a profession has given limited attention to this evidence.

The purpose of this essay is not only to inform current and future SLPs of this subject, but also to purport the need for services to the youth justice system to be included in the speech-language pathology scope of practice. SLPs have the unique and specific knowledge base over language disorders necessary to advocate for youth offenders and educate relative authorities on the impact of their communication impairments.

Note on terminology: For the purposes of this essay, the term *youth offender* is used consistently to describe an adolescent who has encountered the youth justice system and has received some form of sentence, whether to a rehabilitative program, confinement, or other form of restitution. I chose this term in keeping with Snow's epidemiological overview (2019) because it carries the least association with negative connotations and "judgments of reduced worth as associated with terms such as *delinquent*."

Information concerning the prevalence of language disorders in youth offenders was gathered by searching several databases for articles concerning the topic. The primary database used was American Speech-Language-Hearing Association's (ASHA's) online catalogue which includes articles from the *American Journal of Speech-Language Pathology, Journal of Speech, Language, and Hearing Research*, and the *Language, Speech, and Hearing Services in Schools Journal*. Additional sources were gathered using the Ouachita Baptist University Library system and Research Gate from the International Journal of Language and Communication Disorders and Children and Youth Services Review.

I searched each database using the following keywords and variations of such: youth offender, juvenile offender, juvenile delinquent, adjudicated adolescent, adjudicated, incarcerated, confinement, recidivism, communication disorder, language disorder, language impairment. Abstracts of articles containing the above terms or variations of such were then analyzed to determine their relevance to the topic of study. Upon determining its relevance, I read and examined each article in more detail to gather and to determine its application to the topic. Additional relative material was gathered as articles were read due to citations of prominent studies utilized in various reviews and research articles. These cited studies were also analyzed in the described manner and included if pertinent.

Although a more recent object of research, the utilized articles were published in the years ranging from 1997-2020. These articles provided findings that confirmed the associations of communication disorders (CDs) and youth offenders and the subsequent disadvantages faced by this population. These outcomes carry pressing implications for the SLP's role in a variety of settings, but principally the school-based setting.

A. ESTABLISHED EVIDENCE OF THE HIGHER PREVALENCE OF LANGUAGE DISORDERS IN YOUTH OFFENDER POPULATIONS

The association of language impairments and youth offending has been widely acknowledged by researchers for some time due to confirmation from numerous bodies of research. Here, I will discuss the results of some of the studies that contributed to the realization of the higher prevalence. Most of these studies examined the co-occurrence of youth offending and language impairments by utilizing comparative groups of individuals in correctional programs and/or facilities. Among studies that comparatively analyzed groups, youth offenders consistently scored lower on language assessments than their comparison groups.

In community samples of elementary and secondary school students, rates of DLDs were reported between 7% (Tomblin et al., 1997) and 12% (McLeod & McKinnon, 2007). In contrast, the systematic review offered by Anderson et al. in 2016 reported findings from several studies that displayed rates of language impairment in youth offenders significantly higher than those from the community samples.

Another study conducted on 50 youth offenders and 50 non-offending controls matched in sex and SES found that the performance in language and social skills were significantly impaired for the youth offenders in comparison to the control (Snow & Powell, 2008). Additional research suggested that, when compared to peers matched for sex and I.Q., youth offenders had higher proportions of language impairments; in this study, 25% of the youth offenders demonstrated language impairments in comparison to 3.1% of their non-incarcerated peers (Blanton and Dagenais, 2007). The findings from

both of these studies are corroborated by multiple studies (Humber and Snow, 2001; Sanger, Hux, and Belau, 1997; Snow and Powell, 2004, 2005; etc.).

Studies not utilizing comparison groups corroborate the findings from the studies above. In these studies, youth offenders were measured against standardized age equivalence scores. Myers and Mutch stated in 1992 that of the eight youth offenders in their study, 87.5 to 100% scored three or more years under their chronological age on language measures.

In Snow and Powell's 2008 study, 52% of the youth offenders exhibited scores of one standard deviation or more below the comparison group's mean. Another study from Snow and Powell (2011) reported that 46% of the 100 youth offenders tested scored greater than two standard deviations below the mean on more than one language measure. These researchers conducted another study that found language impairments in 37% of a group of 100 incarcerated youth offenders (Snow, Woodard, Mathis, & Powell, 2016). Similar findings reported in a study conducted by Bryan et al. in 2007 found that 46-67% of incarcerated male youth fell to the bottom ninth percentile on language subtest scores for their age groups; additionally, when using an alternative language measure, none of the youth reached age-equivalent scores.

Although not an exhaustive evaluation, the studies discussed above provide ample evidence of the epidemic of communication impairments in youth offenders. It is worth stressing that while most adolescents with DLDs do not commit crimes or encounter the youth justice system, DLDs are considerably overrepresented in youth offender populations (Snow, 2019). This observation is cause for both concern and further investigation into what services may be offered to prevent these rates from persisting.

B. WHY HIGHER RATES OF LANGUAGE DISORDERS IN THE YOUTH OFFENDER POPULATION NEED TO BE ADDRESSED

People need not encounter the justice system for themselves to know it is a densely verbal and lexically diverse environment that places adolescents with impaired language at an immediate disadvantage. From the first encounter with law enforcement and beyond, youth offenders are expected to understand specialized language terminology, such as *Miranda Rights*, which have specific and low-frequency terms unfamiliar to adolescents. Individuals with specific language impairment (SLI) have been found to have poor comprehension of such rights, meaning their access to these rights is compromised (Rost and McGregor, 2012).

Other studies involving children and adolescents with SLI presented weaknesses across the linguistic domain. Semantically, children with SLI showed deficits in vocabulary (Stothard, Snowling, Bishop, Chipchase, & Kaplan, 1998) and understandably also exhibited word-finding difficulties (McGregor, Newman, Reilly, & Capone, 2002). These findings confirm those of other studies that have found children with SLI to produce faulty narratives with unreliable quality and grammaticality (Fey, Catts, et al., 2004). Whether victims, witnesses, or participants to a crime, these adolescents are expected to answer highly detailed questions and produce reliable narratives, skills which – as shown above – are not within their repertoire.

Within the justice system, it is imperative that clients of attorneys possess adequate communication skills. For youth offenders with impaired language, this becomes yet another area in which they are disadvantaged. The impaired narrative abilities, reduced vocabulary, and other effects of language impairment interfere with the

communication between an attorney and the youth offender, thus hindering the adolescent's fair treatment within the justice system (LaVigne & Van Rybroek, 2013).

Unfortunately, the court system is not the only situation that places youth offenders at a disadvantage. In many cases of youth offending, the offender is released on bail. Although bail functions to reduce recidivism (Sprott & Myers, 2011), bail conditions are often expressed with legal terminology and vocabulary, making them difficult for individuals with DLD to understand. Because of this, the complex terminology of bail conditions may underwrite many youth offenders' reappearances in court (LaVigne & Van Rybroek, 2011). Authorities unjustly set youth offenders up for recidivism or violation when they place non-comprehensible expectations and standards upon them.

In conclusion, a youth offender's journey through the justice system is pervaded by high-level literacy requirements and verbal dialogues that would be difficult to understand even for individuals without DLDs. Even custodial sentences focused on remediation with counseling and behavior management necessitate verbal facilitation, hindering a youth offender's ability to benefit from them; it is difficult to remain engaged in such processes when one's understanding is limited.

Because of the difficulties experienced by youth offenders with perpetually undiagnosed DLD, SLPs play a key role in educating staff within the youth justice system on how DLD affects receptive and expressive language. SLPs have the opportunity to ensure the protection of communication as a right in the youth offender population by advocating for them and educating all personnel within the system (officers, attorneys, counselors, educators, etc.).

C. IS THERE EVIDENCE THAT IDENTIFICATION AND INTERVENTION MAKE A DIFFERENCE?

Given the convincing body of evidence exposing the prevalence of language impairments in youth offenders, the informed individual is led to the ask, "Why are the developmental language disorders (DLDs) not identified?" and, "Would identification and intervention of the disorder decrease the likelihood of offending?"

While less research has been conducted that would lead to answers for these questions, there remains convincing indication that, while many DLDs are not identified in youth offenders before they offend, early intervention including SLP services for individuals with DLDs may reduce their contact with the youth justice system (Hughes et al., 2017; Winstanley, Maxine, et al., 2018).

A pioneering study conducting in 2011 by Gregory and Bryan examined seventy-two prolific and persistent youth offenders entering the Intensive Supervision and Surveillance Program (ISSP). Each individual was screened for language difficulties by an SLP after entering the program. Of the seventy-two participants, 65% demonstrated language difficulties, and 20% scored at a "severely delayed" level on standardized assessment. The youth offenders in the ISSP received speech and language therapy services. After program completion the youth offenders were reassessed, and language improvement was demonstrated on the standardized tests used.

A clinical trial conducted in Australia examined six male youth offenders who received medium-intensity, one on one speech-language therapy services for seven to 16 weeks (Snow, Woodard, 2017). In this trial, the participants exhibited generally strong therapeutic engagement, improvements in their language abilities, and favorable responses to intervention.

A relatively more recent study examined substance use and contact with law enforcement in young adults with identified DLD in comparison to age-matched peers. For individuals who received targeted services for their DLD during their schooling, less contact with law enforcement was reported in comparison to their age-matched peers (Winstanley, Webb, & Conti-Ramsden, 2018). The findings of this study are not only encouraging but also indicate the need for more research. Additional evidence that early identification and intervention mitigate youth offending or reoffending would open doors for more targeted mediation. Because of current research regarding youth offenders with identified language impairments who have received services, it can be inferred that not enough is being done to accurately identify language disorders in individuals who are atrisk for offending.

The Hughes et al. study from 2017, conducted in England, examined 93 youth offenders using a range of assessments and found that more than 25% of the individuals were identified as having an impairment, and 47% of the individuals "demonstrated an aspect of language skills significantly below the population average." Of the individuals recognized as having an impairment, *only one in four* had previously seen an SLP for their DLD. In addition to underdiagnosis of language impairments in the youth offender population, it has been indicated that adolescents with neurodisabilities (intellectual disability, autism spectrum disorder, brain injuries, etc.) are also overrepresented and underdiagnosed among youth offenders (Hughes et al., 2012, 2017; Kenny & Lennings, 2007). In another study conducted with a sample of students who had diagnosed emotional and behavioral difficulties, 74% of the individuals were identified as having a

language disorder, yet few than half of these had been acknowledged by educators or health professionals (Stringer & Lozano, 2006).

Evidently, there is a need for improved identification of language disorders within the educational sphere, particularly for those who display multiple comorbid factors, such as low SES, early childhood trauma, and educational underachievement (Snow, 2019). The responsibility of early identification majorly falls to SLPs within the educational environments, especially those in head start programs and elementary schools.

A. IMPROVING EARLY IDENTIFICATION AND INTERVENTION EFFORTS

Given the results of the studies from Hughes et al. (2017) and Winstanley, Maxine, et al. (2018), there should be a greater initiative toward early identification of language and communication disorders in young children, particularly those identified as at-risk for early offending. One on one language instruction should be given to children at risk for offending, especially if they are still attending school. Additionally, educational SLPs and academic authorities need to be keenly aware of the high potential for behavioral and emotional difficulties to mask language impairments (Snow, Woodard, et al., 2015). The educational SLP needs to be aware of the comorbidity between poor academic achievement and behavioral difficulties because, upon closer investigation, many of these children are revealed to have DLDs (Cohen, Davine, Horodezky, Lipsett, & Isaacson, 1993). In these scenarios, an SLP may act as an investigator, educator, and advocate. Not only can she conduct evaluations on children with emotional and/or behavioral difficulties, but she can also educate classroom teachers on effectively responding to a language disorder and its subsequent behavioral implications. Lastly, the educational SLP may also advocate for a child involved in disciplinary situations when an explanation of the language disorder's effects is needed.

B. LITERACY INTERVENTION WITHIN SCHOOLS AND CUSTODIAL FACILITIES

The importance of improving reading and writing abilities among youth offenders cannot be emphasized enough, especially when considered in light of research indicating poor literacy to be an independent predictor of reoffending (Rucklidge, McLean, & Bateup, 2013). Not only does reading failure contribute to recidivism, but it also precipitates a host of other

negative outcomes, such as problems with frustration, academics, behavior, higher rates of suspension, and more limited employment opportunities in adulthood (Leone, Krezmien, Mason, and Meisel, 2005). Reading instruction is therefore vital for at-risk children attending school, and children from backgrounds poor in reading instruction would benefit greatly from explicit instruction (Snow, 2016).

Inopportunely, most youth offenders attend school limitedly before offending (Snow & Powell, 2011). Due to this, it can be inferred that youth offenders receive limited therapeutic services prior to custody. While incarceration of young people is the most unfortunate and severe exhibition of the school-to-prison pipeline, it presents the opportunity for SLPs to provide direct literacy instruction when it is most needed. Within custody, youth offenders are often forced to reenter schooling, and through this can receive one-on-one services catered to improving reading and writing skills. Because of the dearth of research supporting the efficacy of this kind of intervention, SLPs should look in this direction for future research opportunities.

C. INCREASING ACCESSIBILITY OF SLP EXPERTISE IN POLICE AND COURT PROCEEDINGS

Throughout a youth offenders' passage in the justice system, he or she encounters many professionals who lack knowledge of how DLDs affect an adolescent's behavior and communication. As mentioned previously, this unawareness impacts the working relationships between youth offenders and attorneys (LaVigne & Van Rybroek, 2013). It can also be inferred that their communication impairments negatively influence interactions and relationships with police officers, parole officers, educators, and court personnel. This influence is especially strong in circumstances involving detailed questioning and unfamiliar vocabulary, such as police interviews, court hearings, and bail conditions. Because of the

invariable communication breakdowns that occur, there are multiple ways SLPs can provide assistance.

Authorities, particularly police officers and attorneys, often interview youth offenders in an attempt to gain a narrative or specific information. But this narrative is not always gathered in the most straightforward manner, nor do officers utilize best practice guidelines for obtaining narrative accounts from children and adolescents (Snow, et al., 2012). There is a need for SLPs to become intermediaries in the interview process and educate police officers on how to best obtain and interpret information from youth offenders with DLD.

During court hearings and conferences concerning outcomes for youth offenders, a speech-language pathologist plays a key role in ensuring that youth offenders with DLD are not disadvantaged. This is primarily done by informing court personnel of the communication difficulties and susceptibilities often experienced by youth offenders and how to best approach conversations. For example, youth offenders have been shown to have higher rates of alexithymia, difficulty describing one's emotions or affective state (Snow P.C., Woodward M., Mathis M., Powell M.B., 2015). In court hearings, judges will often examine the defendant's language and emotional state for signs of remorse or sadness, but many youth offenders struggle with this ability. In these situations, the SLP can educate convenors of this reality and potentially change the outcome of the trial. The SLP can also encourage the presence of a registered intermediary (RI) during court hearings. RIs are professionals trained on how communication disorders affect processes in the criminal justice system. They protect witnesses vulnerable to communication breakdown by avoiding common barriers and ensuring the opportunity to have as clear communication as possible (Snow, 2019).

Furthermore, SLPs can be key advocates for youth offenders to other clinical service providers, such as counselors and social workers. A speech-language pathologist has the unique knowledge base for successful communication with individuals who have DLD, and she can educate clinical personnel on the common way DLD affects everyday communication. This gives counselors and social workers the means to have more effective, successful communication with youth offenders, thus allowing them to provide their services more efficaciously.

Lastly, as the youth offender enters the court system, he or she is surrounded by legal terminology and high-stake mediations that are verbally dense. The SLP can help prepare youth offenders for these meetings by equipping them with necessary vocabulary and providing explanations for court proceedings. In this way, the SLP becomes a key advocate for young people encountering the justice system by improving oral language competence.

D. INCREASED UTILIZATION OF COLLABORATIVE, INTERPROFESSIONAL TEAMS

During this entire process, the SLP should never work alone. It is not solely the SLP's job to identify children at-risk for offending, provide counseling, and visit the family of the child in question. Rather, SLP needs to work with a collaborative, interprofessional team of educators, a psychologist, a social worker, and fellow therapists to address identified concerns and work to prevent every at-risk child from entering the infamous "school-to-prison pipeline." As the SLP collaborates with other professionals, it is her role to inform each person on how the client's DLD affects his communication, allowing them to more effectively provide their respective services. Additionally, the SLP has the opportunity to equip educators with the tools to improve necessary oracy and literacy skills that "reduce early risk factors and contribute to academic success and retention at school." (Snow, 2019)

Given the well-established evidence of a higher prevalence of language disorders within the youth offender population, the SLP understandably has a role to play in the youth justice system as an informant and advocate. It is her role to increase awareness of how language disorders impact a youth offender's passage through the justice system and provide resources to mitigate the disadvantages experienced by this population. Additionally, by working with an interprofessional team, the SLP can help directly mitigate a young person's entrance into the "school-to-prison pipeline" by increasing efforts of early identification and intervention for atrisk individuals. Because of the multiple, indispensable ways SLPs service the youth justice system, I believe that service to youth offenders and their journey through the criminal justice system should be implanted in the speech-language pathology scope of practice.

As a future SLP, it is my goal to be a part of this process. I believe communication is a basic right, and we deprive children and adolescents of this right *and* their futures when we do not meet them where they are communicatively. These children are often held to standards they do not understand or are cognitively incapable of upholding. They face misunderstanding and miscommunication daily and are often robbed of the opportunity to communicate because they do not communicate as their authorities expect them to. I desire for this communication gap disappear, and I believe SLPs are key instigators in making this happen.

- Blanton, D. J., & Dagenais, P. A. (2007). Comparison of language skills of adjudicated and nonadjudicated adolescent males and females. Language, Speech, and Hearing Services in Schools, 38(4), 309–314.
- 2. Bryan, K., Freer, J., & Furlong, C. (2007). Language and communication difficulties in juvenile offenders. International Journal of Language and Communication Disorders, 42(5), 505–520.
- Cohen, N J et al. "Unsuspected language impairment in psychiatrically disturbed children: prevalence and language and behavioral characteristics." *Journal of the American Academy of Child and Adolescent Psychiatry* vol. 32,3 (1993): 595-603. doi:10.1097/00004583-199305000-00016
- 4. Fey ME, Catts HW, Proctor-Williams K, Tomblin JB, Zhang X. Oral and written story composition skills of children with language impairment. J Speech Lang Hear Res. 2004 Dec;47(6):1301-18. doi: 10.1044/1092-4388(2004/098). PMID: 15842012.
- 5. Gregory J, Bryan K. Speech and language therapy intervention with a group of persistent and prolific young offenders in a non-custodial setting with previously undiagnosed speech, language and communication difficulties. *Int J Lang Commun Disord*. 2011 Mar-Apr;46(2):202-15. doi: 10.3109/13682822.2010.490573. PMID: 21401818.
- 6. Hughes, Nathan, et al. "(PDF) Nobody Made the Connection: Neurodisability in the Youth Justice System. Published by the Office of the Children's Commissioner for England." *ResearchGate*, Office of the Children's Commissioner for England, Dec. 2011, www.researchgate.net/publication/263162877_Nobody_Made_the_Connection_Neurodis

- ability in the youth justice system Published by the Office of the Children's Commissioner_for_England.
- 7. Hughes, Nathan, et al. "Language Impairment and Comorbid Vulnerabilities among Young People in Custody." *Journal of Child Psychology and Psychiatry*, vol. 58, no. 10, 2017, pp. 1106–1113., doi:10.1111/jcpp.12791.
- 8. Humber, E., & Snow, P. C. (2001). The oral language skills of young offenders: A pilot investigation. Psychiatry, Psychology and Law, 8(1), 1–11.
- 9. Kenny, D. T., and C. J. Lennings. "Relationship between Head Injury and Violent Offending in ..." Contemporary Issues in Crime and Justice, 2007, www.researchgate.net/publication/230602099_Relationship_between_head_injury_and_violent_offending_in_young_offenders.
- McGregor KK, Newman RM, Reilly RM, Capone NC. Semantic representation and naming in children with specific language impairment. J Speech Lang Hear Res. 2002 Oct;45(5):998-1014. doi: 10.1044/1092-4388(2002/081). PMID: 12381056.
- 11. McLeod S., McKinnon D.H.. Prevalence of communication disorders compared with other learning needs in 14,500 primary and secondary school students. Int J Lang Commun Disord. 2007 Mar;42 Suppl 1:37-59. doi: 10.1080/13682820601173262. PMID: 17454236.
- 12. Myers, Wade C., and P. Jane Mutch. "Language Disorders in Disruptive Behavior Disordered Homicidal Youth." *Journal of Forensic Sciences*, vol. 37, no. 3, 1992, doi:10.1520/jfs12006j.
- 13. LaVigne, Michele and Van Rybroek, Gregory, Breakdown in the Language Zone: The Prevalence of Language Impairments among Juvenile and Adult Offenders and Why it

- Matters (August 23, 2010). US Davis Journal of Juvenile Law and Policy, Forthcoming, University of Wisconsin Legal Studies Research Paper No. 1127, Available at SSRN: https://ssrn.com/abstract=1663805
- 14. LaVigne, Michele and Van Rybroek, Gregory, 'He Got in My Face so I Shot Him': How Defendants' Language Impairments Impair Attorney-Client Relationships (August 22, 2013). 17 CUNY Law Review 69 (2014), Univ. of Wisconsin Legal Studies Research Paper No. 1228, Available at SSRN: https://ssrn.com/abstract=2314546
- 15. Leone, P. E., Krezmien, M., Mason, L., & Meisel, S. M. (2005). Organizing and Delivering Empirically Based Literacy Instruction to Incarcerated Youth. EXCEPTIONALITY, 13(2), 95. https://doi.org/10.1207/s15327035ex1302_3
- 16. Rost, Gwyneth C., and Karla K. McGregor. "Miranda rights comprehension in young adults with specific language impairment." *American journal of speech-language* pathology vol. 21,2 (2012): 101-8. doi:10.1044/1058-0360(2011/10-0094)
- 17. Rucklidge, Julia J., et al. "Criminal Offending and Learning Disabilities in New Zealand Youth: Does Reading Comprehension Predict Recidivism?" *Crime & Delinquency*, vol. 59, no. 8, Dec. 2013, pp. 1263–1286, doi:10.1177/0011128709336945.
- 18. Sanger, D. D., Hux, K., & Belau, D. (1997). Oral language skills of female juvenile delinquents. American Journal of Speech-Language Pathology, 6(1), 70–76.
- 19. Snow, Pamela C. "Elizabeth Usher Memorial Lecture: Language is literacy is language Positioning speech-language pathology in education policy, practice, paradigms and polemics." *International journal of speech-language pathology* vol. 18,3 (2016): 216-28. doi:10.3109/17549507.2015.1112837

- 20. Snow, Pamela C., et al. "Oral Language Competence, Young Speakers, and the Law." Language, Speech, and Hearing Services in Schools, vol. 43, no. 4, 2012, pp. 496–506., doi:10.1044/0161-1461(2012/11-0065).
- 21. Snow, P. C., & Powell, M. B. (2004). Developmental language disorders and adolescent risk: A public-health advocacy role for speech pathologists? International Journal of Speech-Language Pathology, 6(4), 221–229.
- 22. Snow, P. C., & Powell, M. B. (2005). What's the story? An exploration of narrative language abilities in male juvenile offenders. Psychology Crime and Law, 11(3), 239–253.
- 23. Snow, P. C., & Powell, M. B. (2008). Oral language competence, social skills and high-risk boys: What are juvenile offenders trying to tell us? *Children and Society*, 22(1), 16–28.
- 24. Snow, P. C., & Powell, M. B. (2011). Oral language competence in incarcerated young offenders: Links with offending severity. International Journal of Speech-Language Pathology, 13(6), 480–489.
- 25. Snow P. C. (2019). Speech-Language Pathology and the Youth Offender: Epidemiological Overview and Roadmap for Future Speech-Language Pathology Research and Scope of Practice. *Language, speech, and hearing services in schools*, 50(2), 324–339. https://doi.org/10.1044/2018_LSHSS-CCJS-18-0027
- 26. Snow P.C., Woodward M, Mathis M, Powell MB. Language functioning, mental health and alexithymia in incarcerated young offenders. *Int J Speech Lang Pathol*. 2016 Feb;18(1):20-31. doi: 10.3109/17549507.2015.1081291. Epub 2015 Oct 15. PMID: 28425363.

- 27. Snow P.C., Woodward M.N. Intervening to address communication difficulties in incarcerated youth: A Phase 1 clinical trial. Int J Speech Lang Pathol. 2017 Aug;19(4):392-406. doi: 10.1080/17549507.2016.1216600. Epub 2016 Oct 7. PMID: 27712123.
- 28. Sprott, Jane B. and Nicole M. Myers. "Set Up to Fail: The Unintended Consequences of Multiple Bail Conditions." *Canadian Journal of Criminology and Criminal Justice*, vol. 53 no. 4, 2011, p. 404-423. *Project MUSE* muse.jhu.edu/article/461412.
- 29. Stanford, Shameka. "The School-Based Speech-Language Pathologist's Role in Diverting the School-to-Confinement Pipeline for Youth with Communication Disorders." *Perspectives of the ASHA Special Interest Groups*, vol. 5, no. 4, 2020, pp. 1057–1066., doi:10.1044/2020_persp-20-0002.
- 30. Stringer, Helen, and Sonia Lozano. "Under Identification of Speech and Language Impairment in Children Attending a Special School for Children with Emotional and Behavioral Disorders." *Research Gate*, Educational and Child Psychology, Dec. 2006, www.researchgate.net/publication/261377506_Under_identification_of_speech_and_lang uage_impairment_in_children_attending_a_special_school_for_children_with_emotional _and_behavioural_disorders.
- 31. Stothard SE, Snowling MJ, Bishop DV, Chipchase BB, Kaplan CA. Language-impaired preschoolers: a follow-up into adolescence. J Speech Lang Hear Res. 1998

 Apr;41(2):407-18. doi: 10.1044/jslhr.4102.407. PMID: 9570592.
- 32. Tomblin J.B., Records N.L., Buckwalter P., Zhang X., Smith E., O'Brien M. Prevalence of specific language impairment in kindergarten children. J Speech Lang Hear Res. 1997

Dec;40(6):1245-60. doi: 10.1044/jslhr.4006.1245. PMID: 9430746; PMCID: PMC5075245.

- 33. Winstanley, Maxine, et al. "More or Less Likely to Offend? Young Adults with a History of Identified Developmental Language Disorders*." *International Journal of Language* & *Communication Disorders*, vol. 53, no. 2, 2018, pp. 256–270., doi:10.1111/1460-6984.12339.
- 34. Winstanley, M., Webb, R.T. and Conti-Ramsden, G. (2018), More or less likely to offend? Young adults with a history of identified developmental language disorders*.

 International Journal of Language & Communication Disorders, 53: 256-270. https://doi.org/10.1111/1460-6984.12339