

A Systematic Review and Meta-Analysis of the ~~Language~~ and literature

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A B S T R A C T

Purpose: This systematic review and meta-analysis estimates the overall language skills of youth offenders involved with the juvenile justice system. Given the importance of this population, identifying avenues through which we can increase the likelihood of successful interventions is a necessary societal effort.

Method: Eighteen studies, representing data from 3,304 individuals, contributed 82 effect sizes to the current analytic sample. We used random-effects models to estimate the overall mean effect size metric to address each research question and fit meta-regression models for each moderator analysis.

Results: Results yielded that youth offenders presented with significantly lower language skills than their nonoffending peers ($g = -1.26$). Furthermore, high proportions of the present meta-analytic sample were classified as youth with moderate (50%) and severe (10%) language disorders. In general, differences in language skills did not vary as a function of age, gender, or language measure type. We did detect significant differences as a function of sample country and type of peer comparison group.

Introduction

Oral language is a fundamental skill that is necessary for success in social and educational environments and is foundational for academic progress (Chow, 2018; Dickinson et al., 2010; Moll et al., 2015). Because of the impact of youth's language skills on their overall success, it is essential to investigate the populations of youth who



are typically diagnosed with developmental language disorder (DLD).¹ The prevalence of DLD in the general population has been reported between 7% and 12% (McLeod & McKinnon, 2007; Snow, 2019). Youth offenders² have a higher probability of meeting the criteria for DLD than their general population peers (Snow, 2019). DLD is a common comorbidity with involvement with the juvenile justice system, and boys with DLD are an estimated 4 times more likely to engage in delinquent behavior (Brownlie et al., 2004). More than 20% of youth offenders demonstrate DLD, which may create challenges with syntax, vocabulary, word retrieval, accurate morpheme use, and their overall ability to engage at the conversational level (Sanger et al., 2001, 2019). Because of these challenges, youth offenders are at a higher risk of experiencing difficulty engaging in the high-stakes judicial process, as well as navigating their environment, forming relationships, and succeeding academically (Anderson et al., 2016; Chow, Cunningham, & Stehle Wallace, 2020; Dickinson et al., 2010; Law et al., 2000; Yew & O’Kearney, 2013).

Enhanced understanding of this vulnerable group of children and youth is required to inform future research, policy, and practice. In this article, we synthesized the research concerning the language skills of youth offenders, including those who are or were incarcerated and those who were serving community-based orders. Given the need to support this population (Assink et al., 2015; Beaudry et al., 2020; James et al., 2013; Lambie & Randell, 2013), we must identify avenues through which we can increase the likelihood of successful interventions.

Youth With Community-Based Orders

Youth fulfilling community-based orders are those who received alternatives to incarceration. Their community-based juvenile justice orders may include youth

supervision order, youth attendance order, or parole (Snow & Powell, 2005, 2008). In Australia, 83% of youth offenders receive community-based supervision, and only youth convicted of more serious crimes are housed in secure settings, called *detention centers* (Australian Institute of Health and Welfare, 2019). Similar to Australia, the juvenile system in the United Kingdom focuses on preventive and rehabilitative services, often in a community-based setting and with a focus on education (Blakeman, 2011). The United States has more youth in incarceration than any other country, although current campaigns aim to reform youth incarceration and implement more community-based services like those in Australia and the United Kingdom (American Civil Liberties Union, 2021). Incarceration of the most serious and chronic youth offenders to residential youth facilities results in high concentrations of youth offenders with significant and complex needs within these settings.

Demographic Characteristics of Involved Youth

Gender

Male youth are far more likely to be incarcerated than their female counterparts in the United States (84%; Sickmund et al., 2017), Australia (81%; Australian Institute of Health and Welfare, 2019), and the United Kingdom (96%; Ministry of Justice, 2019). Studies have shown that males are more likely to be detained prior to adjudication, pre-adjudication detention than females (Guevara et al., 2006), and White females receive less severe penalties (e.g., misdemeanor vs. felony) than their female counterparts who identify as a minority (Moore & Padavic, 2010). Males who are incarcerated have a higher rate of diagnosed mental health disorders or trauma exposure and abuse mental health symptoms relative to their female counterparts (Cruise et al., 2007; Cauffman et al., 2007). Females

experiencing juvenile incarceration are also more likely to seek out and receive services for their mental health than males (Braverman & Murray, 2011; Vincent et al., 2008).

Socioeconomic Status

Although research analysis examining the relation between family income and youth incarceration is scarce, child and family poverty is frequently associated with youth crime and later incarceration. A point-in-time analysis conducted among youth detained in a Washington juvenile detention center indicated that 48% of the youth experienced homelessness at some point in their lives (Pilnik, 2016). Economic research identified a correlation between childhood poverty and eventual adult incarceration where boys in the bottom 10% of income distribution during childhood were approximately 20 times more likely to be in prison in their 30s, compared to boys born into families in the top 10% (Looney & Turner, 2018). In addition, youth from the lowest income bracket were 18 times more likely to commit homicides than their peers from the highest income bracket (Males, 2015). A government data analysis has likewise tied higher rates of youth crime to the highest poverty areas of London (Hobart, 2018). The impact of family and community poverty on childhood outcomes is well established (Skowrya & Cocozza, 2007) and is associated with other forms of childhood adversity, including residing in crime-prone communities (Farrington et al., 2012; Greenwald & Pettigrew, 2014), which may contribute to the risk of juvenile justice involvement (Cannon & Hsi, 2016; Marsiglio et al., 2014). Although gender, race, socioeconomic status (SES), living in a crime-prone community, and childhood adversity are associated with juvenile justice involvement, identifying and examining additional risk factors, such as language, may allow researchers and practitioners to determine which specific types of evidence-based interventions may be most effective at providing

youth with the skills necessary to successfully navigate the justice system and reentry into society.

Language and literature

Given that the prevalence of DLD in the general population has been reported between 7% and 12% (McLeod & McKinnon, 2007; Norbury et al., 2016) and that youth justice samples have a higher probability of meeting the criteria for DLD than their general population peers (Snow, 2019), there are important implications of language and DLD for the youth justice system. This may be particularly important because language disorders are often undiagnosed and youth behavior that results from a language disorder can be misinterpreted as defiant or low engagement (Cantwell & Baker, 1987; Cohen et al., 1998; Hollo et al., 2014).

juvenile justice involvement is likely to begin with police officer contact. Following this contact, the officer can generally exercise discretion in how to proceed with a young person accused of an offense (United States: Youth.gov, 2020; United Kingdom: Ministry of Justice, 2016; Australia: Australia Law Reform Commission, 2010). A youth may be expected to engage with an officer so that the officer can ascertain youth risk.

Discussion

We estimated the overall language skills of youth in juvenile justice facilities. We quantified the average difference in language skills between youth offenders and their nonoffending peers. This magnitude corresponds to a 17-point difference on a standardized assessment favoring nonoffending peers. Whether in research or clinical practice, this is a substantial difference, which converges with other research

identifying language as a specific domain in which youth offenders experience deficits (Anderson et al., 2016). Language is an essential component to daily living as it provides a means of navigating our environment; forming relationships; and experiencing academic, professional, emotional, and social success (Chow & Wehby, 2019; Dickinson et al., 2010; Law et al., 2000; Yew & O’Kearney, 2013). Indeed, the World Health Organization (1999) indicates that communication and interpersonal skills, taken together, are one of five areas of globally relevant life skills. From the dual-process language-focused framework, we need to support these life skills of youth offenders in the courts as well as via educational intervention in order to maximize the likelihood for success. Sixty-three percent of this study’s sample demonstrated a mild-to-severe language disorder. This rate of prevalence is much higher than in the population and underscores the need for additional speech and language support among youth offenders or in the child protection system (Anderson et al., 2016). Youth with problem behavior indicative of behavior disorder are more likely to experience juvenile justice involvement (Read, 2014) and are at higher risk for unidentified language disorder.

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