

Disproportionality in Special Education: What Does the Future Hold?

Liana Perez

University of Alaska Southeast

Submitted in partial fulfillment of the requirements of the Master of Education in Special Education degree at the University of Alaska Southeast

RECOMMENDED: _____
Jill Burkert, Ph.D., Academic Advisor

APPROVED: _____
Dean, School of Education

Date

Abstract

This meta-synthesis of the literature on disproportionality of minorities in special education examines the profound effects that inappropriately qualifying and placing culturally and linguistically diverse students into special education programs has on our nation. With the most current data showing the continuous increase of minorities in the US school systems, it is crucial that we develop methods and strategies that will help decrease the disproportionate representation of culturally and linguistically diverse students in our special education programs. It is pertinent that educators and administrators examine their own biases, beliefs, practices and policies to ensure social justice, respect and cultural responsiveness are being implemented in each and every classroom and school.

1. Introduction

1.1. Background

Since the inception of special education, scholars and specialists have been concerned about the disproportionate representation of students from culturally and linguistically diverse backgrounds among students identified with disabilities, also referred to as disproportionality. Professional efforts to address disproportionality have encompassed a range of objectives, but scholars increasingly view disproportionality as a complex, multifaceted problem that requires systemic change in order to improve inequalities (Sullivan, Artiles & Hernandez-Saca, 2015).

Disproportionality is defined by a group's over- or underrepresentation in an educational category, program, or service in comparison with the group's proportion in the overall population (Voulgarides, Fergus & Thorius, 2017). To be more specific, the term refers to the ratio between the percentage of persons in a particular racial or ethnic group experiencing an event compared to the percentage of the same racial or ethnic group in the overall population (Fong, McRoy, Dettlaff, 2005). This ratio could suggest underrepresentation or overrepresentation of a population experiencing a particular occurrence. According to Merriam-Webster, overrepresentation refers to a group or groups represented in a proportion higher than the average.

The United States, as a whole, is experiencing large demographic shifts, including cultural, racial and linguistic changes. Over the span of three decades, between 1980 and 2009,

Running Head: DISPROPORTIONALITY...WHAT DOES THE FUTURE HOLD?

the U.S. white population has declined from 80% to 66% (Voulgarides, Fergus & Thorius, 2017). However, the percentage of “minority” students (including but not limited to) Hispanic American, African American, Asian American, and Native American) in public schools increased from 32% to 45% (Ford, 2012). This trend is expected to continue, with these four groups soon becoming the numerical majority nationally, as is already the case in many school districts. While the country’s racial demographics continue to shift and diversify, education research has repeatedly documented achievement differences associated with race, wealth and income levels, linguistic and ethnic differences, gender, and lack of educational opportunity associated with the increasing segregation of students of color in America’s schools. Race, gender, language status, and other social indicators of difference consistently distinguish students and directly influence academic success and achievement. As the United States continues to diversify, research in education continues to show “*who* a student is matters more for their educational attainment than *how* a student performs in school.” (Voulgarides, Fergus & Thorius, 2017)

The issue of racial disproportionality in special education has been documented for over 40 years in education research despite the advances in policies and practices. Students from culturally and linguistically diverse (CLD) backgrounds comprise a majority of the students served within the categories of emotional and behavioral disorders, learning disabilities (LD), intellectual disabilities, and speech and language impairments. Specifically, the students most affected by disproportionality tend to be low-income, African American, and American Indian (including Alaska Native) youth with disabilities.

Running Head: DISPROPORTIONALITY...WHAT DOES THE FUTURE HOLD?

The Individuals with Disabilities Education Act (IDEA) is a civil rights law based on the 14th Amendment, ensuring equal treatment of all U.S. citizens by providing equal educational opportunities to students with disabilities through free and appropriate public education. IDEA was created to address and repair historical inequities associated with the education of students with disabilities in American schools and has governed how students with disabilities should be educated for nearly four decades. (Voulgarides, Fergus & Thorius, 2017) Despite the fact that research identified disproportionality in special education in the 1960s, it was not until the reauthorization of IDEA in 1997 that disproportionality was even mentioned in the law. This amendment established a specific policy approach for identifying disproportionality in special education. The language included attention to data collection surrounding disproportionality. However, as many researchers would argue, the regulations and guidance did not provide sufficient direction as to how or what it meant to collect this data. Therefore, data amongst states was inconsistent. Among 29 states that created criteria for measuring and collecting disproportionality data, 26 utilized one criteria while the other three focused on multiple criteria. Due to the variations of data collection methods and criteria, the Office of Special Education Programs (OSEP) provided further guidance and support in the 1999 Federal Register and asked that in addition to collecting data on disproportionality patterns, states were now required to review policies, practices, and procedures associated with IDEA implementation. (Voulgarides, Fergus & Thorius, 2017)

The reauthorization of IDEA in 2004 provided further restructuring to the educational policy approach for addressing disproportionality. The 2004 guidance gave attention to the least restrictive environment and discipline and included recognition that African American students

Running Head: DISPROPORTIONALITY...WHAT DOES THE FUTURE HOLD?

had continued to be overrepresented in specific settings within special education. It also allowed for states to discontinue the use of an IQ-Achievement discrepancy formula for identifying students with Learning Disabilities (LD) and permitted the use of response to intervention (RTI) criteria as part of the special education identification process. (Artiles, Duran, Harry, Klingner, Kozleski, Riley, Tate, & Zion, 2005) OSEP recognized disproportionality was widespread which led the reauthorization to include guidance for states to monitor disproportionality, to describe the formula used for identifying disproportionate districts, to require districts found with “significant disproportionality” to set aside 15% of IDEA funds for coordinated early intervention services, and require school districts to be held accountable and publicly report on the revision of policies, practices and procedures. (Voulgarides, Fergus & Thorius, 2017) Significant disproportionality is identified around the overrepresentation in special education and a specific disability, overrepresentation in special education placements and the duration, intensity, frequency and type of suspensions in special education.

There are two provisions related to the monitoring and guidance of disproportionality. The first involves the identification of disproportionality with performance indicators. States have to monitor special education results through 20 qualitative and quantifiable indicators, known as State Performance Plan indicators. Three of the indicators focus on disproportionality: Indicator 9 (disproportionate representation of racial and ethnic groups in special education and related services that is the result of inappropriate identification), Indicator 10 (disproportionate representation of racial and ethnic groups in specific disability categories as the result of inappropriate identification), and Indicator 4 (discrepancies in the rates of long-term suspensions of students with disabilities compared to districts in a state versus long-term suspensions based

Running Head: DISPROPORTIONALITY...WHAT DOES THE FUTURE HOLD?

on race and ethnicity compared with districts in a state due to inappropriate policies, procedures, or practices).

OSEP requires that all states set a numerical threshold to identify significant disproportionality in school districts. However, due to the fact that each state has its own threshold and way to identify disproportionality, the process is overwrought with inconsistencies. Despite the overabundant procedural protections in IDEA, minority students are still being disproportionately excluded from school or overly identified in special education programs. Losen, Hodson, Ee & Martinez (2014) argue that if schools were adequately meeting the legal requirements of IDEA and effectively serving students under IDEA, then minority students would not be disproportionately excluded or over-represented. A.J. Artiles uncovered a paradox embedded in the connections between disproportionality and IDEA legislations (2011) as he stated,

“An interesting paradox arises with the racialization of disabilities [because the] civil rights response for one group of individuals (i.e. learners with disabilities) has become a potential source of inequities for another group (i.e. racial minority students), despite their shared histories of struggle for equity. (p.431)”

1.2 Author's beliefs and experience

My interest in the research of disproportionality of minority students in special education began in my high school years. As a Hispanic woman born and raised in the inner cities of New York and New Jersey, I was engulfed in strong Hispanic culture and surrounded by people of all different nationalities and socioeconomic backgrounds. Although my brother and I were raised

Running Head: DISPROPORTIONALITY...WHAT DOES THE FUTURE HOLD?

by a single mother, she would never settle with regard to education. She demanded the best education money could buy, therefore managing a second job in order to place my brother and I in private schools. The majority of students in my school were white/Caucasian with very strong influences of Irish, Polish and Italian. In my graduating class of 52, I was one of two Hispanic students and one of five minority students. It was at this school that I began to notice and understand the differences in treatment and expectations placed on white/Caucasian students versus minority students. In one incident, during a college preparation session with my school counselor, she looked at where I was ranked amongst my class and stated aloud, "There must be some mistake." To my surprise [and hers], it was soon revealed that I was ranked 5th in the class. As one could imagine, the feeling of hurt and frustration set in as I realized that not everyone believed that I could succeed in the ways my non-minority classmates could. My mother scheduled a meeting to discuss the situation and the counselor apologized for her highly offensive and inappropriate remarks. From that point forward, my eyes were opened to the reality of how vastly divergent the perspectives are amongst even the closest of neighbors.

Growing up with families of very low socioeconomic backgrounds and those considered middle class, I had a great understanding of some of the struggles it took families to make ends meet and stay together. After my high school experiences and into college, I went on to experience a few more personal incidences of racial inequality, and witnessed these inequalities be subjected to innocent children and families in the public-school setting. Through my research and experience, it is clear that the majority of students in inner-city communities are minorities who come from poor or low income homes. This systemic economic and racial separation looms as a huge obstacle for efforts to make a quality education available to all students. The research

Running Head: DISPROPORTIONALITY...WHAT DOES THE FUTURE HOLD?

shows that students from these low-income homes do not attend school as consistently as peers who are not for a variety of reasons. Some of these may include a student's need to obtain a job to help their families make ends meet, caring for younger children in the house, language and cultural barriers that make it difficult for students to be understood or heard, drug/alcohol addiction in the household, the embarrassment of going to school day after day in the same clothes or not wanting to appear unintelligent for not being able to complete the assigned homework because their family's electricity was turned off for their inability to pay the bill and they had no lights. The list goes on. As the cycle continues, these students face larger and larger academic and achievement gaps. It is at this point and occasionally preceding this point that special education services and supports are called in to play and the Individualized Education Plan (IEP) process is underway.

In my current position as an elementary special education teacher in a self-contained, cross-categorical classroom, I am also faced with challenging situations of which I am on the receiving end. Upon receiving any student, they have all joined my class with a valid IEP and current Evaluation Summary and Eligibility Report (ESER). However, throughout the last few years in this position and a similar position to this, teachers and administrators have tried to place students in my class because they "didn't belong" in the general education classroom. Whether the reasoning was behavior, cognitive functioning or academics and actually valid, a majority of the students I was receiving and continue to receive are minority students (i.e. Alaska Native, African American, Polynesian, Asian American).

The research and statistics have been proven over and over again, showing the disproportionate numbers of minority students in special education and the reasoning behind it.

Running Head: DISPROPORTIONALITY...WHAT DOES THE FUTURE HOLD?

The data is required from all states and is available on the Department of Education website.

However, I am less interested in the specific numerical data.

With this meta-synthesis, I hope to investigate the following research areas and questions:

1. What will educators, administrators and school districts do with the information once collected?
2. How will exposing these numbers help improve our nation's disproportionality?
3. What are the researched remedies for disproportionality?

4. Can we utilize the data to evaluate our own teaching practices and methods to ensure we are teaching to meet our students' needs and not to fit a predefined mold that we are told to adhere to?

1.3. Purpose of this meta-synthesis

This meta-synthesis, which focused on the disproportionality of minority students in special education, had multiple purposes. One purpose was to review journal articles related to the implementation of laws (IDEA) meant to provide equal educational opportunities to students with disabilities through free and appropriate public education. A second purpose was to review journal articles related to the improvement of disproportionality, specifically the Response to Intervention (RTI) framework to address possible strategies to correct the systemic problem of disproportionality and social injustice in special education. A third purpose was to evaluate the intended and unintended consequences of RTI. A fourth purpose was to classify each article by publication type, to identify the research design, participants, and data sources of each research study, and to summarize the findings of each study. My final purpose in conducting this

Running Head: DISPROPORTIONALITY...WHAT DOES THE FUTURE HOLD?

meta-synthesis was to identify significant themes in these articles, and to connect those themes to my own practices and classroom experience in teaching culturally and linguistically diverse students with special needs.

2. Methods

2.1. Selection criteria

The 34 journal articles included in this meta-synthesis met the following selection criteria:

1. The articles explored issues related to the disproportionality of minorities in special education.
2. The articles explored issues related to response to intervention (RTI) and possible solutions with regard to the misrepresentation of minority students in special education.
3. The articles explored issues related to the advancement of social justice for minority students in the school system.
4. The articles were published in peer reviewed journals related to the field of education.
5. The articles were published between 1997 and 2018.

2.2. Search procedures

Database searches, Google Scholar searches and ancestral searches were conducted in order to locate articles and journals for this meta-synthesis.

2.2.1 Database searches

I conducted University of Alaska Library (UAS Library) searches within the Educational Resources Information Center (ERIC, Ebscohost) using these specific search terms:

Running Head: DISPROPORTIONALITY...WHAT DOES THE FUTURE HOLD?

1. (“disproportionality why”)
2. (“disproportionality what now”)
3. (“equity in special education”)
4. (“minority students in special and gifted education”)
5. (“minorities in special education Alaska”)
6. (“disproportionality Alaska”)
7. (“response to intervention disproportionality”)
8. (“response to intervention special education”)
9. (“social justice special education”)

These database searches yielded a total of 31 articles (Adams, Brockmeier, Enrique & Hilgert, 2013; Adelman & Taylor, 2018; Al-Zoubi, & Bani Abdel Rahman, 2017; Armendariz & Jung, 2016; Artiles & Zamora-Duran, 1997; Bartholomew, Gray, & McKinney, 2010; Cartledge, Kea, Watson & Oif, 2016; Castro-Villarreal, Villarreal, & Sullivan, 2015; Coutinho & Oswald, 1998; Darrow & Adamek, 2017; Fenton, Ocasio-Stoutenburg & Harry, 2017; Fong, McRoy & Dettlaff, 2014; Ford, 2012; Gates, Fischetti & Moody, 2013; Klingner, Artiles, Kozleski, Harry, Zion, Tate, Duran & Riley, 2005; Liasidou & Symeou, 2018; McKinney & Snead, 2017; Mente, Nieuwenhuizen & Hvidston, 2016; Monroe, 2005; Morgan, Farkas, Cook, Strassfeld, Hillemeier, Pun, & Schussler, 2018; O’Connor, Bocian, Beach, Sanchez, & Flynn, 2013; Office of Special Education and Rehabilitative Services, 2016; Office of Special Programs & Westat, 2011; Pilla, 1999; Poon-McBrayer, 2018; Popov, Wolhuter, Ermenc, Hilton, Ogunleye, Niemczyk, & Bulgarian Comparative Education Society, 2015; Sciuchetti, 2017; Sullivan, Artiles &

Running Head: DISPROPORTIONALITY...WHAT DOES THE FUTURE HOLD?

Hernandez-Saca, 2015; Voulgarides, Fergus & Thorius, 2017; Yavuz, 2016; Zhang & Katsiyannis, 2002).

2.2.2 *Ancestral searches*

An ancestral search involves reviewing the reference lists of previously published works to locate literature relevant to one's topic of interest (Welch, Brownell, & Sheridan, 1999). I conducted ancestral searches using the reference lists of the previously retrieved articles. These ancestral searches yielded three additional articles that met the selection criteria (Gere, Buehler, Dallavis, & Haviland, 2009; Losen, Hodson, Ee & Martinez, 2014; Orfield, 2017).

2.3. *Coding procedures*

I used a coding form to categorize the information presented in each of the 34 articles. This coding form was based on: (a) publication type; (b) research design; (c) participants; (d) data sources; and (e) findings of the studies.

2.3.1 *Publication Types*

Each journal article was evaluated and classified according to publication type (e.g. research study, theoretical work, descriptive work, opinion piece/position paper, and guide). *Research studies* use a formal research design to gather and/or analyze quantitative and/or qualitative data. *Theoretical works* use existing literature to analyze, expand, or further define a specific philosophical and/or theoretical assumption. *Descriptive works* describe phenomena and experiences, but do not disclose particular methods for attaining data. *Opinion pieces/position papers* explain, justify, or recommend a particular course of action based on the author's opinions and/or beliefs. *Guides* give instructions or advice explaining how practitioners might implement a particular agenda. *Evaluative works* are based on or related to an assessment to form

Running Head: DISPROPORTIONALITY...WHAT DOES THE FUTURE HOLD?

an idea of the value of something. *Periodicals* are pieces that are published at regular intervals.

An *annotated bibliography* is a list of cited works on a particular topic, followed by a descriptive paragraph describing, evaluating, or critiquing the source. *Reviews of the literature* critically analyze the published literature on a topic through summary, classification, and comparison.

2.3.2 *Research design*

Each experiential study on disproportionality in special education was further classified by research design (i.e., quantitative, qualitative, mixed methods research). *Quantitative* research utilizes numbers to convey information. Rather than numbers, *qualitative* research uses language to explore issues and outcomes of a given study. *Mixed methods* research involves the use of both quantitative and qualitative methods to present information within a single study.

2.3.3 *Participants, data sources, and findings*

I identified the participants in each study (e.g., general education students, special education students, administrators, general education teachers, special education teachers). I also identified the data sources used in each study (e.g., observations, surveys, interviews, additional article studies). Lastly, I summarized the finding of each study (Table 2).

2.4. *Data analysis*

I used a modified version of the Stevick-Colaizzi-Keen method previously employed by Duke (2011) and Duke and Ward (2009) to analyze the 34 articles included in this meta-synthesis. Significant statements were first identified within each article. For the purpose of this meta-synthesis, the following statements were identified as significant statements that addressed issues related to: (a) over- vs. under- representation; (b) laws and policies; (c) perpetuating factors and effects of disproportionality; (d) improving disproportionality; (e)

Running Head: DISPROPORTIONALITY...WHAT DOES THE FUTURE HOLD?

Response to Intervention (RTI). I then generated a list of non-repetitive, significant statements with paraphrased formulated meanings. These paraphrased formulated meanings represent my interpretation of each significant statement. Lastly, the formulated meanings from all 34 articles were grouped into theme clusters, represented as emergent themes as seen in Table 3. These emergent themes represented the fundamental elements of the entire body of literature.

3. Results

3.1. Publication Type

I located 34 articles that met my selection criteria. The publication type of each article is located in Table 1. Fifteen of the 34 articles (44.1%) included in this meta-synthesis were research studies (Adams, Brockmeier, Enrique & Hilgert, 2013; Al-Zoubi, & Bani Abdel Rahman, 2017; Armendariz & Jung, 2016; Cartledge, Kea, Watson & Oif, 2016; Gates, Fischetti & Moody, 2013; Gere, Buehler, Dallavis, & Haviland, 2009; Losen, Hodson, Ee & Martinez, 2014; McKinney & Snead, 2017; Mette, Nieuwenhuizen & Hvidston, 2016; Morgan, Farkas, Cook, Strassfeld, Hillemeier, Pun, Wang & Schussler, 2018; O'Connor, Bocian, Beach, Sanchez, & Flynn, 2013; Office of Special Education and Rehabilitative Services, 2016; Voulgarides, Fergus & Thorius, 2017; Yavuz, 2016; Zhang & Katsiyannis, 2002). Two of the articles (6.0%) were guides (Artiles & Zamora-Duran, 1997; Office of Special Programs & Westat, 2011). Ten of the articles (29.4%) were descriptive works (Adelman & Taylor, 2018; Bartholomew, Gray, & McKinney, 2010; Coutinho & Oswald, 1998; Darrow & Adamek, 2017; Fong, McRoy & Dettlaff, 2014; Ford, 2012; Klingner, Artiles, Kozleski, Harry, Zion, Tate, Duran & Riley, 2005; Monroe, 2005; Pilla, 1999; Sullivan, Artiles & Hernandez-Saca, 2015). Six of the articles (17.6%) were evaluative works (Castro-Villarreal, Villarreal, & Sullivan, 2015; Fenton,

Running Head: DISPROPORTIONALITY...WHAT DOES THE FUTURE HOLD?

Ocasio-Stoutenburg & Harry, 2017; Liasidou & Symeou, 2018; Orfield, 2017; Poon-McBrayer, 2018; Sciuchetti, 2017). One of the articles (2.9%) was a theoretical work (Popov, Wolhuter, Ermenc, Hilton, Ogunleye, Niemczyk, & Bulgarian Comparative Education Society, 2015).

Table 1

Author(s) & Year of Publication	Publication Type
Adams, Brockmeier, Enrique & Hilgert, 2013	Research Study
Adelman & Taylor, 2018	Descriptive Work
Al-Zoubi, & Bani Abdel Rahman, 2017	Research Study
Armendariz & Jung, 2016	Research Study
Artiles & Zamora-Duran, 1997	Guide
Bartholomew, Gray, & McKinney, 2010	Descriptive Work
Cartledge, Kea, Watson & Oif, 2016	Research Study
Castro-Villarreal, Villarreal, & Sullivan, 2015	Evaluative Work
Coutinho & Oswald, 1998	Descriptive Work
Darrow & Adamek, 2017	Descriptive Work
Fenton, Ocasio-Stoutenburg & Harry, 2017	Evaluative Work
Fong, McRoy & Dettlaff, 2014	Descriptive Work
Ford, 2012	Descriptive Work
Gates, Fischetti & Moody, 2013	Research Study
Gere, Buehler, Dallavis, & Haviland, 2009	Research Study
Klingner, Artiles, Kozleski, Harry, Zion, Tate, Duran & Riley, 2005	Descriptive Work
Liasidou & Symeou, 2018	Evaluative Work
Losen, Hodson, Ee & Martinez, 2014	Research Study
McKinney & Snead, 2017	Research Study
Mette, Nieuwenhuizen & Hvidston, 2016	Research Study
Monroe, 2005	Descriptive Work

Running Head: DISPROPORTIONALITY...WHAT DOES THE FUTURE HOLD?

Morgan, Farkas, Cook, Strassfeld, Hillemeier, Pun, Wang & Schussler, 2018	Research Study
O'Connor, Bocian, Beach, Sanchez, & Flynn, 2013	Research Study
Office of Special Education and Rehabilitative Services, 2016	Research Study
Office of Special Programs & Westat, 2011	Guide
Orfield, 2017	Evaluative Work
Pilla, 1999	Descriptive Work
Poon-McBrayer, 2018	Evaluative Work
Popov, Wolhuter, Ermenc, Hilton, Ogunleye, Niemczyk, & Bulgarian Comparative Education Society, 2015	Theoretical Works
Sciuchetti, 2017	Evaluative Work
Sullivan, Artiles & Hernandez-Saca, 2015	Descriptive Work
Voulgarides, Fergus & Thorius, 2017	Research Study
Yavuz, 2016	Research Study
Zhang & Katsiyannis, 2002	Research Study

3.2. Research design, participants, data sources, and findings of the studies

As stated previously, I located 15 research studies that met my selection criteria (Adams, Brockmeier, Enrique & Hilgert, 2013; Al-Zoubi, & Bani Abdel Rahman, 2017; Armendariz & Jung, 2016; Cartledge, Kea, Watson & Oif, 2016; O'Connor, Bocian, Beach, Sanchez, & Flynn, 2013; Gates, Fischetti & Moody, 2013; Gere, Buehler, Dallavis, & Haviland, 2009; Losen, Hodson, Ee & Martinez, 2014; McKinney & Snead, 2017; Mette, Nieuwenhuizen & Hvidston, 2016; Morgan, Farkas, Cook, Strassfeld, Hillemeier, Pun, Wang & Schussler, 2018; Office of Special Education and Rehabilitative Services, 2016; Voulgarides, Fergus & Thorius, 2017;

Running Head: DISPROPORTIONALITY...WHAT DOES THE FUTURE HOLD?

Yavuz, 2016; Zhang & Katsiyannis, 2002). The research design, participants, data sources, and findings of each of these studies are identified in Table 2.

Table 2

Authors	Research Design	Participants	Data Sources	Findings
Adams, Brockmeier, Enrique & Hilgert, 2013	Quantitative	All African American students, ages 6-21, receiving special education services in GA school districts (not including schools with less than 20 African American students or school districts with more than 75% African American enrollment)	Georgia Department of Education (GADOE); Friedman's analysis of variance (ANOVA); Wilcoxon signed rant test; Bonferroni correction	A small increase in the weighted disproportionality risk ratio for African American students occurred when looking at disability categories collectively. African American students with a specific learning disability (SLD) had increased risk ratios. African American students with emotional behavior disorders and intellectual disabilities (ID) show no increase in risk ratios. African American students with SLD showed an increased risk for referral and placement in special education after RTI was introduced.
Al-Zoubi, & Bani Abdel Rahman, 2017	Mixed Methods	408 administrators and employees working in 24 Special Education Centers (SECs) affiliated with the Jordanian Ministry of Social	Survey; Likert Scale; Cronbach's Alpha formula	SECs play a big role in promoting social empowerment, which is a key factor in the fight for social justice in education. Improving the quality of life of individuals with ID contributes to the achievement of social empowerment and

Running Head: DISPROPORTIONALITY...WHAT DOES THE FUTURE HOLD?

		Development (JMSD)		inclusion of those with ID. Both governmental and non-governmental institutions should highlight social rights of individuals with ID. National and international legislation regarding social empowerment should be enacted.
Armendariz & Jung, 2016	Quantitative	160 general education (GE) teachers; 119 special education (SPED) teachers (23 males, 256 females in total)	Surveys; Assessment Rating Profile-Revised (ARP-R); 6-point Likert scale	Overall, both GE and SPED educators endorsed the use of the Response to Intervention (RTI) over the Severe Discrepancy (SD) model in identifying student learning problems. Both believed RTI was beneficial for a child. GE teachers showed significant preference to the RTI model. RTI appears to be the more accepted model for the determination of an SLD.
Cartledge, Kea, Watson & Oif, 2016	Qualitative	692 students between grades PreK-3 and culturally and linguistically diverse (CLD) students	Article searches to include the following criteria: published in a peer-reviewed journal between 2005-2015; reading intervention incorporated within the RTI framework; students between grades	This review indicated that the Tier 2/3 interventions reported positive effects for CLD learners but the interventions were not positioned in RTI schools. There is lack of evidence that current special education programs are advantageous for CLD children, particularly this in high incidence categories. Rigorous, Culturally Responsive Pedagogy (CRP)/RTI scientific interventions

Running Head: DISPROPORTIONALITY...WHAT DOES THE FUTURE HOLD?

			PreK-3; and CLD students *10 reviewed articles found	appeared to show promise. Instead of pushing to reduce disproportionality, policymakers need to multiply their efforts (i.e. funding and service centers) to increase resources and professionalism needed to equip CLD students with appropriate, multi-tiered schools.
Gates, Fischetti & Moody, 2013	Mixed Methods	Phase one: 32 elementary resource teachers in 1 school district in southeastern North Carolina Phase two: 6 of the 32 elementary resource teachers in the same North Carolina school district	Surveys (<i>Perceptions of RTI Skills</i>); interviews (<i>Special Education Teacher Roles in Implementing and Monitoring RTI</i>); observations	The implementation of RTI is a collaborative effort from both special education and general education teachers. Special education teachers increased their presence and provided instruction in general education classrooms more often as a result of RTI. Administrator influence is essential and it is recommended that administrator preparation programs prepare school leaders with the knowledge, skills and dispositions for RTI implementation.
Gere, Buehler, Dallavis, & Haviland, 2009	Qualitative	12 White students and 3 students of color during the winter 2006 Teachers for Tomorrow program(TFT)	Journals; interviews; essays	Race has proven to be influential on both students and instructors in teacher education. The relationship between raced consciousness and cultural responsiveness helps clarify issues surrounding cultural competence, social justice, and academic achievement. Instructors

Running Head: DISPROPORTIONALITY...WHAT DOES THE FUTURE HOLD?

				need to recognize how their own raced consciousness (as well as students') shapes the creation of curriculum and assignments, responses to assignments and stereotypes that may come about when new teachers look to exhibit cultural responsiveness.
Losen, Hodson, Ee & Martinez, 2014	Quantitative	Students from 72,168 schools, nearly 7,000 school districts in every state	2009-2010 Civil Rights Data Collection (CRDC) survey	At the elementary school level, a 1-point increase in Black students' identification as having emotional disturbance predicted a 2.3% increase in the suspension rate for all Black students. The research also indicated the over-identification of Black students in special education and rates of suspension are, in part, contributed to their exposure to inexperienced teachers.
McKinney & Snead, 2017	Qualitative	87 teachers from 8 different Tennessee elementary schools	Survey; Stages of Concern Questionnaire (utilizing the Likert scale)	Among educators, the level and efficacy of implementation within Tennessee's RTI differ depending on faculty position (general education, special education, counselor, tutor, etc.), teacher effect data, and teacher effectiveness rank. The data also explains that when a new program is implemented, each individual progresses at their own pace depending on personal experiences

Running Head: DISPROPORTIONALITY...WHAT DOES THE FUTURE HOLD?

				and understanding of the program. Therefore, ongoing professional development and training for RTI would be crucial for utilizing the program to fidelity.
Mette, Nieuwenhuizen & Hvidston, 2016	Mixed Methods	73 high school teachers (20 males, 52 females, 1 unidentified)	Surveys	With regard to Culturally Responsive Pedagogy (CRP), teachers agreed that CRP professional development helped examine views on poverty, but did not help close the achievement gap. Elective and special education teachers were more positive than general education teachers of the impact of culturally responsive pedagogy and how the professional development impacted building faculty instruction. Teachers reported success of the CRP professional development by acknowledging cultural differences but reported challenges of the same efforts due to lack of time and implementation apathy.
Morgan, Farkas, Cook, Strassfeld, Hillemeier, Pun, Wang & Schussler, 2018	Mixed Methods	22 studies (met 6 specific criteria)	Slavin's Best-evidence synthesis	Although well intentioned, the federal policies designed to reduce minority over-representation due to racial or ethnic bias may actually be exacerbating inequities in education by limiting access to special education services and

Running Head: DISPROPORTIONALITY...WHAT DOES THE FUTURE HOLD?

				IDEA's legal protections. The finding suggests, though, there is a need to intensify the use of culturally and language-sensitive disability screening and evaluation procedures to ensure that the disability procedures are not inequitably responsive to White, English speaking children and families.
O'Connor, Bocian, Beach, Sanchez, & Flynn, 2013	Qualitative	381 elementary aged students one year prior to RTI implementation; 377 elementary aged students in the RTI environment	Peabody Picture Vocabulary Test; Test of Oral Language Development; DIBELS subtests Oral Reading Fluency and Word Identification Fluency; Woodcock Reading Mastery test; Gray Oral Reading Test	In the study, more students were identified with LD in Grades 3-5 than in K-2 but no students with OHI were identified later than kindergarten in the RTI cohort. As teachers and school psychologists became more adept at differentiating instruction across tiers, student responsiveness to the interventions they implemented had improved, thus decreasing special education referrals and placements. The data supports the idea that the implementation of an RTI model reduced disproportionate representation.
Office of Special Education and Rehabilitative Services, 2016	Quantitative	All school districts in all 50 states and the District of Colombia (2011-2014)	Data drawn from EdFacts Data Warehouse from June 25-26, 2015	In compliance with IDEA, the US Department of Education requires all states, including the District of Colombia, to use a standard methodology to

Running Head: DISPROPORTIONALITY...WHAT DOES THE FUTURE HOLD?

				<p>identify significant disproportionality. The tables in this article show the number and percentage of school districts (in each state) that would be identified with significant disproportionality by race/ethnicity, disability, percentage of time spent in the general education classroom, separate setting, suspensions/expulsions of ten days of less/more, and removals from the classroom in general.</p>
<p>Voulgarides, Fergus & Thorius, 2017</p>	<p>Qualitative</p>	<p>Review of descriptive, explanatory, and theoretical studies</p>	<p>Journals; articles</p>	<p>Studies indicate that practice-based and socioeconomic factors are two very prominent sources of disproportionality and they suggest nuanced patterns of racism and other forms of bias. The research also identifies Multi-tiered Systems of Support (MTSS), Response to Intervention (RTI) and Positive Behavior and Intervention Supports (PBIS) as individual solutions for a systemic issue. In order to disrupt disproportionate outcomes and address deep-seeded and systemic special education disproportionality, researchers and specialists should</p>

Running Head: DISPROPORTIONALITY...WHAT DOES THE FUTURE HOLD?

				actively engage with the effects of culture, context, and differences in practice.
Yavuz, 2016	Quantitative	171 students from an urban school (90% of students are enrolled in the free and reduced lunch program)	Surveys; field of tests	The findings highlight the ideas that when highly trained educational leaders and professional school counselors provide all-inclusive intervention programs, like College Readiness Access and Success Program (CRASP), underprivileged urban students experience measurable benefits in college access. School leaders should set high expectations and provide ongoing support and guidance for every educator. More specifically, the data suggests that the presence of CRASP at this particular urban school helped significantly more students enter post-secondary education.
Zhang & Katsiyannis, 2002	Quantitative	All school districts in all 50 states and the District of Columbia (1998-1999) for students from the age group of 6-21 years.	Data drawn from 22 nd Annual Report to Congress on the Implementation of the Individuals with Disabilities Education Act (2000),	On average, across all states and for all disabilities (Emotional Behavior Disturbance, Learning Disabilities and Mental Retardation), the data shows that African American and American Indian/Alaskan students were overrepresented in all categories, whereas Hispanic and

			National Center for Education Statistics: Statistics in Brief (2000), and Poverty in the United States (1999)	Asian/Pacific Islander students were underrepresented in these categories. African Americans had the highest representation of all groups in the category of mental retardation.
--	--	--	---	--

3.2.1 Research design

Six of the 15 studies (40%) used a quantitative research design (Adams, Brockmeier, Enrique & Hilgert, 2013; Armendariz & Jung, 2016; Losen, Hodson, Ee & Martinez, 2014; Office of Special Education and Rehabilitative Services, 2016; Yavuz, 2016; Zhang & Katsiyannis, 2002). Five of the studies (33.3%) utilized a qualitative research design (Cartledge, Kea, Watson & Oif, 2016; Gere, Buehler, Dallavis, & Haviland, 2009; McKinney & Snead, 2017; O'Connor, Bocian, Beach, Sanchez, & Flynn, 2013; Voulgarides, Fergus & Thorius, 2017). Four of the studies (26.6%) used a mixed methods research design (Al-Zoubi, & Bani Abdel Rahman, 2017; Gates, Fischetti & Moody, 2013; Mette, Nieuwenhuizen & Hvidston, 2016; Morgan, Farkas, Cook, Strassfeld, Hillemeier, Pun, Wang & Schussler, 2018).

3.2.2 Participants and data sources

The majority of the 15 research studies included in this meta-synthesis analyzed data from elementary and high school students with and without disabilities as well as school administrators, general educators and special education professionals. Seven of the studies (46.6%) analyzed data collected from elementary and high school students with and without disabilities (Adams, Brockmeier, Enrique & Hilgert, 2013; Cartledge, Kea, Watson & Oif, 2016;

Running Head: DISPROPORTIONALITY...WHAT DOES THE FUTURE HOLD?

Gere, Buehler, Dallavis, & Haviland, 2009; Losen, Hodson, Ee & Martinez, 2014; O'Connor, Bocian, Beach, Sanchez, & Flynn, 2013; Yavuz, 2016; Zhang & Katsiyannis, 2002). Five of the studies (33.3%) analyzed data from administrators, general education and special education professionals (Al-Zoubi, & Bani Abdel Rahman, 2017; Armendariz & Jung, 2016; Gates, Fischetti & Moody, 2013; McKinney & Snead, 2017; Mette, Nieuwenhuizen & Hvidston, 2016).

Surveys, database analyses and article reviews/analyses provided the main data sources used in the research studies. Seven of the studies (46.6%) used surveys to collect data from participants (Al-Zoubi, & Bani Abdel Rahman, 2017; Armendariz & Jung, 2016; Gates, Fischetti & Moody, 2013; Losen, Hodson, Ee & Martinez, 2014; McKinney & Snead, 2017; Mette, Nieuwenhuizen & Hvidston, 2016; Yavuz, 2016). Four of the studies (26.6%) used article reviews/analyses to collect data (Cartledge, Kea, Watson & Oif, 2016; Gere, Buehler, Dallavis, & Haviland, 2009; Morgan, Farkas, Cook, Strassfeld, Hillemeier, Pun, Wang & Schussler, 2018; Voulgarides, Fergus & Thorius, 2017). Other data sources were also used in the research studies, including database analyses, interviews and evaluative assessment measures.

3.2.3 Findings of the studies

The findings of the 15 research studies included in this meta-synthesis can be summarized as follows.

1. According to the federal implementation of IDEA, each state is required to collect, examine and report data to determine if disproportionality is, in fact, a concern as well as the review of its (the states') policies, practices and procedures associated with IDEA implementation. The data shows that minority (i.e. African American, Native American, Hispanic) students are often misidentified or over-identified for special education placements,

Running Head: DISPROPORTIONALITY...WHAT DOES THE FUTURE HOLD?

especially in the following categories: Specific Learning Disability (SLD), Intellectual Disability (ID), and Emotional Disturbance (ED).

2. Some of the prominent foundations of disproportionality are practice-based and socioeconomic factors. In order to help rectify or reduce the systemic issue of disproportionality, three individual solutions were identified: Multi-tiered Systems of Support (MTSS), Response to Intervention (RTI) and Positive Behavior and Intervention Supports (PBIS). However, in order to implement the solutions at a school level, all team members (i.e. general educators, special education professionals, administrators) need to be receptive of the effects of culture, context, and differences in practice.

3. General educators and special education professionals have had differing beliefs as to their roles and responsibilities of Response to Intervention (RTI) implementation as it effects minority students and their placement in a special education program and/or provided student supports. Collaboration is required by both general educators as well as special education professionals in order for students to demonstrate maximum growth and progress and reduce the amount of special education placements of students of color. Understanding of the RTI process and implementation is essential for all team members involved.

4. Implementing evaluative measures and curricula that is culturally and linguistically responsive is shown to decrease the disproportionality of minority students in special education placements as well as create for a more culturally competent environment in which educators/specialists, administration and students understand and accept their differences and acknowledge their own cultural differences. However, the challenges pertaining to the

Running Head: DISPROPORTIONALITY...WHAT DOES THE FUTURE HOLD?

implementation of cultural and linguistic responsiveness includes lack of time and implementation apathy and training/professional development in these areas.

3.3. Emergent themes

Five themes emerged from my analysis of the 34 articles included in this meta-synthesis. These emergent themes, or theme clusters, include: (a) disproportionality: over- vs. underrepresentation, (b) laws and policies regarding disproportionality, (c) perpetuating factors and effects of disproportionality, (d) approaches and possible solutions to improve disproportionality, (e) Response to Intervention (RTI). These five theme clusters and their formulated meanings are represented in Table 3.

Table 3

Theme Clusters	Formulated Meanings
Disproportionality: Over- vs. underrepresentation	<ul style="list-style-type: none"> ● Disproportionality is defined as the overrepresentation and underrepresentation of a specific population or demographic group in special education programs relative to the presence of this group in the overall population. ● According to IDEA data from 2010-2011, about 6.4 million students between the ages of 3-21 received special education services in the United States. ● According to the Data Accountability Center report (2011), each state picks the threshold for over- and underrepresentation. ● Research demonstrates that a child's race and ethnicity are significantly related to the probability that he/she will be inappropriately identified as disabled. <p>Over-representation</p> <ul style="list-style-type: none"> ● U.S. Department of Education (2013) data indicates that Native American/Alaska Native children are the racial group with the largest percentage (16%) of students in special education, especially in high incidence disability categories (i.e. emotional and behavioral disorders, learning disabilities, intellectual disabilities, speech/language impairments). ● U.S. Department of Education (2013) data indicates that African Americans are the second largest group in special education at 15%.

	<ul style="list-style-type: none"> ● U.S. Department of Education (2013) data indicates that Hispanic students are the third highest group at 12%. ● White and Asian/Pacific Islanders comprise about three fourths of all students enrolled in gifted and talented programs, showing high overrepresentation. ● English Language Learners (ELLs) tend to become overrepresented later in the schooling process and in districts that serve large ELL populations. <p>Under-representation</p> <ul style="list-style-type: none"> ● Educators and specialists are often discouraged against referring ELL students (at the elementary level) because of the difficulty in differentiating between differences and disorders, which would then fall in line with the notion of individual, case-by-case assessment approaches and academic programming. ● Data shows that some culturally and linguistically diverse (CLD) populations (i.e. African American, Latino and Native American/Alaska Native) are underrepresented in gifted and talented programs. ● According to the U.S. Department of Education, Hispanics are under-identified within certain disability categories as compared to white peers. ● Data also shows that Asian/Pacific Islanders are less likely to be identified for special education services than other CLD populations.
Laws and policies regarding disproportionality	<ul style="list-style-type: none"> ● Public Law 94-142 (the Education for All Handicapped Children Act 1975) was passed in 1975 and required states to provide a free and appropriate public education (FAPE) to children with disabilities, including those with significant impairment caused by severe or multiple disabilities. ● In 1990, Public Law 94-142 was renamed the Individuals with Disabilities Education Act (IDEA). ● IDEA (2006) was amended in 1997 and 2004 in order to provide clarity to states regarding overrepresentation in special education and ways to monitor states for trends in disproportionality. ● The US Department of Education's "Equity in IDEA" rule expanded federal compliance monitoring requirements for the overrepresentation of minorities in special education including the use of a standard formula and limit of significant disproportionality based on race or ethnicity. ● Under IDEA, states need to identify and address any root causes of significant disproportionality, whether or not it is due to the under or overrepresentation of a racial or ethnic group. However, this mandate fails to take into account factors that

	<p>may increase the risk for disability identification, in which minority children are disproportionately more likely to face (i.e. low birth weight, exposure to harmful substances, poverty and toxic stress caused by chronic exposure to multiple risk factors).</p> <ul style="list-style-type: none"> ● IDEA allows states to utilize Response to Intervention (RTI) criteria as part of the special education identification process rather than using an IQ-Achievement formula. ● The Every Student Succeeds Act (ESSA) of 2015 makes parent and family engagement as well as community partnerships central to the academic success equation. ● Under ESSA (2015), parents and families are legally mandated to sit at the table with more input and decision-making power than before.
<p>Perpetuating factors and effects of disproportionality</p>	<p>Factors/Causes:</p> <ul style="list-style-type: none"> ● Disproportionality is believed to be a systemic issue that extends beyond and starts before intervention, identification, and placement processes. ● Arguments have been made that disproportionality should be understood in a broader context in which minorities have been seen as lesser than and more problematic as compared to white peers. This thinking then created educational policies and practices that have shown advantage to some groups while disadvantaging others. ● The following practice-based factors attribute to disproportionality: <ul style="list-style-type: none"> a. gaps in the development and implementation of interventions and referral systems; b. uneven quality of instruction and management in general education classrooms c. lack of availability of alternative programs (i.e. early intervention, bilingual education, Title 1); d. teacher beliefs and expectations of students, based on race; e. gaps in district and school level educational practices and policies; f. lack of diversity in the teaching force; g. cultural unresponsiveness and bias, including lack of evidence-based, culturally relevant curricula materials and resources; and h. lack of diversity, disability, behavior preparation and training for professionals and the intersectionality of all three ● The following sociodemographic factors attribute to disproportionality: <ul style="list-style-type: none"> a. Race; b. family structure; c. free/reduced lunch status/poverty

	<p>(This is an important contributor to educational outcomes due to its potentially harmful impact on children's adjustment and family stress. Data shows that children who grow up in a less affluent household will have less access to educational, health-related and environmental resources and technology. Therefore, children in poverty are more likely to struggle academically leading to special education referrals.)</p> <p>Effects/Implications:</p> <ul style="list-style-type: none"> ● Over identification of CLD students in special education ● Once students begin receiving special education services, they tend to remain in special education classes ● Curriculum limitations; substandard instruction ● Lower academic achievement; lower graduation rates ● Decreased participation in post-secondary education ● Decreased employment opportunities; lower wages ● Independent living challenges ● Stigmatization ● Lowered expectations ● Isolation from the educational and social curricula of general education (which may lead to significant racial separation) ● Higher probability of arrests as compared to nondisabled peers and disabled White peers
<p>Approaches and possible solutions to improve disproportionality</p>	<ul style="list-style-type: none"> ● Culturally Responsive Practice (CRP) <ol style="list-style-type: none"> a. CRP refers to effective teaching in culturally diverse classrooms. b. CRP helps teachers to learn about cultural backgrounds with the intent to use the information to design lessons which may increase students' success. c. Students and teachers experience culturally supported and student-centered instruction that focuses on the strengths of the students to promote achievement for all. d. CRP strategies include scaffolding of students' cultural knowledge, prior experiences, and learning styles to provide better access to curriculum through flexible groups, collaborative efforts with other students, and creating a classroom community that is cooperative and similar to that of a family. e. In order for a teacher to become culturally proficient, they must undergo a personal transformation through careful self-reflection of their own biases, attitudes, beliefs and beliefs about others (including race-consciousness) f. When we are race-conscious and discuss the race-based tensions that accompany attempts to engage in culturally responsive teaching, students and educators are offered an

	<p>important opportunity to examine how race shapes their thinking and why race presents the challenges it does.</p> <p>g. There is definitely a need for education preparation programs to continue to improve ways to help educators and administrators reflect on issues of race and racism, but the notion that racism is deeply embedded and reinforced, still exists. Teachers who identify as White are not always able to breakdown the idea of how public school systems favor White students.</p> <ul style="list-style-type: none"> ● Social Emotional Learning (SEL) <ul style="list-style-type: none"> a. Researchers have identified SEL as an approach to assist individuals with developing competencies in the areas of emotional and behavioral regulation and management; developing and demonstrating care and empathy; establishing and maintaining positive interpersonal relationships; practicing responsible decision making; and appropriately and effectively responding to challenging situations. b. SEL follows the principles of CRP and requires teachers to teach skills that are relevant and interesting to the student, provide culturally relevant peer models, integrate student experience into instruction and provide authentic opportunities to roleplay and apply learned skills. ● Multi-tiered Systems of academic and behavioral Support (MTSS) <ul style="list-style-type: none"> a. Positive Behavioral Interventions and Supports (PBIS) <ul style="list-style-type: none"> -PBIS is a proactive approach for addressing student behavior and is grounded in applied behavior analysis and practical approaches to behavior management. -PBIS is a multi-tiered framework that offers a range of interventions that are applied to students based on their demonstrated levels of need. -PBIS also emphasizes altering the environment and preventing inappropriate behaviors by teaching desired skills and reinforcing appropriate behavior. -PBIS was originally designed as an alternative to unresponsive interventions used with students who engaged in self-injury and aggression. -There are six key aspects of PBIS: <ol style="list-style-type: none"> 1. Behavioral supports are primary (school wide), secondary (classroom), and tertiary (individual). 2. A continuum of positive behavioral supports exists for all students within a school.
--	--

	<ol style="list-style-type: none"> 3. Students' lifestyles improve in many domains (i.e. personal, social, work, family, and recreation). 4. Problem behavior becomes less effective, efficient, and relevant for students. 5. Productive behavior becomes for functional for students. 6. Implementation occurs throughout the school (including classrooms, hallways, restrooms, etc.). <p>-PBIS can be integrated in and coordinated with RTI models to address behavioral concerns also.</p> <p>-When addressing behavior and learning, PBIS has to be supported by culturally responsive practices.</p> <p>-When implemented within early intervention services, IDEA funds can be used to support many of the PBIS activities, like social emotional training and anti-bullying programs.</p> <p>-When implemented to fidelity, data shows that disruptive and challenging behaviors that lead to high numbers of referrals, suspensions and expulsions are decreased.</p> <p>b. Response To Intervention (RTI)</p> <p>-RTI is the multi-step process of providing interventions and supports to students who struggle academically. The ... interventions are matched to students' needs, and their progress is frequently monitored.</p> <p>-RTI provides a framework that schools can deliver within early intervention services.</p> <p>-Recognizing early intervention is a key goal of the 3-tier model.</p> <p>-RTI is viewed as a process that could potentially help reduce disproportionality and improve education outcome for many minority students as well as those from low socioeconomic backgrounds.</p> <p>-The National Education Association (2007) has reported the following eight core features of the RTI process:</p> <ol style="list-style-type: none"> 1. High quality, research based instruction and support in general education 2. Universal screening of academics in order to determine which students need closer monitoring or additional interventions 3. Multiple tiers of instructional strategies that are progressively more intense and include scientific, research-based interventions matched to students' needs 4. Use of a collaborative or problem-solving approach by school staff in developing, implementing, and monitoring the intervention process
--	---

	<ol style="list-style-type: none"> 5. Continuous monitoring of student performance during interventions using objective data to determine if students are meeting goals 6. Follow-up measures assuring that interventions were implemented as intended and with appropriate consistency 7. Use of student progress monitoring data to shape instruction and make educational decisions 8. Parent involvement throughout the process <p>-With RTI, districts have the option to use the standard treatment protocol (use of research based interventions in response to academic needs, whereby student response is measured and evaluated; somewhat one-size-fits-all approach) or the problem-solving protocol (examines why student is struggling and individualizes interventions).</p> <p>-Utilizing the standard treatment protocol alone may not be able to consistently meet the diverse challenges that minorities face.</p> <p>-The problem-solving model analyzes the individual student's needs within the context of their environment, history and background. However, this model can be time consuming and staff would require extensive knowledge of evidence-based interventions.</p> <p>-Within the RTI model, research suggests that utilizing the standard treatment method and then problem-solving method if the standard intervention is ineffective would be most beneficial.</p>
--	---

4. Discussion

In this section I have summarized the emergent themes from my analysis of the 34 articles included in this meta-synthesis. These emergent themes were then connected to my own practices as a special education teacher. Narrative

4.1. Disproportionality: Over- vs. underrepresentation

Before anyone can initiate any form of change regarding the issue of disproportionality, one must truly understand what it is. Disproportionality, or disproportionate representation, as it pertains to special education, is the over- or underrepresentation of a given population in special

Running Head: DISPROPORTIONALITY...WHAT DOES THE FUTURE HOLD?

education programs as compared to their presence in the overall population. For decades, culturally and linguistically diverse (CLD) students have been improperly identified as having a disability or disabilities. Sadly, research has shown that a child's race and ethnicity have a significant impact in the probability that they may be inappropriately identified. According to federal data, Native American/Alaska Native, African American and Hispanic children comprise the largest percentage of students qualified for and receiving special education services. These percentages show an over-representation of these children in special education programs and an underrepresentation of these students in gifted and talented programs. On the other hand, White and Asian/Pacific Islanders have the largest percentage of students in the gifted and talented programs, and less likely to be identified for special education.

As a special educator in Alaska, I engage with a variety of children from many different ethnic/cultural/linguistic backgrounds daily. Whether they be students in the general education population, students who qualify for special education services/supports in a resource type of setting or students in my own self-contained classroom, I appreciate the opportunities I get to meet and engage with students who may or may not be like me. Like many general and special educators, I too had a very general understanding of what disproportionality truly is and how it manifests in our own schools and districts. After my thorough research for this meta-synthesis, I now understand what disproportionality is and what it looks like, even if in my very own classroom. Many would hate to admit it, but the disproportionate representation of CLD students (specifically the large representation of Alaska Native students) in special education occurs in our special education programs here in the school district I work for. I have personally witnessed a break-down of the multi-tiered systems my school district has in place for interventions as well

Running Head: DISPROPORTIONALITY...WHAT DOES THE FUTURE HOLD?

as the initial qualification process. With this breakdown, children are seemingly “fast-tracked” into special education programs. While I am not certain that the break-down I have observed is the direct result of disproportionality, there are concerns with the way in which general and special educators and administrators respond to students who show academic and/or behavioral needs, as well as linguistic and cultural differences. With the knowledge I have gained, I am able to recognize these particular issues and be more of an advocate for students.

4.2. Laws and policies regarding disproportionality

It is important to know and understand the laws and policies that surround special education and disproportionality specifically. With this knowledge and the foundation of fair laws and policies, educators can better serve and provide for their students, and families can better advocate for their children. In 1975 the Education for All Handicapped Children Act was passed, requiring all states to provide free and appropriate education to children with disabilities, regardless of the nature or severity of the disability. Fifteen years later in 1990, the Education for All Handicapped Children Act was renamed the Individuals with Disabilities Act (IDEA). In 1997, 2004 and again in 2006, IDEA was amended in order to provide the states with some clarity regarding overrepresentation in special education as well as ways for the states to monitor for trends in disproportionality. IDEA also mandated that every state needed to identify and address any root causes of significant disproportionality, regardless of whether or not it was due to the under or overrepresentation of a specific racial or ethnic group. However, this mandate failed to take into account the specific factors (i.e. low birth weight, exposure to harmful substances, poverty and toxic stress caused by chronic exposure to multiple risk factors) that may increase the risk for disability identification of whom minority children would be more likely to

Running Head: DISPROPORTIONALITY...WHAT DOES THE FUTURE HOLD?

possess. In response to the disproportionality data provided by each state, IDEA allowed states to utilize the multi-tiered Response to Intervention (RTI) criteria as part of the special education identification process rather than continuing to use an IQ-achievement formula. In 2015, the Every Student Succeeds Act (ESSA) was passed making parent and family engagement and community partnerships central to the academic equation. It also mandated that parents and families be given a seat at the table to provide more input and decision making power than ever before. This, in turn, should create a more cohesive and transparent relationship between family and school.

Within my position as a special educator, it is extremely important that I am aware of the laws and policies surrounding education and more specifically, special education. Our laws and policies provide the guidelines we are to follow as we initiate, continue and amend special education services for all qualifying students. Without these guidelines, the probability of educators and most importantly, students, not receiving the support and services they truly need would be significantly high. I can admit that I was not as knowledgeable about the laws and policies surrounding special education as I should have been. As an educator, I would like trust that the incumbent policies were created for the benefit of students, taking all the aspects of student diversity and needs into account. However, through my research, it is evident that some of the laws and policies put in place have given an advantage to some groups of students, but have been at a disadvantage to others. Currently, I teach a cross-categorical, self-contained class comprised of Kindergarten through sixth graders. The meaning of cross-categorical has been explained to me as a compilation of Life Skills, Extended Resource, Structured Learning and Behavioral classrooms all in one. With this being said, all of my students come to me with an

Running Head: DISPROPORTIONALITY...WHAT DOES THE FUTURE HOLD?

Individualized Education Plan (IEP), placing the responsibility of initial qualifications of students in other educators' hands. So, although my students have already been qualified for special education services, I can do what is necessary to uphold fair and just practices within my classroom for the students I serve.

4.3. Perpetuating factors and effects of disproportionality

Disproportionality is believed to be a systemic issue that starts even before the intervention, identification and placement processes. Many argue that disproportionality should be understood in a broader, more simplistic context in which minorities have been seen as lesser than and more problematic as compared to White peers. With this thinking, the educational policies and practices produced show benefits for some groups, while creating injustices for others. It is vital to learn and understand what factors contribute to this important issue of disproportionality, so we can then work towards correcting it. The research describes two general factors that attribute to disproportionality: sociodemographic and practice-based factors.

Sociodemographic factors are related to social and demographic factors, pertaining to all of the influences and effects that have occurred outside-of-school. Some of these sociodemographic factors include a child's race, their family structure, and class or status. Poverty is an important contributor to educational outcomes due to its potentially harmful impact on a child's adjustment or lack thereof and family stress. Data shows that children who grow up in a less affluent household will have less access to educational, health-related and environmental resources and technology. Therefore, children in poverty are more likely to struggle academically, which leads to more special education referrals. Practice-based factors are those that would be attributed to influences within the education system. Research describes at least eight of these factors as

Running Head: DISPROPORTIONALITY...WHAT DOES THE FUTURE HOLD?

follows: gaps in the development and implementation of interventions and referral systems; the uneven quality of instruction and classroom management in the general education setting for CLD students; the lack of availability of alternative programs like early intervention, bilingual education and Title 1; teacher beliefs and expectations of students, based on race; gaps in district and school level educational policies and practices; lack of diversity in the teaching force; cultural unresponsiveness and bias; lack of culturally relevant curricula materials and resources; and the lack of diversity, disability and behavior preparation and training for professionals.

It is also vital that we examine the implications of disproportionality so we know in what ways our students are affected as well as the possible outcomes for their futures. By becoming aware of these facts, we can help to alter the negative trajectory they may be headed towards and work to provide fair and equal services to all students. Research identified the following effects of disproportionality: curriculum limitations and substandard instruction; lower academic achievement and graduation rates; decreased participation in post-secondary education; decreased employment opportunities and lower wages; independent living challenges; stigmatization; lowered expectations; isolation from the educational and social curricula of general education potentially leading to racial separation; and a higher probability of arrests as compared to non-disabled, White peers. These potentially detrimental effects are enough cause for me to truly question and rethink my own practices to ensure all students are receiving what they need academically, behaviorally and culturally.

In my own teaching practice, I have come to really understand how sociodemographic factors have affected many students of CLD populations. There have been years in my career where I would check in with each student daily to make sure their basic needs were met. I would

Running Head: DISPROPORTIONALITY...WHAT DOES THE FUTURE HOLD?

ask students if they were warm, if they were hungry, if they were rested and how they felt to be in school. I always tried to keep spare clothes (especially socks) and snow gear, snacks and a comfortable place in the classroom where they could have some “peace and quiet”. I learned very early on that a child will not learn effectively if their needs aren’t met, they don’t feel safe or if they can’t trust the authority figure. Every year, I begin by trying to build a foundation of trust and rapport with my students, which includes getting to know each of them, who they are, what they like and dislike and what they need. This has truly helped in my ability to educate them. It is vital that all children know and feel someone is in their corner and wants the best for them. They must also know that we will continue to care for them even when they make mistakes. As a whole, the education system has not done a lot of our students much justice. As a woman and educator of color, I come to the table with a different perspective. I value the differences and similarities amongst my class and embrace what each child brings. I would, however, like to include a more diverse and culturally responsive curricula and/or resources to be inclusive of all of my students’ needs at each level. Yet, while teaching six to seven grade levels each day in one classroom, I realize that it seems a bit unrealistic, even if it is coming from a very positive and hopeful place. I believe that possibly starting slow and integrating one small resource or practice at a time, I may eventually be able to incorporate enough practices in which all students are enveloped in a beautiful melting pot of culture and respect.

4.4. Approaches and possible solutions to improve disproportionality

Disproportionality is a significant and ongoing issue that has been the cause of substantial downfalls in education. In order to help remediate disproportionate representation, federal policies and mandates have been put in place that require each state to report their own

Running Head: DISPROPORTIONALITY...WHAT DOES THE FUTURE HOLD?

significant disproportionality as well as tiered systems to confront the numerical data. However, by doing this alone, does not address the issue in entirety. The research indicates that there are various methods that can be used to help the issue. Creating a culturally responsive environment in which students and teachers experience culturally supported and student-centered instruction that focuses on student strengths promotes achievement for all involved. This method requires strategies be used to scaffold students' cultural knowledge, prior experiences, and learning styles to provide better and more useful curriculum through groups, collaboration and a cooperative, classroom community. Most importantly, within the CRP methodology, in order for a teacher to become culturally proficient, they must undergo a personal transformation through careful self-reflection of their own biases, attitudes, beliefs and beliefs about others.

Another approach discussed in the literature identified Social Emotional Learning (SEL) as a method for helping reduce some of the disproportionate representation we see in education. SEL assists individuals to develop skills in the areas of emotional and behavioral regulation and management, develop and demonstrate care and empathy, establish and maintain positive interpersonal relationships, practice responsible decision making, and appropriately and effectively respond to challenging situations. It is important to note that SEL follows the principles of CRP and requires teachers to teach skills that are relevant and interesting to the student, provide culturally relevant peer models, integrate student experience into instruction and provide authentic opportunities to roleplay and apply learned skills.

A third approach discussed and researched is the Multi-tiered Systems of academic and behavioral Support (MTSS). The MTSS model is broken down into two systems, in which one addresses behavior and the other focuses more on the academic aspect of learning. Positive

Running Head: DISPROPORTIONALITY...WHAT DOES THE FUTURE HOLD?

Behavioral Interventions and Supports (PBIS) is a proactive MTSS approach for addressing student behavior and is grounded in applied behavior analysis and practical approaches to behavior management. It is a multi-tiered framework that offers a range of interventions that are applied to students based on their demonstrated levels of need. PBIS also emphasizes altering the environment and preventing inappropriate behaviors by teaching desired skills and reinforcing appropriate behavior. There are six key aspects of PBIS that promote a continuum of supports for students. Like SEL, when addressing behavior and learning, PBIS has to be supported by culturally responsive practices. When implementing PBIS to fidelity, the data shows that disruptive and challenging behaviors that lead to high numbers of referrals, suspensions and expulsions are decreased. Response To Intervention (RTI) is the MTSS multi-step process of providing interventions and supports to students who struggle academically. The interventions provided are matched to students' needs, and their progress is frequently monitored. RTI provides a framework that schools can deliver within early intervention services as this is a key goal of the 3-tier model. RTI is viewed as a process that could potentially help reduce disproportionality and improve education outcome for many minority students as well as those from low socioeconomic backgrounds as mentioned in federal policies, like IDEA. The National Education Association (2007) has reported eight core features of the RTI process that provide a structure for implementation. With RTI, districts have the option to use the standard treatment protocol or the problem-solving protocol. The standard treatment protocol uses research based interventions in response to students' academic needs, whereby the student response is measured and evaluated. It is somewhat of a one-size-fits-all approach. Unfortunately, utilizing the standard treatment protocol alone may not be able to consistently meet the diverse challenges

Running Head: DISPROPORTIONALITY...WHAT DOES THE FUTURE HOLD?

that minorities face. The problem-solving protocol examines why a student is struggling and individualizes interventions for that particular student. This model analyzes the individual student's needs within the context of their environment, history and background. However, this model can be time consuming and staff would require extensive knowledge of evidence-based interventions. Research suggests that utilizing the standard treatment method and then problem-solving method if the standard intervention is ineffective would be most beneficial for culturally and linguistically diverse students.

Within the school district in which I teach, I am pleased to say that the SEL and MTSS are being researched, discussed and implemented to an extent. The school district has mandated that we teach the provided SEL curriculum each week. Each day, I have created time to teach an SEL lesson utilizing the curriculum provided by the district as well as supplemental resources I have purchased. This time is well spent and truly helps with creating an environment conducive to cultural respect and responsiveness and well as building a family unit within the classroom. With regard to MTSS, our district has employed the RTI system approach to helping our students academically. Teams of school psychologists, general education and special education teachers, ELL supports (when necessary), school nurses (when necessary), parents and administrators gather during a Student Support Team (SST) meeting to discuss individual students' needs, whether academic or behavior. They plan for interventions at this meeting, apply the recommended interventions within the school and then re-meet about six weeks later to discuss the outcome of the interventions used. If the interventions were successful, they will continue to be implemented until they are no longer needed. If the interventions were unsuccessful, a more intensive plan of action and interventions are discussed. However, it is at this point in which

Running Head: DISPROPORTIONALITY...WHAT DOES THE FUTURE HOLD?

some students have not been provided the more intensive interventions within the general education or resource setting and have been sent or as previously mentioned, “fast-tracked” to a more restrictive environment (like a self-contained classroom) to be provided with the help they need. A lot of times, this occurs when the classroom teacher is frustrated with the amount of time some of the interventions may take or when they will see the results they are expecting and vocalizes this frustration consistently. I am aware that many, if not all students would benefit from a smaller classroom size with a smaller student to teacher ratio, but for which students is it absolutely necessary? For students of whom these supports are necessary, they are the ones who would benefit from the more restrictive environment to make progress on the goals and objectives set, with or without an IEP.

Within my own teaching and classroom environment, I would like to build a more culturally responsive curriculum for my diverse student population and varying ability levels. I want to make sure that my students are engaged and feel included in their learning processes. Even though students come to me with an already established IEP, I feel it is my job to ensure each student [and their families] have a part in its implementation. I also believe that by utilizing a combination of the mentioned approaches (SEL and CRP) even within one classroom, student success will be more evident and student well-being will increase more than we know.

5. Conclusion

Running Head: DISPROPORTIONALITY...WHAT DOES THE FUTURE HOLD?

The findings in this meta-synthesis highlight the intricacies, factors and effects influencing disproportionality of minorities in special education as well as approaches that may help reduce it. Disproportionality is ultimately an issue of social justice. The data shows that the causes of disproportionality stem from practice-based and sociodemographic factors.

Practice-based factors, such as an uneven quality of education and classroom management in general education, lack of diversity in the teaching force, teacher beliefs and expectations of students based on race or culture or the lack of culturally responsive curricula, stem from the education system itself, whereas sociodemographic factors, like poverty and family structure are based more on a child's home life and experiences rather than the influence of schooling. Both sets of factors can drastically change a student's outcome. The effects of disproportionate representation of minorities in special education programs can play a significant role in a child's future. In elementary through high school, students who are misidentified may experience stigmatization, lowered expectations, isolation from same-aged peers and/or lower graduation rates. Students are also faced with challenges in their adult life, including difficulties attaining a job or attending post-secondary education, higher risks of incarceration, or independent living challenges. Therefore, it is vital that we utilize the current research to examine our practices and implement strategies and systems to help decrease the prevalence of disproportionality and properly identify students.

The research indicates that disproportionality is a systemic issue that cannot be completely eliminated through the use of multi-tiered systems or the implementation of social emotion learning curricula alone. Instead, it is suggested that the education system recognize the importance of identifying and addressing teacher/administrator biases and preconceived ideas

Running Head: DISPROPORTIONALITY...WHAT DOES THE FUTURE HOLD?

(regarding race, culture, socioeconomic status and language) in order to begin focusing on mending the issue of disproportionate representation of any given population. Once the biases and stereotypes are examined and different perspectives are taken, we can truly utilize some of the programs created to improve our pressing issue of disproportionality. Programs like RTI, PBIS, SEL and CRP used in conjunction with one another are proven more effective in student growth and learning and make the learning process more meaningful for both students and teachers.

The findings in this study show that disproportionality is not an issue that can be easily or quickly resolved. Due to its several decades long history and deep-rooted causes and effects, the disproportionate representation of minorities in special education will take time in order for our country to see positive change. However, educators and administrators have to be willing to take the first steps to initiate this change for the success and well-being of our students. “Together, we not only *can* change the world, we must.” (Klingner, Artiles, Kozleski, Harry, Zion, Tate, Duran & Riley, 2005)

References

- Adelman, H., & Taylor, L. (2018). Improving School Improvement. Online Submission.
- Alahmari, A. (2018, January 1). General Education Teachers' Perceptions of Response to Intervention Implementation: A Qualitative Interview Study. ProQuest LLC. ProQuest LLC.
- Al-Zoubi, S. M., & Bani Abdel Rahman, M. S. (2017). Social Empowerment of Individuals with Intellectual Disabilities. Online Submission (Vol. 3, p. 3).
- Armendariz, G., & Jung, A. (2016). Response to Intervention vs. Severe Discrepancy Model: Identification of Students with Specific Learning Disabilities. *Journal of Special Education Apprenticeship*, 5(1).
- Artiles, A. J., Zamora-Duran, G., & Council for Exceptional Children, R. V. (1997). Reducing Disproportionate Representation of Culturally Diverse Students in Special and Gifted Education.
- Cartledge, G., Kea, C.D., Watson, M., & Oif, A. (2016). Special Education Disproportionality: A Review of Response to Intervention and Culturally Relevant Pedagogy. *Multiple Voices for Ethnically Diverse Exceptional Learners*, 16(1), 29-49.
- Castro-Villarreal, F., Villarreal, V., & Sullivan, J. R. (2016). Special Education Policy and Response to Intervention: Identifying Promises and Pitfalls to Advance Social Justice for Diverse Students. *Contemporary School Psychology*, 20(1), 10–20.
- Coutinho, M. J., & Oswald, D. P. (1998). Ethnicity and Special Education Research: Identifying Questions and Methods. *Behavioral Disorders*, 24(1), 66–73.

Running Head: DISPROPORTIONALITY...WHAT DOES THE FUTURE HOLD?

Darrow, A.-A., & Adamek, M. S. (2017). Recent and Continuing Initiatives and Practices in Special Education. *Music Educators Journal*, 104(2), 32–37.

Enrique, J. A., Adams, K. S., Brockmeier, L. L., & Hilgert, L. D. (2013). A Preliminary Study of Disproportionate Representation and Response to Intervention. *Georgia Educational Researcher*, 10(1), 19–33.

Fenton, P., Ocasio-Stoutenburg, L., & Harry, B. (2017). The Power of Parent Engagement: Sociocultural Considerations in the Quest for Equity. *Theory Into Practice*, 56(3), 214–225.

Fong, McRoy, Dettlaff. (2014) Disproportionality and Disparities. *Encyclopedia of Social Work*, 1-16. National Association of Social Workers and Oxford University Press.

Ford, D. Y. (2012). Culturally Different Students in Special Education: Looking Backward to Move Forward. *Exceptional Children*, 78(4), 391–405.

Gates, L. K., Fischetti, J. C., & Moody, A. (2013). Implementing and Monitoring the Response to Intervention Process: The Special Educator Perspective. *Journal of the American Academy of Special Education Professionals*, 20–47.

Gere, A. R., Buehler, J., Dallavis, C., & Haviland, V. S. (2009). A Visibility Project: Learning to See How Preservice Teachers Take Up Culturally Responsive Pedagogy. *American Educational Research Journal*, 46(3), 816–852.

Klingner, J. K., Artiles, A. J., Kozleski, E., Harry, B., Zion, S., Tate, W., Riley, D. (2005). Addressing the Disproportionate Representation of Culturally and Linguistically Diverse Students in Special Education through Culturally Responsive Educational Systems. *Education Policy Analysis Archives*, 13(38).

Running Head: DISPROPORTIONALITY...WHAT DOES THE FUTURE HOLD?

Kramarczuk Voulgarides, C., Fergus, E., & King Thorius, K. A. (2017). Pursuing Equity:

Disproportionality in Special Education and the Reframing of Technical Solutions to Address Systemic Inequities. *Review of Research in Education*, 41(1), 61–87.

Lee, Andrew M.I. JD (2016). Individuals with Disabilities Education Act (IDEA): What You Need to Know. Understood.org USA LLC.

Liasidou, A. & Symeou, L. (2018). Neoliberal versus social justice reforms in education policy and practice: discourses, politics and disability rights in education, *Critical Studies in Education*, 59:2, 149-166, DOI: [10.1080/17508487.2016.1186102](https://doi.org/10.1080/17508487.2016.1186102)

Losen, D., Hodson, C., Ee, J., & Martinez, T. (2014). Disturbing Inequities: Exploring the Relationship between Racial Disparities in Special Education Identification and Discipline. *Journal of Applied Research on Children*, 5(2).

McKinney, D., & Snead, D. (2017). Assessing Teacher Concerns Regarding Response to Instruction and Intervention. *Journal of Inquiry and Action in Education*, 9(1), 1–11.

McKinney, E., Bartholomew, C., & Gray, L. (2010). *RTI and SWPBIS: Confronting the problem of disproportionality*. Bethesda: National Association of School Psychologists.

Mette, I. M., Nieuwenhuizen, L., & Hvidston, D. J. (2016). Teachers' Perceptions of Culturally Responsive Pedagogy and the Impact on Leadership Preparation: Lessons for Future Reform Efforts. *International Journal of Educational Leadership Preparation*, 11(1).

Monroe, C. R. (2005). Why Are “Bad Boys” Always Black? Causes of Disproportionality in School Discipline and Recommendations for Change. *Clearing House: A Journal of Educational Strategies, Issues and Ideas*, 79(1), 45.

Morgan, P. L., Farkas, G., Cook, M., Strassfeld, N. M., Hillemeier, M. M., Pun, W. H.,

Running Head: DISPROPORTIONALITY...WHAT DOES THE FUTURE HOLD?

- Schussler, D. L. (2018). Are Hispanic, Asian, Native American, or Language-Minority Children Overrepresented in Special Education? *Exceptional Children*, 84(3), 261–279.
- O'Connor, R. E., Bocian, K. M., Beach, K. D., Sanchez, V., & Flynn, L. J. (2013). *Special Education in a Four-Year Response to Intervention (RtI) Environment: Characteristics of Students with Learning Disability and Grade of Identification*. Grantee Submission.
- Office of Special Education and Rehabilitative Services (ED). (2016). Racial and Ethnic Disparities in Special Education: A Multi-Year Disproportionality Analysis by State, Analysis Category, and Race/Ethnicity. Office of Special Education and Rehabilitative Services, US Department of Education.
- Office of Special Education Programs (ED/OSERS), & Westat, I. (2011). *Methods for Assessing Racial/Ethnic Disproportionality in Special Education: A Technical Assistance Guide (Revised)*. US Department of Education.
- Orfield, G. (2017). Commentary: Racial Division, Research, and Building Human Capital. *American Educational Research Journal*, 54(1_suppl), 164S-167S.
- Pilla, T. V., & Alaska State Advisory Committee to the U.S. Commission on Civil Rights. (1999). *Alaskan Natives and Other Minorities in the Special Education Programs of Four Alaskan School Districts*.
- Poon-McBrayer, K. F. (2018). Practicing Response-to-Intervention Model: A Case of Leadership Practices. *International Journal of Whole Schooling*, 14(1), 154–171.
- Popov, N., Wolhuter, C., Ermenc, K. S., Hilton, G., Ogunleye, J., Niemczyk, E., & Bulgarian

Running Head: DISPROPORTIONALITY...WHAT DOES THE FUTURE HOLD?

- Comparative Education Society (BCES). (2015). Quality, Social Justice and Accountability in Education Worldwide. BCES Conference Books, Volume 13. Number 1. Bulgarian Comparative Education Society.
- Sciuchetti, M. B. (2017). Addressing Inequity in Special Education: An Integrated Framework for Culturally Responsive Social Emotional Practice. *Psychology in the Schools*, 54(10), 1245–1251.
- Sullivan, A. L., Artiles, A. J., & Hernandez-Saca, D. I. (2015). Addressing Special Education Inequity through Systemic Change: Contributions of Ecologically Based Organizational Consultation. *Journal of Educational & Psychological Consultation*, 25(2), 129–147.
- Tracy-Bronson, C. (2018). *Inclusive education in practice: District-level special education administrators' leadership* (Order No. 10808494).
- Yavuz, O. (2016). Educational Leadership and Comprehensive Reform for Improving Equity and Access for All. *International Journal of Education Policy and Leadership*, 11(10).
- Zhang, D., & Katsiyannis, A. (2002). Minority Representation in Special Education: A Persistent Challenge. *Remedial and Special Education*, 23(3), 180–87.