

SNAP JUDGEMENTS: VULNERABLE DECISION POINTS LEADING TO
DISPROPORTIONATE DISCIPLINE

by

JONATHON PETER SANCHEZ

A DISSERTATION

Presented to the Department of Educational Methodology, Policy and Leadership
and the Division of Graduate Studies of the University of Oregon
in partial fulfillment of the requirements
for the degree of
Doctorate of Education

June 2021

DISSERTATION APPROVAL PAGE

Student: Jonathon Peter Sanchez

Title: Snap Judgements: Vulnerable Decision Points leading to Disproportionate Discipline

This dissertation has been accepted and approved in partial fulfillment of the requirements for the Doctor of Education degree in the Department of Educational Methodology, Policy, and Leadership by:

Keith Zvoch	Chairperson
Ilana Umansky	Core Member
Kent McIntosh	Institutional Representative

and

Andrew Karduna	Interim Vice Provost for Graduate Studies
----------------	---

Original approval signatures are on file with the University of Oregon Division of Graduate Studies.

Degree awarded June 2021

© 2021 Jonathon Peter Sanchez

DISSERTATION ABSTRACT

Jonathon Peter Sanchez

Doctor of Education

Department of Educational Methodology, Policy, and Leadership

May 2021

Title: Snap Judgements: Vulnerable Decision Points leading to Disproportionate Discipline

Disproportionate discipline, the overrepresentation of predominately Black and Latinx students in school disciplinary actions, has led to students from these groups being suspended more frequently and for longer durations than their White peers. This trend is found most often in subjective discipline incidents (SDIs) where authority figures must use their judgment in deciding if a rule violation has occurred in a situation (i.e., defiance and disruption). The vulnerable decision point (VDP) model identifies these moments as key points where a person's implicit bias may increase the likelihood that disproportionate discipline outcomes will result for stereotyped students. The VDP model also recognizes that environmental factors such as time of day, day of week, and fatigue level increase the likelihood that implicit bias will manifest in SDIs.

In this dissertation study, I analyzed extant discipline data from a large Pacific Northwest school district (PNWSD) to (a) identify disproportionate discipline patterns and (b) apply the VDP model to pinpoint possible environmental factors that might be useful when planning interventions to reduce the impact of implicit bias on educators' responses to subjective discipline incidents. The key finding points to a relation between time in school year and the disproportionate discipline experienced by Latinx students.

Implications for school districts as well as suggestions for extensions of this research in other fields are discussed.

CURRICULUM VITAE

NAME OF AUTHOR: Jonathon Peter Sanchez

GRADUATE AND UNDERGRADUATE SCHOOLS ATTENDED:

University of Oregon, Eugene
Concordia University, Portland
Multnomah University, Portland

DEGREES AWARDED:

Doctor of Education, 2021, University of Oregon
Master of Arts in Teaching, 2008, Concordia University
Bachelor of Arts, 2005, Multnomah University

AREAS OF SPECIAL INTEREST:

Disproportionate Discipline
Implicit Bias
Secondary Education
Quantitative Research

PROFESSIONAL EXPERIENCE:

Vice Principal, Beaverton Academy of Science and Engineering, 2015 - Present

Teacher / Dean of Students / Vice Principal, Ralston Middle School, 2012-2105

Teacher, Sunrise Middle School, 2008-2010

PUBLICATIONS:

Accepted for presentation ASCD Conference for ASCD, June 2021
Sanchez, J. (2021, June 23). *Snap Judgements: Vulnerable Decision Points and the Influence of Implicit Bias on Student Discipline*. ASCD Conference, Online Convention, United States.

ACKNOWLEDGMENTS

I wish to thank my committee members for their tremendous support and feedback throughout the completion of my dissertation: Dr. Keith Zvoch, Dr. Ilana Umansky, and Dr. Kent McIntosh. I'd especially like to thank my adviser, Keith Zvoch. Your supportive and astute feedback has pushed me to understand my research deeper and clarify my writing. Dr. Joanna Smith for your support and encouragement as I began the EMPL program. I'd also wish to give thanks to Dr. Julie Alonzo for your on-going guidance, countless revisions, and steadfast support during our weekly meetings. I'd also like to thank the members of my EMPL cohort. We've had a lot to overcome but our time together in classes, weekend Zoom sessions, and insightful conversations, have taught me invaluable lessons from your expertise, passion, and research.

I'd like to thank my crew students at Beaverton Academy of Science and Engineering. Commiserating with you over homework load, exchanging study strategies, and our frequent check-ins at school have been a constant source of encouragement. I'd also like to thank the many colleagues in the Beaverton School District that have supported my pursuit in this program, Dr. Brian Sica, Dr. Jon Bridges, Andrew Cronk, and Maria Copelan.

Lastly, I'd like to thank my family. Lynette, thank you for all your love and support as I have pursued this program. It could not have been done without your tireless hard work for me and the kids. To my children, Ari, Noa, and Ava, thank you for your patience with me being gone and your silly humor when we are together. To my parents, your support has remained steadfast throughout my life. Thank you for always instilling the values of education in us kids and building the supports for us to achieve it.

This paper is dedicated to all the students that have come to my office. You have taught me so much and remind me that I have much more left to learn.

TABLE OF CONTENTS

Chapter	Page
I. INTRODUCTION AND LITERATURE SYNTHESIS	1
The Multifaceted Manifestations of Disproportionate Discipline	4
Discipline’s Relation with Academic Achievement	5
Disproportionate Discipline’s Relation to School Climate.....	6
The Influence of Implicit Bias on Disproportionate Discipline.....	7
The Influence of Implicit Bias in Academic Decisions	7
The Role of Implicit Bias in Subjective Discipline Incidents.....	8
Vulnerable Decision Points Model: Educator Decisions.....	9
Environmental Factors’ Influence on the Manifestation of Implicit Bias	12
Disproportionality and the Impact on Latinx Students	13
The Current Study.....	16
II. METHODS.....	18
Methodology	18
Participants and Setting.....	18
Procedures.....	19
Discipline Incident Type.....	19
Date of Incident.....	20
Analytic Plan.....	21
III. RESULTS	23
IV. DISCUSSION.....	32

Chapter	Page
Summary of Major Findings.....	32
Study Limitations.....	35
Instrumentation.....	35
History.....	36
Attrition.....	36
Sample Limitations.....	37
Implications of Findings.....	38
Implications for School Districts.....	38
Implications for School Sites.....	42
Implications for School Staff.....	42
Opportunities for Future Research.....	43
The Rise of New Environmental Stressors and VDPs.....	44
VDPs and Healthcare.....	45
VDPs and Policing.....	45
Conclusion.....	46
REFERENCES CITED.....	49

LIST OF FIGURES

Figure	Page
1. The Vulnerable Decision Point Model	11
2. Graphic Display of ILRR for Latinx Students by School Year	23
3. Graphic Display of ILRR for Latinx Students by School Level and School Year	26
4. Count of Latinx SDI's by Time Segment	29
5. Weighted Mean ILRR By Time Segment Within School Year.....	31

LIST OF TABLES

Table	Page
1. Total Latinx/White Student Populations and SDI's by Year and School Level....	20
2. ILRR for Latinx Students by School Level and School Year.....	25
3. Count of Latinx SDI's by Time Segment	28
4. Weighted Mean ILRR by Time Segment	30

CHAPTER I

INTRODUCTION AND LITERATURE SYNTHESIS

In *Brown v. the Board of Education*, the Supreme Court of the United States decided that “separate is never equal” in regard to education. This decision meant that schools formerly segregated in the U.S. were to begin integrating students of all races into a cohesive educational experience. Despite that decision, in today’s educational setting new lines of segregation have emerged as disenfranchised students struggle to access the education promised them. Students are no longer barred access to schools by angry mobs or stoic officers, but the subtle new divisions are still drawn along racial lines. Differences in school experience based on race are particularly disturbing because schools increasingly serve students from diverse backgrounds.

The demographics of students enrolled in United States has changed from the 2000 to the 2017 school year. While total enrollment of White students declined (-13%), the total enrollment of students of color increased with the largest growth attributed to Latinx students (10%) (NCES, 2021). Similarly, the student population in Oregon is also growing more diverse. In the 2018-2019 school year, of Oregon’s 581,730 students, 38.8% identified as not “White”. From 2015-2020 there has been an increase in the percentage of Oregon students identifying as Asian (2.2%), Hispanic/Latinx (6.5%), Multi-Racial (17.5%), and Native Hawaiian/Pacific (9.9%) while the proportion of White (-2.01%), Black/African American (-4.13%), and American Indian/Alaska Native (-15.59%), student populations have been on the decline ([Oregon State Report Card, 2020](#)). As a state, it is clear that the demographics of students are changing to include students from more diverse backgrounds. However, a gap currently exists between the percentage

of teaching staff from ethnically and racially diverse backgrounds and the percentage of students from these backgrounds. Fully 89.6% of Oregon teachers identify as White, compared to only 61.9% of students. The largest difference between student/teacher racial and ethnic compositions in Oregon exists for Latinx students and teachers, with Latinx making up 23.4% of the student population yet only 5.4% of the teacher population in the state ([Oregon State Report Card, 2020](#)).

Given the increasing diversity of the student body and the relative lack of diversity in the educator workforce, it is not surprising that in Pacific Northwest schools while Black and Latinx students may be seated in the same room as their White peers, their experience in school can be marked by vastly different outcomes. One factor influencing the difference in students' educational experiences is the persistent problem of disproportionate discipline. Disproportionate discipline is the reality confronting some students, largely from Black and Latinx populations, who face more frequent or more severe discipline in relation to their White peers (Finn & Servoss, 2014). In the 1990's, patterns of exclusionary discipline in schools began to mimic zero tolerance policies found in the criminal justice system (American Psychologist, 2008). The policies of zero tolerance mimicked in schools' policies contributed to students being suspended at higher frequencies and longer durations in an effort to stamp out misbehavior for even minor offenses (American Psychologist, 2008). For example, a student might be disciplined harshly for a disruption in class, with the idea that the escalated response to a relatively minor infraction would prevent a future, more significant misbehavior such as a physical altercation. This approach to discipline stems from the "broken windows theory" of policing which states that minor offenses, if left unchecked, grow into bigger offenses

(Wilson & Kelling, 1982). Modeling school discipline policies on zero tolerance policing policies sowed the seeds for the disproportionate discipline landscape today, as described below.

The Multifaceted Manifestations of Disproportionate Discipline

Disproportionate discipline takes many forms in U.S. schools. It often starts in the classroom with Black or Latinx students being referred for discipline more often than their peers from other demographic groups. In a study that analyzed the discipline data from 4,000 schools nationwide in the 2005 – 2006 school year, researchers observed that Black students were 2.19 (elementary school) to 3.78 (middle school) times more likely to receive an office referral than their White peers (Skiba, Horner, Chung, Rausch, May, & Tobin, 2011). The same study reported that Latinx students were 1.71 times more likely than their White peers to be referred to the office at the middle school level (Skiba et al., 2011).

In an earlier study of a large midwestern school district involving 19 middle schools and 11,000 students, researchers found that students referred to the office more often for discipline were also more likely to encounter more serious discipline outcomes like suspension and expulsion (Skiba, Michael, Nardo, & Peterson, 2002). Another nationwide study involving 10th grade students from 500 public schools ($n = 8,775$), found that Black students were 1.78 times and Latinx students were 2.23 times more likely to be suspended than their White peers for the same type of offense (Finn & Servoss, 2014). Furthermore, patterns of disproportionate discipline continue even when the misbehaviors of White and Black students are identical. Finn and Servos (2014) also reported that, nationally, when compared to their White peers, Black students were 1.80

times more likely to be suspended and Latinx students were 1.64 times more likely to be suspended for the same misbehavior.

Discipline's Relation with Academic Achievement

With students of color facing more frequent disproportionate discipline, it is important to investigate the relation between discipline and academic performance. In a study of 16,897 students in 17 schools in Kentucky, Morris and Perry (2017) reported that students who were suspended had reading scores 15 points lower and math scores 16 points lower than their never-suspended peers when controlling other factors like socioeconomic status. Arcia (2006) analyzed achievement test results in a sample of 9,237 4th through 7th grade students attending school in the Miami-Dade County, Florida public schools and reported similar relations between academic achievement and student suspensions when controlling for socioeconomic status, limited English proficiency, and talented and gifted status. Students with a high frequency of suspensions were academically three years behind classmates with no suspensions on standardized reading assessments.

Cholewa, Hull, Babcock, and Smith (2018) analyzed a national longitudinal data set of 23,000 students from 9th grade to post-high school. They reported that students who received an in-school suspension (ISS) were 4.7 times more likely to drop out of high school than their peers who had not been suspended. Additionally, this same study found that the Grade Point Average (GPA) of eleventh grade students who received an ISS was 0.40 grade points lower than that of their peers who had not received an ISS. Their cumulative high school GPA was also 0.35 grade points lower than their peers who had not been suspended when controlling for other intersecting factors (Chowela et al., 2018).

Taken together, it is evident from these studies that discipline is negatively associated with the academic outcomes of at-risk students.

Disproportionate Discipline's Relation to School Climate

In addition to the direct impact on individual students, disproportionate discipline is also negatively associated with school climate and culture. In a study of 58 Maryland urban and suburban schools representing 19,726 students, Bottiani, Bradshaw, and Mendelson (2017) found that students in schools with evidence of disproportionate discipline reported a lower sense of belonging ($\gamma = -0.54, p < .001$) and a lower perception of equity ($\gamma = -0.50, p < .001$) at their school. This same study reported that the presence of disproportionate discipline at a site was positively associated with adjustment problems for Black youth ($\gamma = 0.77, p < .001$). In other words, Black students at a site where disproportionate discipline outcomes were present were more likely to exhibit misbehaviors or to have misbehavior attributed to them. Conversely, in a study involving one mid-sized school (Gregory & Weinstein, 2008), Black students reported being more compliant with the requests of teachers who were viewed as trustworthy and caring. Madison and Aber's (2007) research on two public high schools in a moderate sized Midwest town ($n = 1,838$) also identified a relation between students' self-reported perceptions of negative school climate (increased experiences of racism, perception of racial fairness, and perceptions of the need for change) with an increased frequency of suspensions. Similarly, Shirley and Cornell (2011), using survey data from 400 suburban middle school students found that negative perceptions of school climate, as measured by students' decreased willingness to seek help from adults, was related to increased likelihood of receiving discipline referrals.

These results suggest that the disenfranchised feelings reported by students who are subjected to disproportionate discipline may actually be a contributing factor to their discipline infractions, further exacerbating the disproportionate discipline outcomes. With this possibility in mind, identifying the underlying influences on the pattern of disproportionate discipline is an important next step.

The Influence of Implicit Bias on Disproportionate Discipline

Skiba (2002) suggested that implicit bias, an unconscious generalized association that all people have about others and their world, throughout the disciplinary process may exacerbate disproportionate discipline outcomes. For example, findings from a longitudinal study of 25,000 8th graders from a nationally representative data set (Huang, 2018) document a pattern of Black and Latinx students receiving harsher discipline outcomes than White peers for the same incident. This finding suggests that implicit bias against Black and Latinx students may have manifested in the administrative decisions to deliver disciplinary consequences resulting in disproportionate outcomes given that circumstances and culpability were comparable with that of White students.

The Influence of Implicit Bias in Academic Decisions

Implicit bias in schools has also been observed outside of discipline incidents as well. For example, when teacher input was included in the English Learner reclassification process in a study of 8th graders in two southern California school districts ($n = 5,023$), students who were male, Latinx, and low-income were less likely to be referred for reclassification (i.e., to exit ELD services) than students who were female, Asian, and not from low socioeconomic backgrounds, even when they were equally likely to have met the criteria for reclassification (Reyes & Domina, 2019). In this

particular study, implicit bias may have influenced staff members' decisions to retain Latinx students in ELD services based on perceived stereotypes that they may not have been ready to advance even though academic indicators suggested they were on level with non-Latinx students who had exited. If implicit bias is therefore able to manifest in placement decisions that are methodically made, it is worth investigating how implicit bias might manifest itself in decisions made in the moment, when tensions might be elevated.

The Role of Implicit Bias in Subjective Discipline Incidents

In the educational setting, educators make numerous decisions throughout the day. Many of those decisions are in response to student behavior. When a staff member encounters a discipline incident, it can be exceptionally challenging to maintain clear-headed, unbiased decision-making. A subjective discipline incident (SDI) is a discipline situation that requires an interpretation from a staff member to determine if a rule violation has occurred or not. Defiance and disruptive behavior fall into this category because a staff member must decide if a particular incident meets the threshold for a response that violates a school behavior expectation. For instance, a staff member may make a request of a student to sit up in his chair or to remove his hood in the classroom. This request may or may not be complied with in a way that meets the expectations of that staff member (it is possible for this to be perceived as defiance). It is in this moment that the staff member would need to decide how to respond to the situation.

Using a nationally representative sample of over one million students from the School Wide Information Systems (SWIS) database (SWIS; May et al., 2013), Smolkowski et al. (2016) reported that Black students were 1.34 times more likely to

receive an office referral for a major subjective discipline incident than their White peers. However, Smolkowski et al. (2016) identified that teachers who managed subjective discipline incidents in the classroom instead of sending the student to the office for discipline were less likely to be influenced by implicit bias during a subjective discipline incident.

Another study using the SWIS national database, Girvan, Gion, McIntosh, and Smolkowski (2017) observed disproportionate discipline with regard to race for Black students, with subjective discipline incidents at a rate 1.5 times higher in high school and 3.0 times higher in middle school when compared to objective discipline incidents (situations that are clearer rule violations such as tardiness, fighting, and truancy).

In other words, their research points to the potential for teachers' implicit bias to manifest itself differently in different situations, and with different reactions to subjective discipline incidents. With this finding in mind, it is important to continue to investigate the relation between subjective discipline incidents and disproportionate discipline outcomes. The current study thus examines if a similar relation to the one that nationally representative data identifies (Girvan et al., 2017) holds true for Latinx students in a PNWSD using a vulnerable decision points framework.

Vulnerable Decision Points Model: Educator Decisions

This study uses a theoretical framework known as the Vulnerable Decision Points model (VDP), which helps explain how implicit bias is related to disproportionate discipline in subjective discipline incidents (McIntosh, Girvan, Horner, and Smolkowski, 2014). Walking through the model (see Figure 1) from left to right, the staff member and student become engaged in an SDI, such as student non-compliance with a staff member

request. In the SDI, the staff member must decide if the incident is a violation of the school's student conduct policy. In the VDP model, the interaction between staff member and student is the first point at which implicit bias can have an impact on the discipline process. In instances like this, a staff member may perceive a Black or Latinx student's actions as requiring a discipline referral, whereas the same non-compliance from a White student would not result in a discipline referral because of the staff member's implicit bias against Black and Latinx students (McIntosh et al., 2014). Researchers identify situations where a subjective incident is experienced as a vulnerable decision point because it is precisely when a staff member is deciding *how to respond in the moment* that implicit bias has the greatest chance of unconsciously influencing the outcome (McIntosh et al., 2014).

If a student receives a referral to the office for discipline, another vulnerable decision point occurs as the administrator interprets the situation in order to decide on a response. As with the earlier staff member, the subjective discipline incident is open to interpretation and can be tainted by the implicit bias of the administrator. For example, in deciding consequences for an office referral, an administrator's implicit bias, coupled with an elevated level of stress at this point in time may result in exclusionary discipline for a student of color whereas the same administrator might have opted for restorative practices earlier in the day, when their stress levels were lower. Although time of day was not specifically addressed in this study, Chowela et al. (2018) analyzed a large national data set and identified that Black boys are 1.56 times more likely to be cited in office referrals for disobedience than White boys, and Black girls are 2.53 times more likely to be cited than White girls in similar situations.

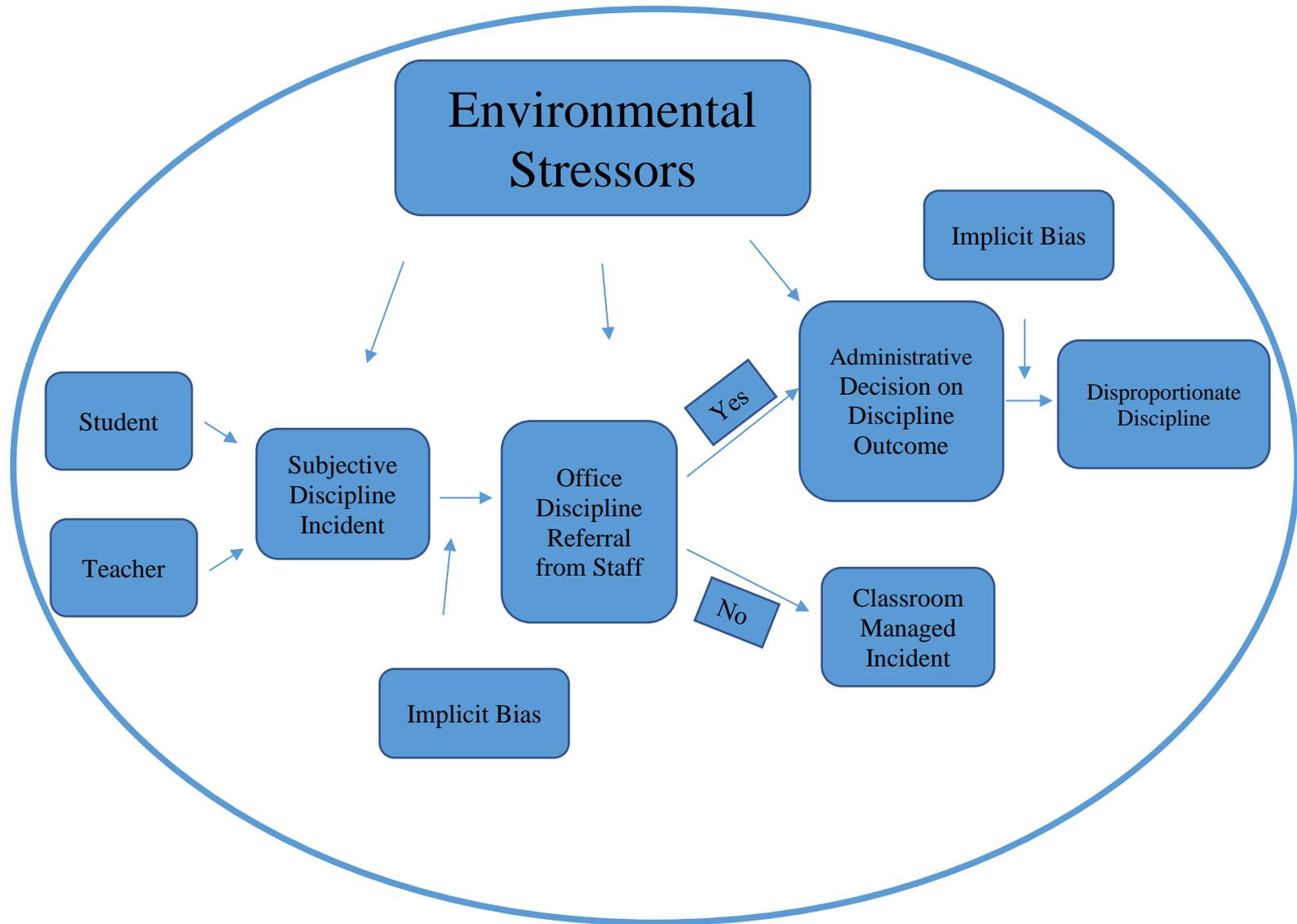


Figure 1. The Vulnerable Decision Point Model

This means that Black students were at higher risk to receive office referrals for disobedience than their White peers in situations where both students' behaviors were comparable, and therefore meriting similar responses from staff. In other words, a staff member was more likely to refer a Black student for discipline than a White student when a referral for both students may have been justified. With this in mind, it is important to understand how implicit bias might manifest in the discipline process.

Environmental Factors' Influence on the Manifestation of Implicit Bias

In the Vulnerable Decision Point model, environmental factors affect all aspects of an SDI situation. Environmental factors may include fatigue, hunger, time of day, location of incident, day of the week, and current stress level of the staff member. Each factor can contribute to how a staff member responds to a subjective discipline incident. Coincidentally, these same factors influence responses of both students and administrators as well. In a study that included four experiments focusing on the intersectionality of moral choices and time of day, Kouchaki and Smith (2014) found that as the day progressed a person was more susceptible to implicit bias leading to unethical behaviors because of the gradual depletion of their self-regulatory resources.

The idea that one's capacity to self-regulate is related to the time of day is reinforced by another study analyzing SWIS data from elementary, middle, and high school students in which researchers observed that American Indian and Alaskan Native students were 2.21 times more likely to receive an office referral for a subjective discipline incident at the end of the day when compared to their White peers (Gion, McIntosh, & Smolkowski, 2018). This finding further supports the idea that environmental factors may contribute to the outcome of an SDI. It is worth noting that the

focus here is on the adults' reaction to the subjective discipline incident rather than the students' infraction, given that students who engaged in the same behavior earlier in the day were less likely to be referred to the office. Thus, the decision of the adult in terms of how they elect to handle the discipline incident is consequential, and the Vulnerable Decision Point model seeks to identify when implicit bias may have the greatest impact on the discipline process so that it might be ameliorated.

Disproportionality and the Impact on Latinx Students

Several studies have focused on Black students' experiences with disproportionate discipline in comparison with their White peers. However, fewer studies focus primarily on the experience of Latinx students. Of these, one study reported that when controlling for other factors, Latinx students who had similar rates of misbehavior as their white peers were more likely to face school discipline than their white peers (Peguero & Shekarkehar, 2011). The same study also found that differences in the generational status of Latinx students was associated with disproportionate discipline. A comparison of first-generation immigrants to the U.S. to second and third generations revealed that the likelihood of students receiving more frequent or more severe punishment was increased the further away from first generation status a student fell.

Furthermore, in a two-year ethnographic study of three fifth-grade classrooms in Northern California, one researcher pointed out that the staff perception of elementary Latinx students' behavior had both positive and negative consequences for those students. The observations of Latinx students suggested that their behavior was often characterized as "well-behaved Latino kids" as opposed to African-American students who were labeled as "troublemakers." This racialized stereotype of Latinx elementary school

students bestowed what would initially seem like a benefit to the Latinx students. In other words, the findings of this study indicated that Latinx students were less likely to be cited for misbehavior than their African-American peers even when Latinx students in those classes were at fault from the perception of both students and staff. This occurred even when student and staff perception of misbehavior from Latinx students seemed to be in clear conflict with classroom expectations (Rueda, 2015). While this racialized stereotype from the staff may seem beneficial for Latinx students, it was noted that the compliant behavior from Latinx elementary school students may unintentionally encourage staff to gloss over academic deficiencies because of strong behavior compliance (Rueda, 2015). In another investigation, Morris (2016) reported that over the course of a two-year qualitative study at a large middle school with a predominately minority student population, a relation existed between staff perceptions of threats around race, school attire, and behavior of Latinx male students and disproportionate discipline rates. Findings suggested staff perceptions and assumptions about Latinx males led to those students being punished more frequently and severely than their White peers. For instance, staff perceptions of threats associated with male Latinx clothing choices (clothing typically related to working-class families) related to the staff's increased rate of discipline referrals as staff perceived that strong disciplinary action might shift student attire (Morris, 2016).

Another study investigating the effects of stereotype boost (an instance when an individual's actions are influenced either consciously or subconsciously to conform to a stereotyped belief) and stereotype threat (an individual's concern for being associated with the negative stereotype) for Latinx graduate students performance on a math test

indicated that as students became aware of staffs' racialized stereotypes, those students were more likely to meet those racialized stereotypes of staff either consciously or subconsciously (Armenta, 2010). The authors reported that Latinx students who were prompted with a negative stereotype that Latinx students were not academically strong in mathematics were more likely to conform to that stereotype's expectations, resulting in decreased performance on a math test. Armenta (2010) hypothesized that this result was prompted by the activation of stereotype threat and stereotype boost.

The findings of these studies, along with the increasing Latinx population in Pacific Northwest schools, suggests the need for more in-depth research focused specifically on Latinx students and disproportionate discipline. Additional research is needed in this area to gain a deeper understanding of what relations might exist between disproportionate discipline, SDIs, and VDPs for Latinx students across the elementary, middle, and high school level.

The Current Study

I analyzed extant data from a large school district in the Pacific Northwest, hereafter referred to as PNWSD. Like many large school districts, the PNWSD is navigating how to support a student body that is growing increasingly more diverse while the predominately White staff remains largely unchanged. Given this context, it was important to investigate if disproportionate discipline exists in PNWSD and how it might intersect with SDIs and implicit bias for the Latinx students it serves.

This correlational study extends the findings of previous research using the Vulnerable Decisions Point model by examining four years' worth of discipline referral data for subjective discipline incidents in the PNWSD and the intersection with time of

year. I analyzed the data for relations related to date in school year based on the hypothesis that as the academic year proceeds, fatigue becomes more present in staff. My 13 years of experience working in schools led me to consider this possibility, as informal observation of my own level of energy and that of my colleagues, as well as personal observation of what appeared to be staff tempers being on a “shorter fuse” as the year progresses led me to a desire to examine this topic empirically. My study is a variation on prior research that found subjective discipline incidents increase for indigenous and Alaska native students related to the passage of time during the school day (Gion, McIntosh, & Smolkowski, 2018).

In my study, I analyzed the data by segmenting the school year into proportional sections, similar to how the time in a school day is measured by hours and minutes. The school year was broken into semesters and quarters, which lends itself to dividing the quarters proportionally in half, resulting in eight roughly equal segments of time across all four school years in the data. With the design of this analysis, I addressed the following research questions:

- 1) What is the relation between race (White compared to Latinx) and subjective discipline incidents?
- 2) Does the relation between subjective discipline incidents vary with time in school year for Latinx students?

CHAPTER II

METHODS

In this chapter I will present the methodological approaches I used in this dissertation. I describe the participants and setting, procedures, measures, and data analyses.

Methodology

This quantitative study investigates how implicit bias and environmental stressors may be related to the increased likelihood of an office referral for a subjective discipline incident for Latinx students in a large urban school district located in the Pacific Northwest.

Participants and Setting

I used extant data from the PNWSD to identify relations between the variables discussed below. Students of color in the PNWSD comprise 53% of the nearly 41,000 students, with the largest subgroup being Latinx students at 24%. With 53 elementary, middle, and high schools, the PNWSD is one of the largest school districts in Oregon. A total of 88 languages are spoken in the district, and 12% of the student body are English Language Learners. The district provides special education services to 12% of the student body, 16% are enrolled in the Talented and Gifted program, and 38% of district students qualify for Free or Reduced-Price Lunch. In 2019, 86% of the senior class graduated from one of 10 high school programs (ODE, 2019).

Procedures

The data were collected through PNWSD's Synergy data collection software, which is used to report discipline incidents to the Oregon State Department of Education.

The dataset includes all discipline incidents tracked by elementary, middle, and high schools in the district from 2015 to 2019. Within the dataset, discipline outcomes are coded as a variable with the following possible values: expulsion, in school suspension (ISS), out of school suspension (OOS), and alternative education placement.

Measures

In the PNWSD, district administration has created a continuum of discipline – from discussions with students, to two types of suspension (ISS and OSS), to expulsion, to placement in alternative schools. Reasons for discipline can range from disrespecting a staff member (subjective) to stealing (objective). The PNWSD defines suspension (in or out of school) as the temporary removal from a student the right of attending school or school activities and/or being on school property. Suspensions are issued by the principal or assistant principal and may vary in length depending on the severity of the infraction and the past behavior of the student (PNWSD, 2019). In this study, the discipline outcome (i.e., in school suspension, out of school suspension, or expulsion) was not the focus. Instead, the discipline incident type that led to the initial office referral was the variable investigated.

Discipline Incident Type. The discipline incidents are coded by offense type. In all, there were 9,498 discipline incidents in the data set. For this study, the primary offense codes of two discipline incidents - disorderly conduct ($n = 2052$) and insubordination ($n = 841$) – were identified. As these offenses are open to interpretation, they can be classified as subjective discipline incidents. With the focus of this study being on Latinx students the counts of subjective discipline incidents and student populations for Latinx and White students across the four years data were utilized.

Table 1.

Total Latinx/White Student Populations and SDI's by Year and School Level

Year	School Level	Latinx Students	Latinx SDI's	White Students	White SDI's
2015-2016	Elem.	5309	31	9888	92
	Mid.	1991	71	3946	119
	High	3235	54	7067	85
2016-2017	Elem.	5222	54	9701	110
	Mid.	2058	61	3919	129
	High	3368	48	7150	92
2017-2018	Elem.	5081	32	9415	144
	Mid.	2091	108	3813	141
	High	3375	54	7076	83
2018-2019	Elem.	5129	71	9186	187
	Mid.	2097	118	3831	180
	High	3512	72	6893	92

Note. Elem.=Elementary Mid.=Middle

Date of Incident. The date of recorded disciplinary incidents was also used as a variable in the study. Date of incident indicates when the incident resulting in discipline took place. The school year was divided into semesters and quarters based on the district's academic calendar. The academic calendar was further divided into proportional segments dividing quarters in half, resulting in eight segments of time throughout the academic calendar year. This approach allowed for investigation the relation between number of subjective discipline incidents and time in the school year. This analysis was intended to give additional insight into when discipline incidents were occurring across the academic year.

Analytic Plan

To address the first research question, an incident level risk ratio was calculated to determine if there was a relation between race and subjective discipline incidents. In this study, the relative risk of a subjective discipline incident being recorded for a Latinx student was compared to the control group (White students). The dependent variable, therefore, was subjective discipline incidents (computed as the incident level risk ratio), and the independent variable was race (White and Latinx). The incident risk ratio was computed as follows:

$$IL\ RR_{Sch} = \frac{\left(\frac{\# \text{ of SDIs of Latinx Students}_{Sch}}{\text{Total \# of Latinx Students}_{Sch}} \right)}{\left(\frac{\# \text{ of SDIs of White Students}_{Sch}}{\text{Total \# of White Students}_{Sch}} \right)}$$

Using the incident level risk ratio calculation, an investigation of the overall risk of a subjective discipline incident being issued to a Latinx student was compared to that of a White student. This calculation allows for each of the incidents issued to students who have received more than one subjective discipline incident to be accounted for in the analysis. With this calculation, a number greater than one indicates that an SDI is more likely to be issued to a Latinx student in comparison to their White peers, while a number less than one indicates that an SDI is less likely to be issued to a Latinx student in comparison to their White peers. For instance, the analysis might find a relation between students' race and SDIs as manifested in ILRR. For Latinx students in particular, the degree of risk present for ILRR may relate to school level as well (Rueda, 2015; Smolkowski et al., 2016). In addition to calculating the incident level risk ratio for Latinx students, a univariate analysis of variance (ANOVA) was thus performed with school level as the independent variable (elementary, middle, high) and incident level risk ratio

(ILRR) as the dependent variable. Tukey's Post Hoc tests were conducted to identify pairwise group differences between the school levels.

To address the second research question, I report descriptive statistics organized by the segment of time within school year in which subjective discipline incidents occur. To further support the understanding of the relation between segment of time within school year and incident level risk ratio, a weighted mean incident level risk ratio was calculated. The weighted mean incident level risk ratio used the total counts of subjective discipline incidents for a Latinx student within each segment of time to determine its weighting. A Pearson's correlation was then computed to investigate the relation between the weighted incident level risk ratio and time segment within school year.

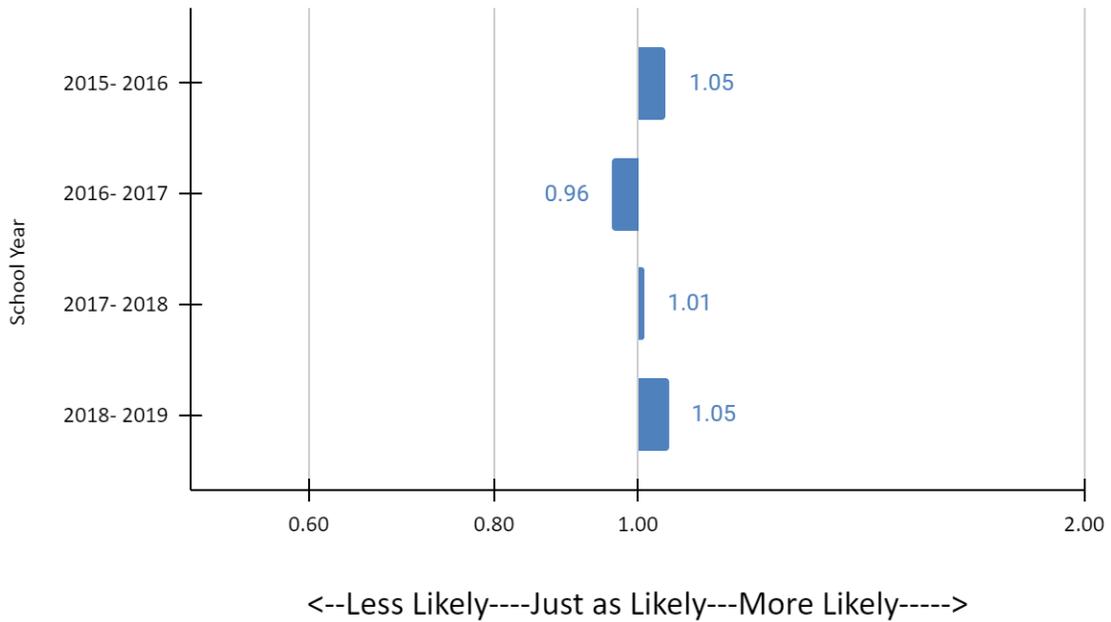
CHAPTER III

RESULTS

To answer the first research question (*What is the relation between race [White compared to Latinx] and subjective discipline incidents?*), the incident level risk ratio for subjective discipline incidents for Latinx students was calculated for all four school years (2016 – 2019) and then across all three school levels within those school years. Focusing on just the incident level risk ratio across academic years, Latinx students had a slightly increased incident level risk ratio in AY 2015-2016 (ILRR = 1.05), AY 2017-2018 (ILRR = 1.05), and AY 2018-2019 (ILRR = 1.06). In AY 2016 – 2017, Latinx students had a slightly decreased incident level risk ratio (ILRR = 0.96).

Figure 2.

Graphic display of ILRR for Latinx Students by School Year



The incident level risk ratio for Latinx students was then broken down by school level (elementary, middle, high) for each of the four school years. In all four years, Latinx elementary students were at less risk for an SDI referral relative to their white peers. In AY 2015-2016, the ILRR for Latinx elementary school students was 0.63. In AY 2016 – 2017, the ILRR was 0.91. In AY 2017 – 2018, the ILRR was 0.41, and in AY 2018 – 2019 the ILRR was 0.68. Additionally, middle school Latinx students were at decreased risk for an SDI referral during the 2016 – 2017 school year (ILRR = 0.90). Over the four years of data, the incident level risk ratio revealed increased risk for Latinx students during middle and high school for most years. In the 2015 – 2016 school year, Latinx students were at 1.18 greater risk in middle school and 1.39 greater risk in high school. Results were similar in the 2017 – 2018 school year for middle school (ILRR = 1.40) and high school (ILRR = 1.36) as well. Lastly, in the 2018 – 2019 school year, Latinx middle school and high school students were at increased risk (ILRR = 1.20, 1.54 respectively) to receive a subjective discipline incident. Table 2 and Figure 3 display the results of the ILRR analyses, by school level and year.

To further analyze the relation between race and subjective discipline incidents, a univariate analysis of variance (ANOVA) was performed with school level as the independent variable and incident level risk ratio (ILRR) as the dependent variable. School level had three categories (elementary, middle, and high schools). The analysis was performed using SPSS 26.0 for Windows.

Table 2.

ILRR for Latinx Students by School Level and School Year

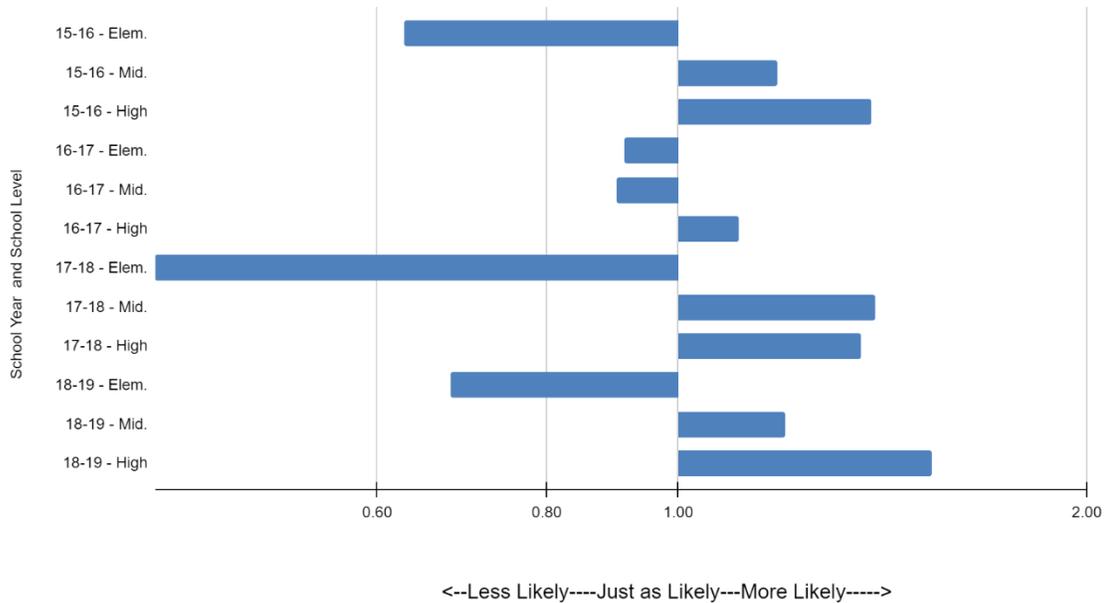
Year	School Level	ILRR for Latinx Students
2015- 2016	Elem.	0.63
	Mid.	1.18
	High	1.39
2016- 2017	Elem.	0.91
	Mid.	0.90
	High	1.11
2017- 2018	Elem.	0.41
	Mid.	1.40
	High	1.36
2018- 2019	Elem.	0.68
	Mid.	1.20
	High	1.54

Note. Elem.=Elementary Mid.=Middle

The univariate test indicated that the ILRR was statistically related to school level, $F(2, 9) = 13.36, p < .01, \eta^2 = 0.75$. Tukey's post hoc tests revealed that the incident level risk ratio was statistically larger at middle school ($M = 1.17, SD = 0.20$) and high school ($M = 1.35, SD = 0.18$) than at elementary school ($M = 0.66, SD = 0.20$). There was no statistical difference between middle and high school incident level risk ratios.

To answer the second question (*Does the relation between subjective discipline incidents vary with time in school year for Latinx students?*), descriptive statistics were computed to determine the count of subjective discipline incidents by time segment within each of the four school years.

Figure 3
Graphic Display of ILRR for Latinx Students by School Level and School Year



The total for each subjective discipline incident across all four years of discipline data. The time segments within school years that did not have subjective discipline incidents or segments of time that fell outside the data set of the current study were not included. For instance, what would have been the data point “2015 - 5” on the chart below was not included because those data actually fall under the 2014 - 2015 school year, which is outside of the scope of the study. Table 3 presents the observed counts of Latinx SDIs by time segment, and Figure 4 provides a graphic display of the data.

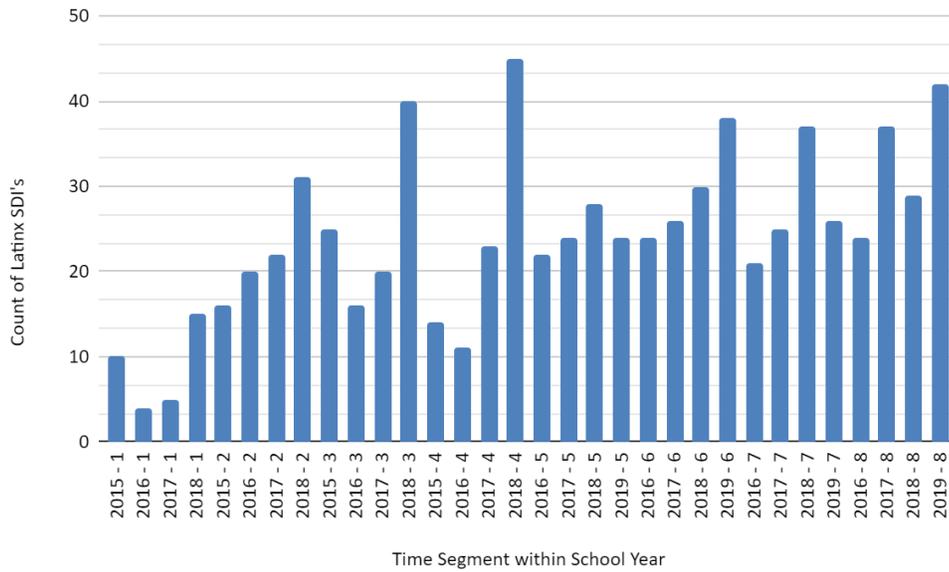
Additionally, a weighted mean of the incident level risk ratio was calculated to assess if a relation existed between incident level risk ratio and time in the school year. The mean was weighted based on the number of subjective discipline incidents for that year within each time segment to account for differences in counts across the years (see Table 4 and Figure 5).

Table 3.

Count of Latinx SDI's by Time Segment

Time Segment within School Year	Count of Latinx SDI's	Time Segment within School Year	Count of Latinx SDI's
2015 - 1	10	2016 - 5	22
2016 - 1	4	2017 - 5	24
2017 - 1	5	2018 - 5	28
2018 - 1	15	2019 - 5	24
2015 - 2	16	2016 - 6	24
2016 - 2	20	2017 - 6	26
2017 - 2	22	2018 - 6	30
2018 - 2	31	2019 - 6	38
2015 - 3	25	2016 - 7	21
2016 - 3	16	2017 - 7	25
2017 - 3	20	2018 - 7	37
2018 - 3	40	2019 - 7	26
2015 - 4	14	2016 - 8	24
2016 - 4	11	2017 - 8	37
2017 - 4	23	2018 - 8	29
2018 - 4	45	2019 - 8	42

Figure 4
Count of Latinx SDIs by Time Segment



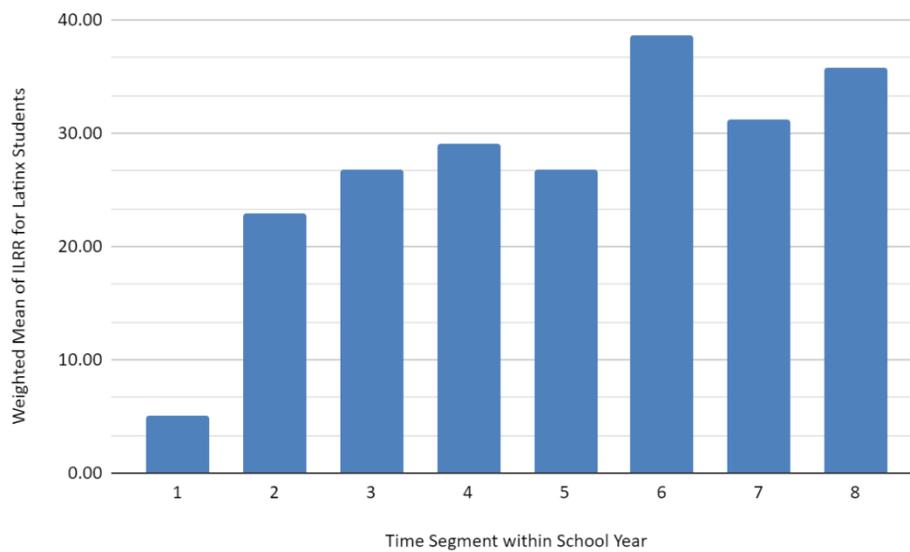
Pearson’s correlation was then computed between time segment and the weighted incident level risk ratio. The results indicated that there was a moderately strong positive correlation between time segment and the weighted incident level risk ratio ($r = 0.54$, $p < .001$).

Table 4.
Weighted Mean ILRR By Time Segment

Time Segment within School Year	Weighted Mean ILRR by Time Segment
1	5.05
2	22.91
3	26.82
4	29.03
5	26.79
6	38.63
7	31.23
8	35.85

Figure 5

Weighted Mean ILRR By Time Segment within School Year



CHAPTER IV

DISCUSSION

Summary of Major Findings

The results of my study provide evidence that Latinx students are less at risk relative to their White peers to receive a subjective discipline incident referral in elementary school. This finding is in alignment with prior research reporting that the racialized stereotypes of staff (that elementary Latinx students were “well-behaved”) are related to Latinx students receiving fewer office referrals (Rueda, 2015). In prior research however, no distinction was made between office referrals for subjective discipline incidents and objective discipline incidents, which is the nuance of the study.

The results of this study also indicate that Latinx students had a higher incident level risk ratio, associated with an increased likelihood of receiving a subjective discipline incident in middle and high school. These findings reinforce well-established research in the field highlighting the pattern of Latinx students facing higher rates of discipline than white peers in the later grades (Morris, 2005).

Results from this study provide additional evidence that Latinx students are underrepresented for discipline in elementary school and overrepresented as they move into secondary schools. These new findings also align with Skiba et al.’s (2011) study of nationally representative SWIS data from 436 schools, divided into K-6th ($n = 272$) and 6th-9th ($n = 92$) that found Latinx students were at decreased risk (odds ratio = 0.71, $p < .05$) in elementary school and increased risk (odds ratio = 1.71, $p < .05$) in secondary school of receiving objective discipline referrals. Whereas the earlier study reviewed objective discipline referrals (i.e., tardiness, smoking, trespassing), my findings, focusing

on subjective discipline incidents, adds additional layers of nuance to prior research efforts. The nuance provided by my study contributes to our understanding of the degree to which implicit bias might relate to subjective discipline incidents in discipline processes in ways that objective discipline referrals might not.

For instance, when compared to objective discipline incidents, SDI's by nature require a staff member to determine if a rule violation had occurred. A staff member's implicit bias has a greater opportunity to manifest in an SDI because an interpretation is required. An objective discipline incident would have clearer delineations for determining if a rule violation occurred. For example, it is easier to determine if a student arrived before 8am or after 8am (tardiness). Whereas with an SDI, a staff member might have to determine if a student's tone was appropriate (disrespect), which would necessitate an interpretation by the staff member. Thus, this study's investigation into SDI's as its focus gives a fuller perspective on how Latinx students might be encountering discipline when SDI's are separated from objective discipline incidents.

This study adds to current research by focusing particularly on the experience of Latinx students from the Pacific Northwest. With the increasing population of Latinx students in the focal school district, it is imperative that educators in the district become more aware of how the school experiences of Latinx students may be related to staff members' racialized stereotypes about Latinx students. To the extent that such pre-conceptions might be related to subjective discipline incidents, gaining greater awareness of this relation might offer important implications for district policy and practice, as discussed below.

Another contribution from this study follows from the results associated with research question two. Prior research has indicated Alaska native and indigenous students were at greater risk of receiving subjective discipline incidents as time progressed toward the end of the school day (Gion, McIntosh, & Smolkowski, 2018). Additionally, a study published by Smolkowski et al. (2016) that analyzed office discipline referrals in 2011 - 2012 across 45 states found a relation with time in school day and increased risk of receiving office discipline referrals for Black students. In the Smolkowski et al. study, researchers found that Black boys were 1.4 times more likely to receive a subjective office referral in the first 90 minutes of class in comparison to White students. The same study found that Black girls were 1.72 times more likely to receive a subjective office referral within that same period of time. Both of the Gion et al. (2018) and Smolkowski et al. (2016) studies provide evidence of a relation between subjective discipline incidents and time of day. Both of these studies highlight the relation between time of day and SDI's for Black and Alaskan Native students, but do not address how time of year might relate to SDIs. My study provides evidence of a relation between time of year and SDIs for Latinx students expanding on the relation between time and SDIs.

Through the investigation of the relation between subjective discipline incidents and time in school year for Latinx students, my dissertation study sheds new light on an environmental factor that relates to disproportionate subjective discipline incident referrals. I found that time of school year had a relation with increased incident level risk ratio and subjective discipline incident counts. This study builds on prior research by broadening the prior focus of time of day to the progression of discipline incidents *across the whole of the school year*. I found that Latinx students are more likely to have

increased incident level risk ratio as the date in school year approached the end of the calendar school year. These findings suggest that—similar to fatigue related to passage of time in the school day—cumulative fatigue bearing down on staff as the school year closes may also serve as an environmental stressor, increasing the risk for Latinx students to receive office referrals for subjective discipline incidents.

Study Limitations

As with all research this study has threats to its validity, including those stemming from instrumentation, history, and attrition, and limitations related to what is known about the sample. As district-provided extant data was used for this study, it is important to make note of the threats to internal validity and document how this study and the PNWSD addressed those threats.

Instrumentation. This threat to validity occurs when there is a change or flaw in the instrument, observer, or scorers that would lead to discrepancies in results. Instrumentation is a threat to internal validity in this study because different sites input data into Synergy, the district’s data collection system, and it is possible that staff members might have inputted discipline incidents differently, leading to errors in the data set. One way the district has worked to control for this threat is to mandate a discipline data entry training for all staff inputting discipline records. This mandatory one and a half hour training walks all staff through how to ensure correct procedures are followed. Additionally, the district has implemented a discipline entry review system for all office referrals. For instance, a district staff member reviews all discipline entries for accuracy. The district-mandated training and discipline entry review system provide some level of confidence that this threat to validity has been adequately controlled.

An additional instrumentation threat is the possibility that staff members making the behavior referrals have different interpretations of what constitutes an office referral. Although this is a likely possibility, the differences in staff interpretations are related to the overall research question centered on identifying disproportionate outcomes of subjective discipline incidents. Thus, this threat to validity was directly investigated.

History. Another threat to the validity of the study is history. This threat occurs when something unrelated to the study impacts the results. For example, the data set included four years of discipline data. Patterns in the data could be impacted if the district held a training around more equitable discipline practice, for example. It is possible that such training could influence staff behavior, which may lead to a decrease in office referrals unrelated to the VDPs on which the study was focused. Another instance could arise if typical school day interactions were no longer possible because of school closure, such as happened in the spring of 2020, with the COVID-19 pandemic (which fell outside the timeframe of this particular study). As another example, there was a snowstorm in the 2016-2017 school year that limited on-site instruction. However, the counts of subjective discipline incidents in comparison to the other years were not notably different, thereby reducing this validity threat.

Attrition. A third internal validity threat was associated with attrition and/or changes in the sample due to students leaving or new students enrolling in the district. Given that the study focuses on incident-level risk ratios however, students who receive multiple office referrals were included in the data analyses. It is possible though that a student contributing to many of those office referrals might graduate from the school district, cease attending school, or move away. Losing a student with multiple office

referrals from the dataset could result in a decrease in the number of office referrals based on which students are involved in the sample. Similarly, if a student with multiple office referrals moves into the district at a particular point in the year, their data might result in a change in the time-related risk-ratio. An increase in the risk ratio that may initially appear to be attributable to time of year may instead be a reflection of changes in the sample. As the analyses were based on four years of data, there is some reassurance that these types of attrition threats have been minimized.

Sample limitations. A final limitation of this study is that it did not encompass an in-depth look at the cultural and linguistic factors that may contribute to the office referrals of Latinx students. It is possible that a cultural and linguistic mismatch contributes to subjective discipline incidents for Latinx students, but those factors would need to be researched in a future study with different data collection methods. This study looked at race as a contributing factor in the disproportionate number of office referrals associated with subjective discipline incidents but did not extend to include those potential other factors. However, the findings of this study may suggest future directions for research within this district. For instance, the differences in the language of the students and the referring staff were not taken into account. It is possible that differences in communication may contribute as a possible environmental stressor in the vulnerable decision points model. Further research centered on the possible relation between language differences and subjective discipline incidents would shed more light on this aspect of the relation between environmental stressors and subjective discipline referrals.

Implications of the Findings

Despite the limitations, this research may have important implications for the educational attainment of Latinx students. As Latinx students become a larger share of the enrollment in the district, action must be taken at all levels within the district to make changes to ensure that Latinx students do not continue to experience disproportionate rates of subjective discipline. My findings therefore have implications not only for school districts, but also for individual school sites and educators.

Implications for School Districts

In order for school districts to better serve all Latinx students, it is imperative that an ongoing and comprehensive review of discipline data is conducted to identify and ameliorate disproportionality in discipline. The district has responsibility to root out inequities because exclusionary practices are disproportionately impacting students of color in ways that may undermine institutional efforts at closing academic achievement gaps and increasing student connection to schools.

It is therefore important that school districts carefully consider how student behavior handbooks provide guidance on responding to subjective discipline incidents. Behaviors attributed to students often place the onus of responsibility for changing the misbehavior squarely on the shoulders of students. However, findings on the vulnerable decision points in the discipline data indicate that adult behaviors also have an impact on disproportionate discipline outcomes of students. Unfortunately, adult behaviors are rarely if ever taken into consideration in discipline decisions regarding student behavior. The findings of disproportionate discipline incidents related to time of school year suggest that the school district needs to build consistent and clear guidelines for how staff

should respond to vulnerable decision points and subjective discipline incidents.

Providing clear guidance on how to navigate challenging subjective discipline incidents in ways that mitigate implicit bias are a critical next step in this process.

Although the PNWSD has a *Student and Family Handbook* that outlines behavior expectations for all students, it is possible that those expectations are not being applied uniformly to Latinx and White students. The results of my study indicate a relation between Latinx students and subjective discipline incidents; thus, it is likely there is a need for more training and consistent discipline practices across all school levels. The differential treatment of Latinx students as they move from elementary into secondary schools is likely doing harm to their academic and social well-being. For example, lower expectations of Latinx students in elementary school may have a relation with lower academic achievement related to staff's racialized stereotypes and the often-compliant behavior of Latinx elementary school students (Rueda, 2015). Additionally, racialized stereotypes of perceived threats centered on the attire of Latinx students (particularly male students) may lead to an over referral or overreliance on exclusionary disciplinary practices.

As a one potential solution, the district should consider implementing a School Wide Positive Behavior Intervention and Support (SWPBIS) system. A multitiered approach to student behavior, clear communication of behavioral expectations, and training of staff responses could be one way to support increased consistency in discipline practices (Smolkowski, Girvan, McIntosh, Nese, & Horner, 2016). Presently in the PNWSD, only a handful of schools implement this system of support. Increased use of SWPBIS systems would also allow schools to practice regular routines to analyze

discipline data. The increased analysis of discipline data would more readily equip schools to identify potential VDPs or other trends in discipline patterns. For example, analysis of site level data may identify VDPs at a campus that have a relation with disproportionate discipline outcomes. In one study, a site level team at a school in the Pacific Northwest identified an increased office discipline risk ratio of 4.5 for African-Americans students in comparison to White students for physical aggression while playing basketball at recess (McIntosh, Ellwood, McCall, & Girvan, 2018). The identification of this site-level VDP may not have been present at a different site without basketball courts. With the support of the district, schools may be assisted with identifying their own VDP's to support more equitable discipline outcomes for students.

Another implication based on the results would be the need to mitigate the influence of implicit bias in discipline situations. This could be done through training of staff with a strategy known as *active reflexive control through implementation intentions* (Mendoza, Gollwitzer, & Amodio, 2009). This strategy acknowledges that even when people become more aware of their implicit bias, it does not necessarily decrease the influence of implicit bias in their actions. For this reason, this strategy utilizes “if/then” scripts that support staff members by guiding them through encounters where implicit bias is likely to manifest (SDIs) with stereotyped students (Mendoza et al., 2009). Mendoza et al. concluded that participants are less likely to be influenced by implicit bias if they follow a script on how to respond during challenging situations (VDPs). In a school setting, playground supervisors could use a small script card to guide them when intervening in a subjective discipline incident during playground supervision.

Ideally, a script card could be developed across sites and school levels with community stakeholders to identify culturally responsive actions to support student behavior. For example, a staff member who encounters a disruptive behavior in the class may respond using the script or one similar in the following way: discreetly acknowledge the disruption, determine if the students are safe, determine if instruction can continue, if response to both prior statements are “true”, then the teacher would instead follow up with the student in a private conversation during independent work time. In this example, the script is followed, as opposed to calling the student out in the middle of a lesson. The delayed response from the staff member may allow for an opportunity for staff to reflect on any environmental stressors that could be activated and how their own implicit bias may be influencing their initial default response to the disruption in the moment.

In one exploratory study focusing on the experiences of Aboriginal students in Canada, research was conducted at five schools with SWPIBS programs implemented to determine if disproportionate discipline outcomes were impacting that student population. The results of the study indicated that no disproportionality was present in the data for the Aboriginal students. While some limitations in the study prevented conclusive evidence on what may have mitigated the potential for disproportionality, one hypothesis is that culturally responsive teaching practices supporting the Aboriginal populations present at the sites may have had a positive contribution (Greflund, McIntosh, Mercer, & May, 2014). With approaches focusing on site level data, and specific student populations, scripted actions may help reduce the likelihood that Latinx students may face disproportionate discipline at all school levels in the PNWSD.

Implications for School Sites

My study also suggests implications for individual school sites. Because increased incident level risk ratios for Latinx students are present when analyzed at the elementary, middle, and high school levels, individual sites may also be contributing to the cumulative increased risk in disproportionate ways. With this in mind, it is imperative that individual sites review their discipline data to identify exactly where vulnerable decision points may occur at their site. This type of review will allow for strategic planning on how to mitigate those instances or provide specific training to staff to navigate those vulnerable decision points more successfully. For instance, with the research cited earlier, VDP's were present at basketball courts during recess (McIntosh et al., 2018). However, in elementary sites, differences in expectations around the rules of a tetherball court may result in disproportionate discipline outcomes, which makes it incumbent for each site to identify potential VDPs. In doing so, each site might evaluate its own discipline data to determine if vulnerable decision points occur at specific times, locations, or situations. Once identified, staff members could develop ways to mitigate these situations using the if/then scripts discussed earlier.

School sites also have a responsibility to provide professional development for their staff regarding how to navigate vulnerable decision points. Consistent implementation of protocols site-wide will support students with well-established behavior expectations applied uniformly across their educational experience. Inconsistent application of these practices may lead to students experiencing differential treatment from staff. The differences in treatment from school staff have been established in prior

research to exacerbate increased feelings of disconnection from school and shown to have a relation with increased likelihood of misbehavior further (Madison & Aber, 2007).

Implications for School Staff

In light of the results of this research, it is clear that staff play a significant role in the disproportionate discipline outcomes for Latinx students in the Pacific Northwest School District. There is a need for all staff (classified, licensed, and administration) to be aware of vulnerable decision points to identify the environmental stressors present in their current personal and professional lives. Increased self-care in addition to awareness of VDPs could have a positive influence on decreasing the likelihood that implicit bias may influence subjective discipline incidents at sites. Staff members who are aware of their own environmental stressors may be able to better seek help and support from colleagues and/or have honest and appropriate dialogue with students when under the influence of environmental stressors. For example, a staff member acknowledging to students when they have had a lack of sleep because of a sick child may help relieve some of the pressure of responding to student behavior and also give students a lens through which to respond empathetically with staff. Such conversations model openness and authenticity with students which helps to build stronger relations and connectedness. The strength and connections may support staff and students navigating potential subjective discipline incidents in the future.

Opportunities for Future Research

This study provides important information for educators and also suggests areas for additional research, not only in education, but also in other fields.

The Rise of New Environmental Stressors and VDPs

With the impact of the COVID-19 pandemic, school experiences across the world have changed dramatically. Countless student lives have been disrupted in ways not yet fully understood. With the eventual return to on-site instruction, the Pacific Northwest School District will encounter new environmental stressors not previously seen in schools. For instance, social distancing and proper mask wearing are now requirements for compliance with outlined health and safety guidelines. Unfortunately, it may be challenging for staff to determine in the moment what appropriate social distancing and mask wearing may look like for all students. This uncertainty may result in requests for compliance leading to subjective discipline incidents due to differences in student and staff perceptions of and adherence to these guidelines. These new factors may provide additional risk factors for students of color trying to reengage and reconnect in the academic setting.

Additionally, new stressors not typically found in the classroom environment may also be exhibited at this time. Educators may feel students' lack of compliance around safety guidelines puts their health or the health of loved ones at risk. Prior to the pandemic, staff members who had an overreliance on compliance and punitive-based classroom management techniques may fall into old habits with a different nuance of strictly adhering to safety guidelines. The increased stress may result in hypervigilance and over surveillance of students of color, which may correspond to disproportionate increases in SDIs for students for color.

VDP's and Healthcare

Environmental stressors may have ways of influencing the experiences of people beyond the academic setting. For instance, little explanation is needed to understand the increase stressors that are present in the lives of healthcare staff working during the COVID-19 pandemic. Similar to staff in academic settings, healthcare staff are tasked with responding in the moment to decisions that may have long-lasting consequences. Stressors present in the healthcare system may result from long shifts, exhaustion, decreased staffing, and lack of resources (like Personal Protective Equipment). It is possible that these environmental stressors may manifest in the vulnerable decision points in the healthcare system resulting in the manifestation of implicit bias. Decisions around supporting patient needs may be influenced by the implicit bias manifested in those vulnerable decision points from the healthcare workers. This, too, is an area ripe for future research.

VDP's and Policing

The results of the current study indicate that there is a relation between environmental stressors and subjective discipline incidents in the school setting. A possible future related area of research would be to investigate the environmental stressors, subjective rule violations, and snap judgments found in law enforcement. Law enforcement officers tasked with responding to potentially dangerous situations frequently find themselves in high stress situations. There may also be potential for environmental stressors beyond individual situations like extended hours on a shift, time of day, pressure associated with bearing responsibility and access to use of deadly force, and perceptions of the community around policing. Given the continued focus on implicit

bias in policing, this study has implications for future research to extend the current study to law enforcement and the possible relation between vulnerable decision points and subjective enforcement / responses to possible infractions of the law.

Conclusion

The results of this study provide an opportunity for the Pacific Northwest School District, schools, and staff to identify and implement actionable steps to improve the educational experience of the Latinx students it serves. The district's review of its policies and procedures, in light of these findings, is a crucial first step to moving this work forward. Individual sites must also shoulder the responsibility of identifying VDP's that reside within each school's context. School sites will have important differences from each other necessitating that close attention is paid to how potential VDP's are mitigated. For instance, variations in schools' populations, policies, and practices may result in different VDPs specific to particular sites. Just each site must invest in identifying VDPs it is important for individual staff members to understand how their contributions to VDPs influence student discipline outcomes.

Therefore, it is incumbent on each staff member to become more aware of the environmental stressors that influence the manifestation of implicit bias in their day-to-day interactions with students, particularly any situation involving a subjective discipline incident. In the past, zero tolerance policies placed the onus and consequences of student misbehavior squarely on the shoulders of the students. However, the relation between environmental stressors experienced by staff and VDP's highlighted in this study suggest that it is imperative that staff take more responsibility in knowing their own stressors and navigating subjective discipline incidents with greater care.

With the growing rates of Latinx students in the Pacific Northwest School District, establishing ways to increase support for this population is tantamount. To the degree which staff take ownership of their responses in VDPs, Latinx students in the PNWSD may experience more equitable discipline outcomes. Changes in how VDPs are navigated may offer an opportunity to decrease inequity in discipline and provide more equal access to educational opportunities for Latinx students. Increased opportunities for Latinx students will be positive steps toward fulfilling the long absent promises outlined by the Supreme Court of the United States in *Brown v. Board of Education* when they declared that “separate is never equal” with regard to education.

REFERENCES CITED

- American Psychological Association Zero Tolerance Task Force. (2008). Are zero tolerance policies effective in the schools? An 1120 J Youth Adolescence (2014) 43:1110–1122 123 evidentiary review and recommendations. *American Psychologist*, 63, 852–862.
- Arcia, E. (2006). Achievement and enrollment status of suspended students: Outcomes in a large, multicultural school district. *Education and Urban Society*, 38, 359-369. doi: 10.1177/0042085907304879
- Armenta, Brian E. (2010). Stereotype Boost and Stereotype Threat Effects. *Cultural Diversity & Ethnic Minority Psychology*, 16(1), 94–98. <https://doi.org/10.1037/a0017564>
- Bottiani, J. H., Bradshaw, C. P., & Mendelson, T. (2017). A multilevel examination of racial disparities in high school discipline: Black and White adolescents' perceived equity, school belonging, and adjustment problems. *Journal of Educational Psychology*, 109, 532–545. Retrieved from <http://dx.doi.org/10.1037/edu0000155>.
- Cholewa, B., Hull, M. F., Babcock, C. R., & Smith, A. D. (2018). Predictors and academic outcomes associated with in-school suspension. *School Psychology Quarterly*, 33, 191–199. Retrieved from <https://doi.org/10.1037/spq0000213>.
- Dee, T., & Gershenson, S. (2017). Unconscious bias in the classroom: evidence and opportunities. *Google's Computer Science Education Research*. Retrieved from <https://cepa.stanford.edu/content/unconscious-bias-classroom-evidence-and-opportunities>
- Finn, J. D., & Servoss, T. J. (2014). Misbehavior, suspensions, and security measures in high school: Racial/Ethnic and gender differences. *Journal of Applied Research on Children: Informing Policy for Children at Risk*, 5, 1–50.
- Gion, C., McIntosh, K., & Smolkowski, K. (2018). Examination of American Indian/Alaska Native school discipline disproportionality using the vulnerable decision points approach. *Behavioral Disorders*, 44, 40–52.
- Girvan, E. J., Gion, C., McIntosh, K., & Smolkowski, K. (2017). The relative contribution of subjective office referrals to racial disproportionality in school discipline. *School Psychology Quarterly*, 32, 392–404. doi: 10.1037/spq0000178.
- Greflund, S., McIntosh, K., Mercer, S. H., & May, S. L. (2014). Examining Disproportionality in School Discipline for Aboriginal Students in Schools Implementing PBIS. *Canadian Journal of School Psychology*, 29, 213–235. <https://doi.org/10.1177/0829573514542214>

- Huang, F. L. (2018). Do Black students misbehave more? Investigating the differential involvement hypothesis and out-of-school suspensions. *Journal of Educational Research, 111*, 284–294.
- Kouchaki, M., & Smith, I. H. (2014). The morning morality effect: The influence of time of day on unethical behavior. *Psychological Science, 25*(1), 95–102. doi: 10.1177/0956797613498099.
- Mattison, Erica, & Aber, Mark S. (2007). Closing the Achievement Gap: The Association of Racial Climate with Achievement and Behavioral Outcomes. *American Journal of Community Psychology, 40*, 1–12. doi.org/10.1007/s10464-007-9128-x
- McIntosh, Kent; Girvan, Erik J.; Horner, Robert H.; and Smolkowski, Keith (2014) "Education not Incarceration: A Conceptual Model for Reducing Racial and Ethnic Disproportionality in School Discipline," *Journal of Applied Research on Children: Informing Policy for Children at Risk: Vol. 5 : Iss. 2 , Article 4.* <https://digitalcommons.library.tmc.edu/cgi/viewcontent.cgi?article=1215&context=childrenatrisk>
- McIntosh, Kent, Ellwood, Kathleen, McCall, Lisa, & Girvan, Erik J. (2018). Using Discipline Data to Enhance Equity in School Discipline. *Intervention in School and Clinic, 53*, 146–152. <https://doi.org/10.1177/1053451217702130>
- Mendoza, Saaid A., Gollwitzer, Peter M., & Amodio, David M. (2010). Reducing the expression of implicit stereotypes: Reflexive control through implementation intentions.(Author abstract). *Personality & Social Psychology Bulletin, 36*, 512-523. doi.org/10.1177/0146167210362789
- Monahan, K., Vanderhei, S., Bechtold, J., & Cauffman, E. (2014). From the school yard to the squad car: School discipline, truancy, and arrest. *Journal of Youth and Adolescence, 43*, 1110-1122. doi: 10.1007/s10964-014-0103-1.
- Morris, E. W. (2016). “Tuck in that Shirt!” Race, Class, Gender, and Discipline in an Urban School. *Sociological Perspectives, 48*, 25–48. Retrieved November 01, 2020, from <https://doi.org/10.1525/sop.2005.48.1.25>
- Morris, E. W., & Perry, B. L. (2017). Girls behaving badly? Race, gender, and subjective evaluation in the discipline of African American girls. *Sociology of Education, 90*, 127–148. doi: 10.1177/0038040717694876.
- National Center for Educational Statistics (NCES) Digest of Education Statistics. (n.d.). Retrieved March 22, 2021, from https://nces.ed.gov/programs/digest/d19/tables/dt19_203.70.asp

- Oregon Department of Education (ODE) - Report Card Media Page. (n.d.). Retrieved November 27, 2020, from <https://www.ode.state.or.us/data/reportcard/media.aspx>
- Peguro, Anthony A, & Shekarkhar, Zahra. (2011). Latino/a Student Misbehavior and School Punishment. *Hispanic Journal of Behavioral Sciences*, 33, 54–70. doi.org/10.1177/0739986310388021
- Reyes, M., & Domina, T. (2019). A mixed-methods study: Districts' implementation of language classification policies and the implications for male, Hispanic, and low-income middle school students. *Education Policy Analysis Archives*, 27, 30. doi: 10.14507/epaa.27.4210.
- Rueda, Eréndira. (2015). The Benefits of Being Latino: Differential Interpretations of Student Behavior and the Social Construction of Being Well Behaved. *Journal of Latinos and Education*, 14(4), 275–290. <https://doi.org/10.1080/15348431.2015.1025955>
- Shirley, Erica L. M, & Cornell, Dewey G. (2011). The contribution of student perceptions of school climate to understanding the disproportionate punishment of African American students in a middle school. *School Psychology International*, 33, 115–134. doi.org/10.1177/0143034311406815
- Skiba, R. J., Horner, R. H., Chung, C., Rausch, M. K., May, S. L., & Tobin, T. (2011). Race is not neutral: A national investigation of African American and Latino disproportionality in school discipline. *School Psychology Review*, 40, 85-107.
- Skiba, R. J., Michael, R. S., Nardo, A. C., & Peterson, R. L. (2002). The color of discipline: Sources of racial and gender disproportionality in school punishment. *Urban Review*, 34, 317-342.
- Smolkowski, K., Girvan, E. J., McIntosh, K., Nese, R. N. T., & Horner, R. H. (2016). Vulnerable decision points for disproportionate office discipline referrals: Comparisons of discipline for African American and White elementary school students. *Behavioral Disorders*, 41, 178–195.
- Wilson, J.Q., & Kelling, G.L., (1982, March). Broken windows: The police and neighborhood safety. *Atlantic Monthly*, 249.