The Effects of Poverty on Academic Achievement

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Abstract

Poverty has become one of the most prevalent indicators of academic achievement in our schools today. As the number of students raised in poverty increases, it is vitally important that educators be aware of the effects of poverty on student behaviour and learning capacity in the classroom. Educators must incorporate proven strategies in order to help close the gap in academic achievement between those raised in poverty and those raised in more affluent homes.

Academic achievement can be predicted by socioeconomic status (Cedeño, Martinez-Arias, & Bueno, 2016; Reardon & Portilla, 2016). In Manitoba, a single parent with one child earns as much as \$7,000 below the poverty line (Brandon, 2018, para. 1). Children raised in poverty are more apt to experience emotional and social challenges, chronic stressors, and cognitive lags due to significant changes in brain structure in areas related to memory and emotion (Brito & Noble, 2009; Jensen, 2009). The first and best strategy for increasing student effort and motivation is to nurture strong relationships between students and their teachers (Budge & Parrett, 2018). Developing programs that embody respect, embed social skills, and promote inclusive classrooms can assist in closing the achievement gap for students facing emotional and social challenges (Jensen, 2009). For students dealing with chronic stressors, decreasing the likelihood of lower academic achievement can be accomplished by recognizing the signs of poverty, empowering students, and altering the classroom environment. Building core skills, providing assessments that identify the true root of the problem, and recruiting caring and empathetic staff will assist those students with cognitive lags and changes in brain structure to close the gap in academic achievement. It is imperative as educators that we are aware of the effects of poverty so that we can implement these strategies and decrease the likelihood of lower academic achievement.

Common Challenges Viewed in the Classroom

There are many challenges faced by children raised in poverty. Some challenges are longterm obstacles such as chronic stressors and changes in brain structure that effect emotion and memory. Other challenges are more situational causing emotional and social struggles. The mental health issues include high levels of depression among parents and children living in poverty (Jensen, 2009). Students who have experienced emotional and social challenges may demonstrate acting-out behaviours during their school day (Jensen, 2009). They may also be impatient and have poor impulse control. Their behavioural responses may be limited due to having a caregiver who was not sensitive to their needs as an infant. Jensen (2009) pointed to several reasons for this phenomenon. Many of these students have come from homes where they may have had a teen mother. Parents or quardians are often overworked due to working more than one job to make ends meet. This situation, in turn, causes parents or guardians to inflict harsher discipline and be less sensitive to the feelings and needs of their children. Parents or quardians who have experienced difficulties with school in their pasts are less likely to attend parent-teacher interviews or to be involved in any extra-curricular school activities. Poor emotional health, caused by the lack of parental support, may cause an increase in disruptive behaviour in the classroom.

In addition, children raised in poverty may not have been taught to be polite and may not be socially gracious (Jensen, 2009). They may lack the ability to empathize with others. This lack of empathy, in turn, makes it difficult for these students to work well in cooperative groups with

their classmates. This inability to work well with classmates often results in students becoming unwanted participants in groups, adding to their feelings of inadequacy and resulting in the students giving up on a task just before they successfully complete it. Poor social skills, which result in a lack of acceptance from peers, may cause decreases in academic performance.

Children living in poverty see many chronic stressors, including unsafe neighbourhoods where there are high levels of crime, parents who are making minimum wage which causes a financial strain on the family, parents who are separated or divorced, siblings living in different households, and households that are overcrowded (Johnson, Riis, & Noble, 2009). All of these stressors create a void in the lives of children raised in poverty, and result in academic and behavioural issues in school. These students have a higher level of absenteeism, they struggle with focus and concentration, they have significantly more difficulty in comprehension and memory, and they struggle with motivation (Jensen, 2009). In addition, living in homes where there is little parental interaction, fewer books to read, and fewer chances for cognitive stimulation will decrease the children's confidence which, in turn, will lead to future academic failure (Cedeño et al., 2016). Chronic stressors will cause students to underperform in school and either give up or become disinterested in their school work (Jensen, 2009). For all of these reasons, chronic stressors have a significant effect on academic achievement.

Lastly, children raised in poverty are more apt to experience cognitive lags due to significant changes in brain structure in areas related to memory and emotion. Poverty may make it difficult for parents to purchase toys and books to promote cognitive stimulation for their children, thereby causing the children to have a lesser vocabulary and a more directed speech (Johnson et al., 2016). Developmental delays are more prevalent for children raised in poverty as opposed to those raised in more affluent homes. Poor performance on tests when asked to show their knowledge, behavioural problems in the classroom, mental health issues, and emotional problems are also viewed more frequently in those children who have been raised in a lower socioeconomic home. Children raised in poverty experience changes in brain structure in areas related to memory and emotion (Brito & Noble, 2009).

Living in poverty upsets brain development and will result in behavioural problems in the classroom (Dike, 2017). Stress causes our bodies to release a chemical called cortisol (Jensen, 2009). The buildup of cortisol in our body results in sending weaker neuron signals to the prefrontal cortex and the hippocampus. Both the prefrontal cortex and the hippocampus are crucial for learning, cognition, and working memory. Recurring stress can result in shrinking of neurons in the frontal lobes of a child's brain. This area of the brain is responsible for the child's ability to make judgements, plan, and control impulsivity. It can also cause damage to the hippocampus, which may, in turn, cause a reduction in learning capacity. The amygdala is also affected by the effects of stressors in the body (Jensen, 2009). The amygdala is the area of the brain that is responsible for controlling emotions. All of these alterations to the neurons in the brain cause an imbalance in the healthy status of the brain. This imbalance, in turn, may shape the patterns of communication and language. Children raised in poverty who have significant changes in brain structure are faced with many academic and behavioural challenges. Children raised in poverty experience many emotional and social challenges, chronic stressors, and cognitive lags due to significant changes in brain structure in areas related to memory and emotion, which result in lower academic achievement and more behavioural issues in the classroom.

Solutions To Close the Achievement Gap in the Classroom

In order to conquer academic and behavioural challenges faced by children raised in poverty, teachers need to develop strong relationships with their students, embody respect in their interactions with students, embed social skills in lessons, promote inclusive classrooms, recognize the signs of poverty, empower students, alter classroom environments, build core skills, provide accurate assessments, and recruit caring and empathetic staff. Building caring

and supportive relationships with students is the first and best strategy to increase student effort and motivation (Budge & Parrett, 2018). Many children raised in poverty come to school without the necessary social-emotional responses needed to be successful at developing relationships with their peers and teachers (Jensen, 2013). Children raised in poverty need to develop relationships with teachers who give them a reliable and positive role model that they can count on and trust. Inappropriate emotional responses in the classroom can be diminished and engagement increased by taking the time to nurture a strong student-teacher relationship. This relationship between the student and his/her teacher is the precursor to any learning happening in classrooms (Budge & Parrett, 2018). If the student does not perceive that this relationship exists, there will be no learning. There is a saying that students will not care what the teachers know until they know that the teachers care. Students who know that their teachers care about them will be more likely to follow what their teachers are modelling, and will feel more confident taking risks and trying out new behaviours in the classroom. This relationship can be nurtured by offering the student the opportunity to learn how to be respectful and develop appropriate social skills. Providing an environment where the students feel included and valued as members of their classroom community will also help to improve their overall mental health. These efforts can assist in closing the achievement gap for students facing emotional and social challenges (Jensen, 2009).

Embodying respect in the classroom involves showing respect to all the students in the classroom, especially when it may seem it is not warranted (Jensen, 2009). We cannot expect respect from students who have never developed the skills, or had the background, to show us respect. Providing students with choices and input into their assignments will be more effective than using authoritarian directives. Allowing students to be involved in the decision making in the classroom will help them to feel empowered and decrease the likelihood of disruptive behaviour. All of these strategies will help students to develop respectful behaviour, and decrease the likelihood of behavioural problems in the classroom.

Another way to increase student engagement and decrease disruptive behaviour in the classroom is to embed social skills in the lessons taught to students. The process of embedding social skills can be as simple as teaching students raised in poverty to take turns, to say thank you to their classmates, and to learn the correct social etiquette when meeting someone new for the first time (Jensen, 2009). Meeting someone new involves making eye contact, shaking hands, saying hello, and making small talk. Developing social skills will assist children raised in poverty to work more effectively in situations of cooperative learning. Explicitly teaching school expectations, as well as enforcing these expectations, can decrease disruptive behaviour and increase student engagement (Gietz & McIntosh, 2014). These expectations can also be taught through the use of the online Positive Behaviour Interventions and Supports program, also known as PBIS. PBIS helps to keep the school climate positive and acknowledges students for their appropriate behaviour. It also provides consistent consequences for rule violations. Using PBIS in schools has contributed to higher student achievement, higher student engagement, and improved student social relations.

Promoting inclusive classrooms wherein students feel that they are part of our school and our class is a powerful way to increase engagement and effort in students raised in poverty (Jensen, 2009). Providing students raised in poverty a safe place where they feel supported and safe will ensure that their needs are being met and will, in turn, raise student achievement (Budge & Parrett, 2018). Inclusion in our classrooms gives all students the opportunity to learn in a community where all students are viewed as equals and where we value diversity (Katz, 2012). In learning communities such as these, students feel safe, that they belong, and that they are a part of something meaningful. Celebrating effort and not just achievement will increase student engagement as it changes the focus from reaching milestones to a mindset of growth and change (Jensen, 2013). It is important that we remember to have clear communication with parents that education should be a priority in all homes, no matter the socioeconomic status, in order to ensure that all students are given the same opportunities to learn to their full potential.

Early intervention strategies will ensure that students living in poverty will have an increased chance for higher academic performance in an inclusive classroom (Jones, Wilson, Clark, & Dunham, 2018).

Decreasing the likelihood of lower academic achievement can be accomplished by recognizing the signs of poverty, empowering students, and altering the classroom environment. These solutions can be effective for students dealing with chronic stressors to decrease negative behaviours in the classroom (Jensen, 2009). Recognizing the real reason behind demonstrated behaviours, such as apathy and rudeness, is crucial to discerning that the discipline process is positive, and will increase the chances of more positive behaviours in the future. It is important not to criticize impulsive behaviours before we know the real reasons behind the behaviours we are witnessing in the classroom. Teachers need to be aware of the fact that students living in poverty have very minimal control over the length and intensity of the stressors in their lives, that they may not have the required social supports to deal with the effects of the stressors, and that they may be living in a situation where their stress is worsening. It is important to provide these students with outlets, such as games and social supports, to vent their frustrations. Implementing these strategies will help to decrease the likelihood of lower academic achievement in the classroom for children raised in poverty.

Empowering students will help them to feel as though they have some control over the stressful and overwhelming environment they may currently find themselves in. Teaching students ways to act differently to decrease their stress levels will help them to fill a tool belt with strategies to regain control of their feelings of being overwhelmed. Strategies to reduce stress can be physical (yoga and exercise), or mental (guided relaxation and meditation) (Jensen, 2009). It is also helpful to teach students how to set realistic goals, and how to break goals into smaller steps, in order to celebrate small achievements along the way. Goal setting will help them focus on what they want and develop the necessary steps to achieve that particular goal. Teaching students how to rectify a situation they have created in the classroom is also a valuable addition to their stress reduction tool belt. Students who have been disruptive in class need to make restitution to their classmates by doing something positive for the class. Decreasing the level of stress in the lives of children raised in poverty will help to increase positive behaviour in the classroom.

Altering the school environment will help students who are resistant to change become more able to choose positive behaviours while in the classroom. Academic success is strongly associated with how a student perceives his/her school environment (Geitz & McIntosh, 2014). Altering the school environment can include incorporating strategies such as providing students more time to complete homework in class or after class in order to decrease stress, providing time for students to work collaboratively, including multiple intelligences into lessons to benefit all types of learners, and incorporating celebrations of achievement into the classroom (Jensen, 2009). All of these strategies will help a child raised in poverty to become more cooperative in the classroom.

Closing the gap in academic achievement for those students with cognitive lags due to changes in brain structure can be accomplished by encouraging teachers to be caring and empathetic in their interactions with students. It is vital that teachers choose the correct assessment to identify the primary root of academic and social struggles that a student is facing. Providing opportunities for students to develop the core skills necessary to be successful in school is another way to close the gap in academic achievement for those children raised in poverty (Jensen, 2009). There are several core skills that students will need in order to succeed in school, including long- and short-term memory, focus, attention, problem solving, processing, hopefulness, sequencing, self-esteem, perseverance, and social skills. Identifying which skills are lacking, developing a plan of action to attain those skills, and providing access to the required resources are the first steps to building missing core skills. Adding these core skills to their repertoire will assist in closing the gap in academic achievement for children raised in poverty.

Pinpointing the assessment needed to identify the true root of the problem will also help to increase a student's academic success (Jensen, 2009). Using the correct assessment is crucial to the identification of a student's strengths and weaknesses. Following through with the results attained from the assessment is vitally important in ensuring that the students will get the supports they need to increase their chance of success and the tools to overcome that particular identified weakness. The correct assessment will accurately identify the problem and increase academic achievement for children raised in poverty.

One of the most effective ways to increase academic achievement is to recruit the best staff to teach in the school (Jensen, 2009). Teachers who are caring, love challenges, are flexible, and who love children will be the most effective in the classroom. These teachers are looking for supportive administrators, finding new ways to hone their skills through professional development and out-of-town conferences, searching through professional journals for the newest ideas, and implementing new strategies in their classrooms on a daily basis. Recruiting teachers with these skills will not be easy, but it will be the foundation of increasing academic achievement in the school.

Conclusion

Poverty is a reality today and will continue to be a significant factor in our society. There will always be a split in society between those who have and those who have not. Students raised in poverty are indeed more apt to experience emotional and social challenges, mental health issues, chronic stressors in their everyday life, and cognitive lags due to significant changes in their brain structure in areas related to memory and emotion. If we are truly committed to closing the achievement gap between students raised in poverty and those raised in more affluent homes, we need to use the most current research, alter our classroom environments, empower students, teach social skills, embody respect, create inclusive classrooms, and recognize the signs of poverty. Our first and best strategy for decreasing the achievement gap due to poverty is to build strong relationships between students and teachers. Teaching students mental and physical strategies to alleviate stress will decrease the stressors experienced in school, and give them strategies to deal with chronic stressors experienced at home. Changes caused in brain structure are irreversible, but we can close the gap through specialized instruction and providing students with a safe place to take risks in their education (Cedeño et al., 2016). Identifying which basic core skills students are missing and getting them the appropriate social supports will help to increase academic achievement. Teachers can make a difference by making changes to their instructional methods and being aware of the risk factors.

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About the Author

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