MSU AGEP
SCIENCE TODAY BULLETIN
FALL 2019
LETTER FROM THE EDITOR

We are excited to present the 2019 AGEP Bulletin, Science Today. This edition showcases interdisciplinary scientific research from graduate students at Michigan State University. Our hope is by the end of the Bulletin you will agree there is no panacea for improving society, the environment, or world. Instead, it will be through the collective effort of diverse people working in distinct fields to further their area of research, application, and theory. It is our belief that our combined effort will sustain what we have and carry us into a brighter future.

The 6th edition also features stories and conversations with researchers at various stages of careers in science. You will find this content in the two new sections: (1) Alumni Spotlight and (2) Summer Research Opportunities Program (SROP) Undergraduate Researchers. We believe by covering the nuances and subtleties of their stories, we can portray careers in science more holistically and increase visibility for the next generation of researchers and students.

To our readership and AGEP community, we thank you for your support. We have enjoyed serving the Bulletin and the opportunities to participate in science communication and extend scientific discourse into communities of the everyday. We have had a rewarding experience as Editors, and we wish the bulletin continued success.

Sincerely,

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# Table of Contents

**Graduate Student Briefs**

Examining a Group Intervention Pilot Program for Female Survivors of Rape in Nigeria  
Oluwafunmilayo O. Ayeni .......................................................... 5

The Effect of Daily Identity Management on Minority Employees  
Courtney Bryant ........................................................................ 8

Working Together: Determinants to Cross-Disciplinary Research Within a Graduate Student Community  
Tatiana Elisa Bustos, Matthew Klein, and Nick Jaffe .......................... 10

A Pilot Study: Parental Influence in School Decision-Making  
Briana Coleman ........................................................................ 13

How adjacent land use affect the deposition and transport of pollutants in Urban Forest?  
Luis D. Rivera Cubero and Asia Downtin ..................................... 15

Using A Capital Framework to Explore Diversity in Stem: Shifting Away from a Deficit Model  
Patricia Jaimes ........................................................................ 18

The Role of Social Dominance Orientation, Empathy and Perceived Threat in Predicting Prejudice of Turkish Citizens Towards the Syrian Refugees  
Ezgi Karaoglu ........................................................................... 21

Implications of State Legislation on Minors’ E-Cigarette Consumption  
Cristian E Martinez Medina and Jeremiah Grant ............................ 23

There is No Such Thing as the Voiceless: Positioning Youth of Color as Educational Leaders in the Elementary School Setting  
Courtney Mauldin ...................................................................... 26
Examining the Impact of Faculty Endorsement of the Strong Black Woman Stereotype on Academic Advising in Graduate School
Jaleah Rutledge ................................................................. 29

SROP BRIEFS
The Effects of Racial Biases on Latinx Candidates in State Legislative Elections
Raymundo Lopez ................................................................. 31

AGEP ALUMNI SPOTLIGHT
A Conversation with Dr. Danielle King
Briona S. Jones ...................................................................... 34

WHAT IS MSU SROP? ............................................................. 35

WHAT IS MSU AGEP? ............................................................ 36
EXAMINING A GROUP INTERVENTION PILOT PROGRAM FOR FEMALE SURVIVORS OF RAPE IN NIGERIA

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Michigan State University

KEYWORDS: Nigeria, Sexual Violence, Group Intervention, Female, Rape

INTRODUCTION
Sexual violence is a pervasive global health problem (Black et al., 2011). Rape is one of the most prevalent forms of sexual violence in the world. In Nigeria, studies indicate a high prevalence of rape particularly among women and girls (Kunnui & Esiet, 2015). Long-term consequences of rape can include depression, anxiety disorder, post-traumatic stress disorder and suicide ideation (Ohayi et al., 2015). The prevalence of mental health disorders among rape survivors highlights the need for interventions focused on providing psychosocial support to enable survivors deal with the consequences of the experience.

Group psychosocial interventions for trauma survivors have been extensively researched and scholars have found that group interventions for survivors can improve their safety, increase self-sufficiency and self-esteem, and reduce social isolation and self-blame (Macy, Giattina, Sangster, Crosby, & Montijo, 2009). Despite the documented evidence within the global context, there is sparse research on the implementation and efficacy of group interventions for rape survivors in the Nigerian context. Considering this, it is important to identify and evaluate current mental health interventions to determine if and how such programs are beneficial for this population.

CURRENT STUDY
The current study examines the perceived benefits of a group intervention program for female survivors of rape in Nigeria from the perspective of the survivors. The research questions explored are:

1. What are the components of the program that survivors identified as most helpful to their experience?
2. How, if at all, do women perceive the impact of the support group program on their lives?

RESEARCH CONTEXT
This study involved examining rape survivors’ experiences with a group intervention program designed for female survivors of rape in Nigeria. The pilot program was developed and implemented by a non-profit sexual assault organization located in the Southwest Region of Nigeria. The pilot was conducted over a period of three (3) months in 2019. During this period, four (4) self-identified survivors of rape participated in six (6) group sessions held bi-weekly. Each session lasted for about 2 hours and was facilitated by a licensed psychologist.

METHODS
This study utilized a sequential explanatory mixed-methods design (Creswell, Plano Clark, Gutmann, & Hanson, 2003) for data collection. First, quantitative data was collected utilizing a self-administered survey which participants completed at the end of each group session. Participants responded to demographic questions and questions about their opinions on the session format, structure and content in the survey. Two weeks after the completion of the pilot program, participants were invited to complete a semi-structured phone interview in the qualitative phase of the study. In the interviews, participants responded to questions about their experience with the intervention and the perceived impact of the program on their lives.
DATA ANALYSIS
Descriptive analysis of the quantitative data was conducted using SPSS to explore participants’ opinions on the relevance of program topics and usefulness of program materials. Following the analysis of survey data, qualitative data was transcribed verbatim and analyzed using Braun & Clarke’s (2006) 6-step framework for data analysis, which offers a concise and applicable framework for thematic analysis (Maguire & Delahunt, 2017). Themes related to the perceived impact of the intervention on the lives of participants were identified. An interpretation of the entire analysis is presented in the next section.

RESULTS
RQ1: Respondents identified the handouts and group discussions as essential components of the program that were most helpful to their experience. Participants indicated that the content of the handouts utilized in the sessions were educational, relatable and helpful for their mental health and trauma recovery. Additionally, quantitative findings revealed an increase in participants’ knowledge about the nature of sexual violence, healthy sexual behavior, consent and positive coping strategies after the group discussions.

RQ2: Qualitative findings indicated that all participants perceived the intervention as a positive contribution to their lives. In particular, participants identified a reduced sense of isolation, an increase in self-love and self-care practices, an increase in knowledge and utilization of adaptive coping strategies as direct benefits of the intervention. Descriptions of themes and supporting quotes from participant interviews are presented in Figure 1.

LIMITATIONS AND IMPLICATIONS
As this was a pilot study, the group consisted of only 4 participants. As such, it is possible that other survivors will have different viewpoints and opinions regarding group interventions. Nevertheless, this study yields promising findings that describe potential benefits of a group intervention for Nigerian survivors. This study also yields beneficial implications for future research and practice for sexual assault service provision in the Nigerian context. Specifically, results can inform the modification of the program content and structure to improve the quality of the program and further enrich the experiences of survivors. Results can also inform future research on the development of survivor-centered intervention programs in the Nigerian context.

<table>
<thead>
<tr>
<th>THEMES</th>
<th>DESCRIPTIONS</th>
<th>SUPPORTIVE QUOTES</th>
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<tbody>
<tr>
<td>Reduced sense of isolation</td>
<td>Participants expressed feeling less alone in their trauma as a result of the supportive atmosphere and sense of belongingness fostered by the group facilitators and other group members in the sessions.</td>
<td>“I found a community of survivors who I can identify with and who respect me just as I respect them.” “Being in the group helped to lift my spirits and helped me to remember that I am not alone in my struggle.”</td>
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<td>Increase in self-love and self-care practices</td>
<td>Participants expressed developing self-awareness and active regard for their physical and mental well-being.</td>
<td>“I have started to love myself better and started practicing patterns like taking myself out and giving myself a treat every once in a while.”</td>
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<td>Increase in knowledge and utilization of adaptive coping strategies</td>
<td>Participants indicated that they learned healthy approaches to managing and responding to traumatic stress.</td>
<td>“I learned better coping strategies with flashbacks and intrusive memories.” “I have started using the coping mechanisms I was taught, especially yoga when I don’t feel like I am in a safe space or I feel overwhelmed.”</td>
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Figure 1. Perceived Impact of the Intervention
REFERENCES
THE EFFECT OF DAILY IDENTITY MANAGEMENT ON MINORITY EMPLOYEES

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KEYWORDS: Identity Management, Emotional Labor, Well-Being

INTRODUCTION
The identity management literature describes how individuals with stigmatized or minoritized identities strategically self-present in response to a stigma about their identity to actively avoid discrimination and stigmatization (Goffman, 1963; Shih, Young, & Brucher, 2013). The empirical work in this area has often taken an event-based perspective that focuses on identifying the strategies that those with stigmatized identities use when they encounter identity threat or interpersonal discrimination (e.g. Buttons, 2004; Ruggs, Martinez, & Hebl, 2011) and/or the effectiveness of said strategies in a particular context (e.g. Lyons et al., 2018; Singletary & Hebl, 2009). Researchers also agree that minorities proactively manage their identity to counter anticipated discrimination or stigmatization (Roberts, 2005; Shih, Brucher, & Young, 2013), such as changing the way they act, talk, or dress in order to assimilate to the dominant culture, though we know little about the implications of this behavior on the individual. Accounting for the experience of constantly managing one’s identity may contribute to explanations for the success in the workplace or disparity in psychological well-being between minority and non-minority employees. The present paper addresses the research question “How does daily identity management affect minority employee well-being?”

LITERATURE AND HYPOTHESES
To answer this research question, I integrate the identity management literature with the emotional labor literature by utilizing emotional labor as an explanatory mechanism for the experience of daily identity management. Emotional labor is conceptualized as the energy required to manage publicly observable emotion in an outward facing occupation in which there are requirements of display (Hochchild, 1983). Recent work provides theoretical and empirical overlap that suggests emotional labor could also describe the energy required to display identity in general (including speech and general behavior along with emotion; Ozcelik, 2013). In integrating the emotional labor and identity management literatures, I seek to understand how individual and situational factors dictate the emotional labor required for identity shifting at work and its relation to the daily well-being of minorities.

On the individual level, I predict that the relationship between a racial identity and the professional identity will dictate the amount of emotional labor it takes to identity manage and, therefore, daily well-being. More specifically, individuals that have conflicting identities- identities that have incompatible beliefs or values- will have more emotional labor in their identity management interactions and their daily well-being will be lower. I also predict that the situational factors of frequency and duration of identity management will affect emotional labor such that more frequent and longer interactions will require more emotional labor and lead to lower daily well-being.

METHODS
I plan to test these hypotheses by recruiting Black women that have recently started a job (within the last 3 months) and first having them fill out a baseline survey that indicates the relationship between their identities. Next, I will use an experience sampling methodology (ESM) in which participants submit a survey for each workday for two weeks (totaling ten workdays). Each survey will assess the participants’ well-being after work, a measure of the emotional labor applied that day, and then request a description of the frequency and duration of each identity management interaction in that day (both quantitatively with numbers and with an open text box for further description if necessary).
I will use multi-level modeling to account for the nested nature of the data (ten data points belong to each person) and compare results within and between people. Within person, I will test a mediation model that will evaluate the relationship between the frequency and duration of the identity management interactions and emotional labor and then the relationship between emotional labor and well-being. Between individuals, I will test a mediation model that will evaluate the relationship between the identity conflict and emotional labor and then the relationship between emotional labor and well-being.

LIMITATIONS AND IMPLICATIONS
One limitation of this approach is that it depends on the participant to have accurate recollection of the events of the day. Future research will address this concern by supplementing the findings with by an experimental study that elicits reactions to different identity management situations that vary in frequency and duration. The results of this research could have significant implications for how we understand the psychological processes of minority employees. The theoretical contributions shift the focus of the literature from predominantly reactionary to proactive management. In practice, this research would provide evidence for practitioners to devote efforts to change workplaces into environments where minorities do not feel they have to constantly manage their identity to avoid or diminish discrimination.

REFERENCES
WORKING TOGETHER: DETERMINANTS TO CROSS-DISCiplinary RESEARCH WITHIN A GRADUATE STUDENT COMMUNITY

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Michigan State University

KEYWORDS: Cross-Disciplinary Research, Collaboration, Graduate Student Community

BACKGROUND
Cross-disciplinary research refers to any analysis or policy recommendation based on analysis and methods of more than one discipline and includes variants of interdisciplinary and multidisciplinary approaches¹. Such research can advance knowledge further than disciplines working in silos by integrating diverse methodologies, paradigms, and perspectives. These strategies are crucial to address increasingly complex social issues present in public health, communication, environmental sciences, and beyond². While there is an increasing demand for this approach across much of academia, there are ongoing issues that prevent cross-disciplinary research from happening³. Our community project approached barriers to cross-disciplinary research as contextual factors in the specialized nature of graduate training across multiple disciplines at a university. Specifically, our project aimed to (1) understand differences in experiences with cross-disciplinary work across diverse graduate training, programs, or expertise; and (2) to identify facilitators across disciplines that have encouraged cross-disciplinary collaboration among the graduate student community.

METHODS
The study utilized a convergent mixed methods design that collected qualitative and quantitative data at the same time⁶. Specifically, we administered: (1) a quantitative survey to identify determinants (i.e., facilitators and barriers) to investigate the breadth of current cross-disciplinary efforts; and (2) an interactive focus group that would provide depth to participants’ personal experiences with such efforts. The quantitative survey was an adapted Likert type scale from Johari and colleagues that aimed to identify factors that were most influential to fostering cross-disciplinary collaboration⁷. The entire survey lasted about 10 minutes. Some factors include having exposure to cross-disciplinary research or time constraints. As a team, we adapted the language within the survey to promote clarity. For instance, we added, “Preference to work within one’s own discipline,” “Methodological preferences and requirements,” and “Other researchers’ interest in pursuing cross-disciplinary research” to capture more details on “research infrastructure” listed on the original survey. Our qualitative method utilized an interactive focus group activity grounded in rapid assessment procedures (RAP). RAP, rooted in participatory evaluation approaches, is a systematic, data collection tool that conducts rapid qualitative assessments of knowledge, attitudes and practices⁸. We combined the use of free listing and pile sorting activities⁹. Participants were asked to list their ideas on paper, which were then transferred to a large sheet. Participants then grouped similar suggestions together on the same sheet and chose a name for each category of items. Participants were then asked about the implications of responses (e.g., “What does this tell us about cross-disciplinary work at your department”). We decided on this approach because it allowed for participants and researchers to actively synthesize information about cross disciplinary efforts in real time.

PRELIMINARY FINDINGS
Our preliminary findings were based on aggregated responses from a total of 12 graduate students (four focus group sessions). The average age of participants was 26 (range= 21-36). Half of participants were either master-level or Ph.D. level students, ranging from first year to final year in their respective programs. Descriptive statistics were used to identify the most prioritized factors needed for cross-disciplinary research. Majority of participants agreed that solidarity of financial resource (M=3.92, SD=1.24), time constraints in conducting
research (M=3.83, SD=1.12), and preference to work within one’s own discipline (M=3.82, SD=1.08) were barriers to cross-disciplinary work (See Figure 1). Anova analyses were used to identify group differences by gender, level of education, age, or year in program. No significant mean differences were found. Our preliminary findings support prior studies on efforts to interdisciplinary research, indicating issues related to the inability to commit time and energy necessary for successful collaboration, unwillingness to integrate perspectives, and contextual factors related to the organization of institutions in higher education, such as funding\textsuperscript{10}. Qualitative responses also highlighted the overall difficulty of graduate school acting as a barrier to acquire the time and knowledge needed for collaboration in the first place. Final analyses and integration of the qualitative results is currently underway.

**Figure 1: Graduate Student Perspectives on Determinants to Cross-disciplinary Research**

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<td>Other researchers’ interest in pursuing cross-disciplinary research</td>
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<td>Methodological Preferences and requirements</td>
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<td>Preference to work within one’s own discipline</td>
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<td>Stability of research management</td>
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<td>Research networking</td>
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<td>Period of time given by grant provider</td>
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<td>Time constraints in conducting research</td>
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<td>Distance constraints with other researchers</td>
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<td>Tendency for individual research</td>
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<td>Ability to work as a team (between researchers)</td>
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<td>Expertise of research team</td>
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<td>Capability of conducting cross-disciplinary research</td>
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<td>Capability of conducting research</td>
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<td>Requirement for expertise</td>
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<td>Solidity of financial resource</td>
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<td>Tendency for cross-disciplinary research</td>
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**IMPLICATIONS FOR FUTURE RESEARCH**

Findings highlight facilitators and barriers to cross-disciplinary research within a graduate student community in a large, public research university. Preliminary results indicate that more focus should be placed on minimizing time and financial constraints to foster more collaborative research on campus, with special consideration on using existing resources to create intentional spaces (e.g., cross-disciplinary showcases or conferences). The culture of academia, in general, can discourage collaborative work due to the need for specialization within particular disciplines and the ensuing difficult from overcoming differences in understanding approaches outside of one’s expertise\textsuperscript{11}. Ongoing analyses will help identify attitudes, resources, or spaces needed to increase institutional support for more cross-disciplinary collaboration.

**REFERENCES**


A PILOT STUDY: PARENTAL INFLUENCE IN SCHOOL DECISION-MAKING

Briana Coleman
Department of Educational Administration
Michigan State University

KEYWORDS: Urban Education, K-12, School Partnerships, School Governance, Parent Involvement

INTRODUCTION
Reform strategies within urban education are often critiqued for being culturally and contextually unresponsive to the students and communities that they aim to serve (Horsford, Scott, & Anderson, 2019). Across the literature, urban education frequently refers to systems of education that serves low-income and minoritized groups, specifically in densely populated areas in which residents experience many social issues according to racial and class-based inequities (Milner, 2012). These inequities include neighborhood characteristics such as housing insecurity, inadequate transportation, and increased crime rates (Milner, 2012; Green, 2015). These conditions affect the environment of urban schools by contributing to high truancy, academic underperformance, low-parental involvement, low-funding, and high rates of disciplinary infractions (Milner, 2012; Khalifa, Gooden, & Davis, 2016). In response, reform policies from both state and federal levels have been implemented to holds students, teachers, and school leaders to higher academic rigor without an increase in funding and resources required to be successful (Horsford, Scott, & Anderson, 2019). Consequently, these blanket reform strategies have caused state takeovers, school closures, and losses in funding for schools in predominantly low-income and racially minoritized areas (Horsford, Scott, & Anderson, 2019). As a counterapproach, researchers assert the importance of the inclusion of parents and community-based organizations within urban school reform. This approach to urban education reform aims to center the voices of the students, parents, and community members affected by systems of urban education to enact changes that are aligned with their needs and desires (Khalifa, Gooden, & Davis, 2016). Further, policy mandates have charged school leaders with the effective engagement of parents as a mechanism to improve student outcomes. Literature, however, states that effective parental engagement must expand beyond tokenistic measures to those that aim to shift school environments as organizational entities to be more responsive to their and student’s needs (Auerbach, 2010).

This pilot study aimed to understand the experiences of African American parents and their opportunities to engage in school decision-making. Parents in Detroit were chosen due to the number of changes that the district has recently undergone related to governance. The following research question was used to develop the data collection protocol and to analyze participant responses: What are the experiences of Black parents regarding decision-making within school contexts?

METHODS AND ANALYSIS
Data was collected via semi-structured interviews with parents who currently have children enrolled in middle- and high-schools within Detroit. Participants were recruited via convenience sampling through social media outlet, Facebook. Five interviews were conducted with four mothers and one father. Parents varied between lower- to middle-SES status. Interviews ranged from roughly 25-60 minutes in length and were audio-recorded. Interview data was transcribed utilizing an online resource. Transcripts were then cleaned, and I utilized inductive strategies to see what codes emerged from the data. Transcripts underwent two rounds of coding. Below are preliminary findings according to four major themes.

FINDINGS
Leadership: Parents identified two critical components of leadership affecting their experiences to engage in school decision-making: style and turnover. Leadership style referred to bureaucratic versus more democratic
styles of principal leadership, while turnover referred to the replacement of school leaders in short periods of time. Both presented a barrier to parents.

Access: Common codes as access barriers included demographics and parent groups, with fewer codes being related to parent’s education and career attainment and time. Generally, parents felt that those with more economic resources had the most influence over decisions and closer relationships to principals. Time also either warranted or prohibited access for parents per their availability to volunteer or partake in PTA meetings.

Policy Changes: Parents noted curriculum, safety, extra-curriculars as the most recent changes which greatly affected their trust and perceptions of value within their children’s schools. They also were excluded from decision-making conversations regarding these changes.

Communication: Transparency was the most common code among parents when discussing communication, followed by relationships, rapport, and perceived support. Rapport and building relationships with principals were noted as important to inform decision-making and was mitigated by access to esteemed parental groups. Transparency was overwhelmingly negative and presented frustrations for many parents.

CONCLUSION
In closing, these parents’ experiences demonstrate the school’s inability, and inattention to include parents of color as valuable partners in their schools. Even with reform mandating the development of partnerships with parents, school administrators continue to involve them in limiting ways. These findings suggest that school leaders should do more to hear, value, and respond to parents of color in more authentic ways. Limitations included time and a small number of participants due to this being a pilot study.

This research is preliminary to a larger study. The findings from these interviews will be used to inform the development of a project examining larger scale implications of including stakeholders within school reform in urban environments. School, community, and family partnerships are discussed across the literature as a means for serving this purpose, however I intend to examine how particular school leaders have been successful in their implementation. It is intended that this work will expand beyond academia to inform the development of initiatives and partnerships which bridges schools and communities to improve overall school environments for minoritized students.

REFERENCES
HOW ADJACENT LAND USE AFFECT THE DEPOSITION AND TRANSPORT OF POLLUTANTS IN URBAN FOREST?

Luis D. Rivera Cubero and Asia Downtin
Department of Forestry
Michigan State University

KEYWORDS: Throughfall, Stemflow

INTRODUCTION
The world population is exponentially increasing; currently it is 7.3 billion and will 9.7 billion in 2050 according to a United Nations (2015) report. Migration from rural areas, also contribute to the growth in the global urban population. The population boom is becoming a problem in urban settings, and consequently natural ecosystems have been replaced by urban development. Urban development influences climatic conditions and alters the hydrological cycle leading to sporadic runoff and increased pollution in urban watersheds (Sanders 1986; McPherson et al. 1997). Parks, forests and farmlands are three main types of urban greenspace, which have significant ecological, social and economic functions (Bradley, 1995; Shafer, 1999; Tyrväinen, 2001; Lütz and Bastian, 2002). Greenspace confer various ecosystem services: isolating carbon dioxide and produce oxygen, purify air and water, regulate micro-climates, reduce noise pollution, protect soil and water, and maintain biodiversity. In urban areas, greenspaces are an important ecosystem service as concentrations of air pollutants tend to be higher in cities, which can threaten human health. After being deposited on the urban canopy, these gases and particles can be mobilized in the urban ecosystem by different transport mechanisms, including (a) throughfall, which is that precipitation which passes through the canopy in route to the forest; (b) stemflow, which is process that directs precipitation down plant branches and stems. The transport of these solutes via throughfall and stemflow to urban soils may impact the health and function of trees in cities.

OBJECTIVES
• Understand what is deposited on the urban canopy and how it is transported to urban soils.
• Understand the effects of roads on the adjacent plant communities and ecosystems.
• Estimate how throughfall and stemflow hydrochemistry impacts nutrient cycling.

RESEARCH QUESTIONS
1. What is the relationship between the concentrations of air contaminants deposited on Urban Canopy and how is it transported to the urban soils?
2. Quantifying hydrologic and solute fluxes via throughfall and stemflow.
   a. How do hydrologic fluxes impact throughfall and stemflow in urban environments?
   b. How Solute fluxes impact throughfall and stemflow in urban environments?
3. How aerosols fate and transport have an impact on the function of urban trees?
4. What roles do individual trees species have in nutrient and pollutant interception in urban environments?

METHODS
For this project we conducted a survey Hudson Woodlot, Lott North and Biebersheimer woodlots looking for beech, red oak, and basswood trees. The trees must have a canopy that look reasonably healthy and they will vary in location within the woodlot from the edge to the interior. Each woodlot is equipped with 24 throughfall collectors and 1 bulk precipitation collector. Samples were collected within 48 h of all rain events producing more than 1 cm of precipitation. Transect orientation will be from: 0, 10, 20, 30, 40, 50, 75 and 100 m from the windward edge and a total of 3 bulk precipitation collectors will be placed in the clearing. Collection will be after each rainstorm event for chemical analysis in a period of no more than 48 hours.
PRELIMINARY DATA

For the preliminary data we have been conducting a chemical analysis for Nitrate, Ammonia and Total Nitrogen (Sum of Nitrate and Ammonia) for our three woodlots. In figures 1-3 below we can see a significant difference in the concentration of throughfall flux that varies per site with Hudson woodlot being the outlier. This preliminary data is progress towards quantifying nutrients and pollutants fluxes via stemflow and throughfall in a key city.

![Throughfall Flux for Ammonia](image1)

Figure 1. Throughfall Flux Analysis for Ammonia

![Throughfall Flux for Nitrate](image2)

Figure 2. Throughfall Flux Analysis for Nitrate
BROADER IMPACTS

- Determining how sub-canopy nutrient and pollutant change fluxes in time and space.
- This project will be part of a larger effort to understand what trees do from a chemical hydrology perspective.
- This project is important to urban forestry because it could help to quantify nutrients and pollutants fluxes via stemflow and throughfall in a major United State city.

REFERENCES


![Throughfall Flux for Total Nitrogen](image)

Figure 3. Throughfall Flux Analysis for Total Nitrogen
USING A CAPITAL FRAMEWORK TO EXPLORE DIVERSITY IN STEM: SHIFTING AWAY FROM A DEFICIT MODEL

Patricia Jaimes
Department of Earth and Environmental Sciences and Policy
Michigan State University

KEYWORDS: STEM, Diversity, Capital

INTRODUCTION
Increasing diversity in the scientific workforce has long been a United States government initiative. The federal government, educational institutions, and other organizations allocate numerous resources toward helping students from traditionally underrepresented groups (URG’s) pursue and obtain STEM degrees. These resources include providing funding for summer research, college bridge programs, scholarships, and fellowships. Despite these abundant resources, diversity in STEM still lacks. An explanation for this diversity problem is that most current diversity initiatives primarily function on a deficit-based model where students from URG’s are depicted as being high risk and unprepared for scientific careers [10]. Therefore, initiatives such as college bridge or summer research programs, often focus only on providing students from URG’s with the missing knowledge and skills that would enable them to pursue scientific careers [11], such as learning how to read articles and perform research.

My research shifts away from only utilizing a deficit-based approach [10] for understanding how to increase diversity in STEM to using an assets-based approach. In this study, we explore the resources and assets that scientists from URG’s utilize in order to persevere in their scientific careers. Those assets and resources are in the forms of capital, both non-monetary and monetary assets that individuals, particularly from URG’s, utilize to succeed in life [1,4,12,9]. Those forms are often undervalued and go unrecognized in scientific community but are critical for an individual’s educational and professional success [12,9,2].

RESEARCH QUESTION
What capitals (non-monetary and monetary assets) do U.S. scientists from URG’s access and utilize during their scientific endeavors?

METHODS AND ANALYSIS
In 2017, 14 interviews were conducted with scientists from URG’s about the types of resources and support that were instrumental in their career development. Interview transcripts were coded using a deductive approach [5]. We developed a codebook using 12 different forms of capital commonly found in STEM education literature, which we grouped into 4 distinct capital categories: social, cultural, intrinsic, and economic (Table 1). Transcripts were coded using the codebook. Multiple researchers coded interviews and engaged in continuous dialogue in order to ensure inter-rater reliability (i.e. agreement in coding).

RESULTS
Preliminary results suggest that the most utilized capitals by our participants were social (networks) and intrinsic (internal strengths and motivations). Social capital was primarily seen in the form of mentoring while intrinsic capital was seen in the form of aspirations and a commitment to give back, support, and uplift their communities. While the concept of social capital is widely cited in the STEM Education literature as a mechanism for recruiting diverse individuals into STEM [3], intrinsic capital is mostly unrecognized [12, 9]. Our findings suggest that intrinsic capital is as equally important as social capital for the career success of scientists from URG’s.
Future Directions
Based on this preliminary data, I plan to conduct a minimum of 30 more interviews with scientists from URG’s for a more nuanced understanding of the ways that individuals from underrepresented backgrounds utilize forms of capital when pursuing a STEM career. This qualitative study is being followed up by a quantitative study. A survey targeting forms of capital, as well as career objectives, sense of belonging, and cultural participation within the scientific community has been disseminated electronically to STEM listservs across the U.S. To date, we have over 1,000 survey responses from U.S. scientists. ANOVA will be used to explore differences between career outcomes (sense of belonging, participation) among demographic groups and regression will evaluate the relationship between demographics, capital, and career outcomes.

Broader Implications
This research is demonstrating that the scientific community needs to rethink how people from underrepresented groups are recruited and supported while they are pursuing a scientific career. We suggest that the scientific community begin taking a social justice and culturally relevant approach when recruiting diverse individuals into STEM. Our findings are supported by previous studies that suggest that for minority scientists, working toward social change is more important for their career aspirations than those of their non-minority counterparts [6,7]. Instead of focusing on perceived deficits when developing initiatives for increasing diversity in STEM (e.g., undergraduate summer research programs, bridge programs, etc.), it is important to acknowledge and incorporate the strengths and resources that scientists from URG’s bring to the scientific community. Other studies also demonstrate that taking a strengths-based approach when working with diverse individuals is an effective mechanism to increase their participation, retention, and representation in the scientific community [12,9,2].

Although studies show that diversity in the workplace leads to innovative solutions and increased productivity, effectively increasing diversity in STEM has much wider implications than simply creating a productive scientific workforce. It is vital for the scientific workforce to be representative of the U.S. population because many of the scientific problems (e.g. environmental) that scientists are currently trying to solve, are primarily impacting marginalized communities [8]. Therefore, the voices of marginalized communities need to be represented in scientific conversations and solutions.

References


THE ROLE OF SOCIAL DOMINANCE ORIENTATION, EMPATHY AND PERCEIVED THREAT IN PREDICTING PREJUDICE OF TURKISH CITIZENS TOWARDS THE SYRIAN REFUGEES

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KEYWORDS: Prejudice, Syrian Refugees, Social Dominance Orientation, Empathy, Perceived Threat

INTRODUCTION
According to the United Nations Refugee Agency (2019), with the outbreak of civil war in Syria in 2011, the neighboring country, Turkey, has become the host of the largest refugee population with 3.7 million refugees. The Syrian refugees entered the job market as cheap labor force, they were accused of stealing the jobs from host community (i.e. The Telegraph, 2013; Haberturk, 2014). They were also found responsible of the increased rent prices that boiled the tension between the refugees and the host community and the prejudiced attitudes of the host community members toward the Syrian refugees.

THEORETICAL FRAMEWORK
Allport (1954) defines prejudice as the favorable or unfavorable attitudes derived for a person or a thing regardless of the attitudes are constructed as a consequence of prior experience or not. Prejudice is usually measured with negative out-group affect and social distance. Negative affect was defined as generalized feelings of awkwardness, anxiety, and apprehension by Stephan and Stephan (1985) and appears as the most predictive motive on determining out-group stereotyping. In addition, introduced by Bogardus (1959), social distance is the degree of sympathetic understanding that functions between person and person, between person and groups, and between person and group.

Some of the significant predictors of prejudice are social dominance orientation (SDO), empathy, and perceived threat. Pratto (1994) coined the term, SDO, as one’s degree of preference for inequality among social groups or one’s desires that one’s in-group dominate and be superior to out-groups. Although, SDO works well as unitary construct, some analyses suggest two complementary dimensions SDO-Dominance (SDO-D) and SDO-Egalitarianism (SDO-E) (Ho et al., 2011). According to Ho and colleagues (2011), SDO-D was conceptualized as the preference for some groups to dominate others as SDO-E refers to preference for nongenitalitarian intergroup relations. Along with these concepts, Integrated Threat Theory (ITT) identifies realistic and symbolic threat as proximal predictors of attitudes towards out-groups (Pettigrew & Meertens, 1995). Briefly, realistic threat in ITT can be conceptualized as threats to physical existence (e.g., wars, armed conflicts) and well-being (e.g., health) of in-group, any resources (e.g., houses, job opportunities) or sources of power (e.g., economic or political power) that in-group possess; symbolic threat, involving cultural difference threat, refers to clashing morals, norms, beliefs, standards, attitudes and values between the in-group and out-group members and it occurs with the belief of group members on the moral rightness of their group’s norms. Lastly, empathy, is defined as accurate understanding of another person’s inner experience; the attitude of comprehending their feelings and emotions and seeing things from their point of view (Rogers, 1957). In light of these concepts, this present study investigates the following research questions:

1. Does social dominance orientation predict the prejudicial attitudes, perceived threat of citizens of Turkey towards the Syrian refugees?
2. Does the perceived threat mediate the relation between SDO and the attitudes towards Syrian refugees?
3. Does the empathy mediate the relation between SDO and the attitudes towards Syrian refugees?
METHODS
Quantitative data was collected from 592 participants from host community throughout an online survey. To investigate the effect of SDO, empathy and perceived threat on prejudice, multiple regression analyses and mediational analyses were conducted.

RESULTS
Multiple regression analyses suggest SDO-D significantly predicted empathy, cultural difference threat, and general threat; when SDO-D level increased, the negative affect felt for the Syrian refugees, both types of perceived threat increased, and empathy level decreased. Also, empathy and positive affect significantly increased as negative affect and social distance decreased. Moreover, the relation between SDO and negative affect was mediated by empathy and general threat. In general, the ones strived for dominance had more prejudicial attitudes through perceived threat and had less empathy towards out-group members.

LIMITATIONS AND FUTURE RESEARCH
This study describes a control strategy that can be used to improve the efficiency in EV battery chargers, which translate to smaller, lighter, and cheaper charging systems. These advancements are key to promote the mass development and adaptation of EVs, speeding up the replacement of fossil-fueled-based vehicles so as to reduce carbon emissions in the environment. Current work is focused on validating the theory experimentally.

REFERENCES

2019 MICHIGAN STATE UNIVERSITY AGEP SCIENCE TODAY BULLETIN 22
IMPLICATIONS OF STATE LEGISLATION ON MINORS’ E-CIGARETTE CONSUMPTION

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KEYWORDS: E-Cigarette, E-Cigs, Legislation, Minors, Policy

INTRODUCTION
Currently, in the United States, e-cigarette consumption among minors is a pressing issue. Lawmakers are trying to understand this reality and are looking for ways to address it. According to this research, there may be a relationship between the amount of regulation surrounding e-cigarette consumption amongst youth and the actual rates of use. Preliminary results indicate that one way to reduce youth consumption of e-cigarettes is by increasing the regulation surrounding it. Each additional piece of e-cigarette legislation decreases youth e-cigarette consumption by 1.5 percentage points.

RESEARCH QUESTION
According to the CDC, e-cigarettes are now the most commonly used tobacco product among youth. In 2016, more than 2 million U.S. middle and high school students used e-cigarettes in the past 30 days, including 4.3% of middle school students and 11.3% of high school students (US Department of Health and Human Services, 2016). Identifying any correlation among state legislation and the usage of e-cigarettes among youth could allow us to evaluate and assess different measures to address this pressing issue. This research project is designed to examine how and to what degree state legislation that regulates e-cigarette sales to minors impacts its consumption among the group.

- Legislation Theory: It is not the regulatory statutes on e-cigarette consumption that matters, but the comprehensive nature of those policies that matter. This explanation advocates that a well-designed youth access policy affects youth smoking rates in the short term.
- Household Use Theory: Home-environments could be a factor in e-cigarette consumption amongst minors. Youth consumption rates could be higher if students are exposed to e-cigarettes at home or have access to them in their households.

EXPECTATIONS
H1: Minors residing in states with more legislative regulations (i.e. higher score on law index) on e-cigarette sales are less likely to consume e-cigarettes.
H2: Minors who are exposed to e-cigarettes at home are more likely to smoke e-cigarettes than those that aren’t.
H0: Legislative regulations and household use on e-cigarette sales will have no effect on the state-level minors’ consumption of e-cigarettes.

DATA
Our dataset compiles 17,591 answers from minors interviewed in 32 states in the U.S. Our dependent variable is minors’ consumption of e-cigarettes. Our first independent variable is state legislative activity on youth access to e-cigarettes index. Our second independent variable is the consumption of e-cigarettes by members of the minors’ households. Some of our control variables are gender, level of education, and race.

METHODOLOGY
Linear or Ordinary Least Square (OLS) regression: This is a useful approach to test the effect of each of our independent and control variables on minors’ consumption of e-cigarettes. The research interested was in testing the relationship of these variables, controlling for the effects of both of the IVs. The multiple linear regression model regressing the DV (minors’ consumption of e-cigarettes) on the main two IVs of analysis (legislative
regulations, household consumption) and control variables (gender, level of education, race), taking everything into account at the same time.

**RESULTS AND IMPLICATIONS**
The multiple linear regression model lends support to the Legislation Theory. From this model, we see that adding e-cigarette legislation decreases minors’ e-cigarette consumption: adding one additional piece of e-cigarette legislation decreases youth e-cigarette consumption by 1.5 percentage points \( (p<0.000) \). As a result, in states with four laws, we should observe a reduction in minors’ e-cigarette consumption by about six percentage points. Extrapolating this fact, we can deduce that legislation is preventing around 120,000 minors from using nicotine causing cancer. However, the multiple linear regression model does not provide support to the Household Use Theory, after controlling for potential confounding variables. Household use of e-cigarettes seems to have no effect on minors’ e-cigarettes consumption \( (p<.558) \), when controlling for the other variables. Analyzing the control variables, we can see that on average, female minors are three percentage points less likely to consume e-cigarettes compared to males. Also, white minors, on average, are 5.7 percentage points less likely to consume e-cigarettes. Overall, this model only accounts for 0.4\% of the variance in the dependent variable, and the full model is statistically significant \( (F(4,15950) = 15.86, p<.000) \).

```
. regress y_ecig lawindex female_ecig white_ecig household_ecig

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<td>Adj R-squared = 0.0037</td>
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```
| y_ecig     | Coef.   | Std. Err. | t     | P>|t| | [95% Conf. Interval] |
|------------|---------|-----------|-------|------|----------------------|
| lawindex   | -.0147977 | .0031657 | -4.67 | 0.000 | -.0210028 to -.0085925 |
| female_ecig| -.0295794 | .0064391 | -4.59 | 0.000 | -.0422006 to -.0169581 |
| white_ecig | -.0574297 | .0121619 | -4.72 | 0.000 | -.0812683 to -.033591 |
| household_ecig | .0075133 | .0128317 | 0.59 | .558 | -.0176382 to .0326648 |
| _cons      | .301748 | .0133765 | 22.56 | 0.000 | .2755286 to .3279675 |
```

**LIMITATIONS**
Though we are interested in analyzing our research question on a national level to compare the true effect of regulation on consumption nationwide based on state, we weren’t able to find data for all 50 states, nor for any of the territories. Therefore, the true effect of regulation on consumption nationwide based on state remains unknown. Because our data is individual answers nested into the state level, this limited our analysis. For the future, we would like to be able to conduct research about the comprehensive nature of the laws and see its impact individually. In future work, we would try to understand the nature of each legislation, and its dimension, instead of the legislation index, this will provide a more in-deep knowledge about the impact of the legislation.
REFERENCES
Nedelman M. High school e-cigarette use has jumped nearly 80%. Now, the FDA wants new regulations. CNN Health, 2018.
THERE IS NO SUCH THING AS THE VOICELESS: POSITIONING YOUTH OF COLOR AS EDUCATIONAL LEADERS IN THE ELEMENTARY SCHOOL SETTING

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KEYWORDS: Youth Voice, Youth Leadership, Urban Schools, K-12 School Leadership

THEORETICAL AND METHODOLOGICAL APPROACHES
Existing studies on student voice in leadership have highlighted voice as a catalyst for positive change (Mitra, 2012) and an opportunity to engage students as active partners in school change (Mitra et al., 2012; Betrand, 2014; 2017; 2018). However, as it stands, current student voice literature does not adequately explore issues of power, identity, and context (Mansfield, Welton & Halx, 2015). Therefore, this study is guided by a multi-dimensional framework which offers a critical yet holistic understanding of how I examine the engaged voice (hooks, 1994) of elementary-aged youth of color in the K-2 school space. The frameworks that inform the layered approach to examining youth voices of color in the elementary schooling context include (1) Black Feminist Epistemology (Collins, 2009; Dotson, 2015) which supports how we understand the history of marginalized voices, (2) Culturally Responsive School Leadership (Khalifa, Gooden, & Davis, 2016) – how we examine the actions and reflections of the school leader, and (3) reciprocal dialogue (Bertrand, 2014) – how we value student voice as a tool for igniting change.

METHODS & METHODOLOGY
Over the course of two semesters, I worked alongside 10 youth at Sunflower Elementary, a small, yet diverse school in the Midwest serving about 200 students. On a weekly basis, I met with our youth voice group composed of 2nd graders who then finished the study as 3rd graders. In our weekly dialogue space, students were able to create poetry, collage, comics, and short stories that conveyed their ideas about leadership and change in their school, society, and local community. Composing these products into what I call ‘youth artifacts’ allowed us to create and print a playbook for teachers and the school leader to better implement youth voice in the classroom in ways that mattered to students. Methods for this study included participant observation where field notes were captured, weekly memos, and photographs of the school and youth artifacts. Additionally, three focus group interviews were done with the youth in the dialogue space as well as repetitive interviews with the school principal throughout the course of the study.

CASE STUDY METHODOLOGY
Recognizing that case study research is designed to explore a phenomenon or the “how” in a particular context (Baxter & Jack, 2008), I frame this qualitative case study as one informed by critical narrative inquiry with and for youth of color. Using a critical case study approach that draws on narrative inquiry, narrative analysis and narrative traditions firmly guides the collection, analysis, and interpretation of my data (Erickson & Gutierrez, 2002). In order to address my research question concerning how school leaders engage the voices of youth of color in the elementary schooling context, I am able to illuminate the context of the school, the ways in which student voice is engaged by the school leader, and the practice of leadership within the larger school context.

PRELIMINARY FINDINGS
Conducting the dialogue group and multiple principal interviews alongside observations revealed that the school leader and students had different ideas about how student voice comes alive in a school setting. For the principal, youth activism and outlets for discussion about societal issues were important but the execution of student voice initiatives were limited to curricular understandings of student voice such as evaluating teachers for including more student discussion strategies in their lessons. This in turn led to students not being seen as decision makers.
and their voices ultimately disengaged from the material school changes that they desired. Moreover, I found that while the school leader considered herself a culturally responsive school leader, the inclusion of student voice in ways that mattered only came by way of tokenism - where students’ experiences regarding race, racism, and their humanity were only used to decorate the school leader’s agendas, not the students. My findings add to conversations that are emerging in the leadership field around student voice initiatives and how school leaders engage youth as decision makers in schools (Bertrand, 2018). Thus, as the field of educational leadership proposes critical questions around the ways in which we must (re)imagine or (re)envision educational leadership (Gooden & Dantley, 2012; Foster & Tillman, 2009; Bertrand, 2014; Theoharis, 2007; Mansfield, 2014), we must do so by repositioning youth as leaders and actively engaging their voice, rather than passive attempts. Noting that youth of color are experts of their schooling experiences and can provide insider perspectives related to inequity in schools – their voices deserve to be central to how school leaders engage in decision making in the K-12 school setting.

REFERENCES


2019 MICHIGAN STATE UNIVERSITY AGEP SCIENCE TODAY BULLETIN 27
EXAMINING THE IMPACT OF FACULTY ENDORSEMENT OF THE STRONG BLACK WOMAN STEREOTYPE ON ACADEMIC ADVISING IN GRADUATE SCHOOL

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KEYWORDS: Strong Black Woman, Advising, Academia

INTRODUCTION
In the United States, Black women were only awarded about 3% of all doctorates that were conferred in 2017 (National Science Foundation, 2018). At the intersection of their race and gender, Black women face racism and sexism as barriers in their pursuit of higher education. One particular barrier that Black women in graduate school may have to face is being stereotyped or perceived as a “strong Black woman”. The Strong Black Woman stereotype (SBWS) encompasses racialized and gendered beliefs about resilience, independence, caregiving, and emotional strength and shapes perceptions of Black womanhood (Abrams, Hill, & Maxwell, 2019). Although the strength and resilience components of the SBWS may appear to be protective, grappling with perceptions of being a “strong Black woman” can be counterproductive to Black women’s success because it has been related to negative physical and mental health outcomes (Abrams, Hill, & Maxwell, 2019; Walker-Barnes, 2014). To date, little research has focused on higher education as a context for studying the implications of the SBWS.

Existing literature about the SBWS primarily focuses on Black women’s internalization of the SBWS, rather than others’ endorsements of the SBWS outside of the individual. Previous research on stereotypes suggests that endorsement of positive or negative stereotypes can affect behavior that is directed to the stereotyped group (George, 2014). Because the SWBS—a generally positive stereotype—suggests that Black women are strong, resilient, and independent, endorsement of this stereotype may influence the quality of academic support they receive in graduate school. Quality academic support has been defined as implementing strategies that ensures students are “being cared about, treated in a caring way, and valued as an individual” (Cheng, 2004, p. 216). Therefore, there is a need to explore how faculty endorsement of the SBWS may impact the experiences of Black women in graduate school. The purpose of this study is to empirically examine the association between faculty’s endorsement of the SBWS stereotype and academic support for Black women in graduate school. My proposed research question is: Do faculty advisors who endorse the SBWS provide a different quality of academic support to Black women who exhibit the SBWS when compared to women who do not? I hypothesize that Black women who display the SBWS will be less likely to receive quality academic support than women who do not display the SWBS.

METHODS
I will conduct an experiment using video vignettes to examine my research question. I will recruit tenured, tenure track, and non-tenure track faculty from one university in the Midwest as participants for the experiment. Each participant will watch an assigned video vignette. After watching the vignette, the participants will be provided with a list of advising options in response to the video and asked to select the advising option that they would most likely use. The advising options will consist of high-quality, average-quality, and low-quality academic advising responses. The women graduate students in the videos will be similar in age and perceived factors such as socioeconomic background, academic achievement, and overall well-being. Race and the SBWS will be manipulated in a two-by-two factorial, between-subjects design: a Black woman who displays the SBWS, a Black woman who does not display the SWBS, a White woman who displays the SBWS, and a White woman who does not display the SWBS. Using the faculty’s responses, I will conduct a factorial ANOVA to determine if race and the SBWS are associated with the faculty’s advising decisions. Although video vignettes have not been used to
study the SBWS, vignette studies have been used to explore the effects of stereotyping (Sabin, Rivara, & Greenwald, 2008; Sperry & Symons, 2003).

**ANTICIPATED RESULTS AND IMPLICATIONS**

Support for my hypothesis would demonstrate that only Black women receive lower quality academic support when displaying the SBWS. Although other studies have briefly discussed negative perceptions of Black womanhood as barriers to success in graduate school (Jones, Wilder, & Osborne-Lampkin, 2013), none have explicitly examined how faculty endorsement of the SBWS may affect faculty support when advising Black female students. My project will put forward novel information on the impact of stereotyping in graduate school advising; thus, making a unique contribution to the literature about the effects of psychological processes on academic advising. More importantly, findings from this project could inform interventions and programming that support culturally sensitive advising, a step towards making academia more inclusive for members of underrepresented groups.

**REFERENCES**


The Effects of Racial Biases on Latinx Candidates in State Legislative Elections

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Sonoma State University

Keywords: Latino/a Politics, State Politics, Legislative Elections, Voting Behavior, Racial Minorities

Introduction
The Latinx population will double in the next 40 years, comprising nearly 30 percent of the total American population by the year 2060 (U.S Census Bureau). Further the 2000 U.S. Census, in addition to subsequent U.S. Census Bureau reports, have confirmed the Latinx population as the United States’ largest ethnic minority group at 17% (McConnaughy, White, Leal, Casellas 2010). In the political arena, the Latinx population is expected to be the largest ethnic voting bloc in the 2020 presidential election (Pew Research Center 2019).

However, the level of representation seen for Latinx individuals in America does not translate to the representation present in the American political process. The current Latinx population in the U.S. Congress sits at 8% (43 out of the eligible 535 seats); well below half its national populations average. Recent research, however, has found that Latinx candidates get elected as often as their minority counterparts, and non-minority candidates, when candidate information is at the voters' disposal (Juenke et al., 2016). Our project builds on the framework of candidate information by positing visual and written cues in an election simulation, which helps us assess whether voter preference on a Latinx candidate is altered when race and candidate information are both in play.

Research Question
How do racial cues influence voter biases and the electability of Latinx candidates in state legislative elections?

Methods
In a randomized experiment conducted through Lucid, we survey 800 individuals. We randomly assigned our respondents into 8 groups, one control group (100 people) and 7 experimental groups (100 people in each). In the survey, some participants were asked to select a candidate with only a name to reference, while other groups received visual and partisan information.

To test for voter biases, we constructed a 36-question survey which comprised of: probing demographic information, inquiries about racial views in the U.S., and questions that measured user-attentiveness—and paired it up with a mock-candidate ballot to imitate a fictional, state legislative election. This allowed us to simulate real-time vote choices by measuring responses that would best reflect voter biases. Correspondingly, for this project, we grounded voter preference by measuring respondents' racial biases toward fictional candidates. As such, we operationalized racial liberalism and conservatism, by virtue of an additive index from three questions, which asked participants about their positions on contemporary racial views in the U.S. The index allowed us to re-code responses into a racial liberal/conservative spectrum.

We used Stata to perform regression models. We tabulated an ordinary least square and a probit regression model. The former measured the support threshold, on a percentage scale from 1 to 100, for a Latinx Democratic candidate running up against a ‘White’ Republican candidate. The latter regression model assessed vote choice using dummy variables in a binary setting, a yes or no selection of a Latinx candidate.
RESULTS
We found racial conservatives opted for the Republican candidate as opposed to the Latinx candidate in a yes or no setting. However, when given an opportunity to rate a Latinx candidate on a scale from 1 to 100, racial conservatives judged Latinx candidates rather favorably.

Further, we asked participants to guess how likely a Democratic candidate would fare in an election against a Republican candidate—based solely from their names (no visuals). We discovered identical levels of support for a Democratic candidate with a Latinx-sounding and a White-sounding name—both reaching a 40% support threshold. Interestingly, both Democratic candidates outgained Republican candidates in support by more than 8%.

<table>
<thead>
<tr>
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<td>T5 (Ryan + Light Lt. Pic)</td>
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N = 698  R² = .60  N = 455  R² = .51

* indicates statistical significance at the 95% level. OLS regression results shown.

Table 1: illustrates an ordinary least squares regression model for the probability of voting for the Democratic candidate on a scale from 1-100. With the exception of our covariances, our results demonstrate no significant results in the Full Non-Latino Sample. However, when we exclude Hispanic participants and racial liberals we find significance. Racial liberals are participants who acknowledge that racism is detrimental to the American public.

IMPLICATIONS
This study employs an inductive approach to race and biases in legislative elections. Ultimately, we found that racial conservatives aligned with their respective political affiliations. Once we gave participants greater freedom to rate an individual candidate, however, support for a Latinx candidate strengthened. With these results we are better informed about the nature of minority candidates and can identify patterns in voting behavior to enhance legislative elections.
REFERENCES
A CONVERSATION WITH DR. DANIELLE KING
BY BRIONA S. JONES

Dr. Danielle D. King is an Assistant Professor of Industrial-Organizational Psychology at Rice University and is the founder of the WorKing Resilience Research Laboratory. Her research centers on the topics of work resilience, organizational diversity, and employee voice. Specifically, her work involves a) offering conceptual clarity and improved measurement to the resilience domain via integration with motivation frameworks, b) understanding how daily workplace resilience can be fostered, c) highlighting the unique perceptions and experiences of individuals when considering multiple social categories in tandem, and d) uncovering ways to help employees feel that they can and should voice ideas for improvement and engage in other helping-oriented behaviors. Her work has been funded by the National Science Foundation and published in both book chapters and scientific articles. She received her B.A. in Psychology from Spelman College and her M.A. and Ph.D. in Industrial and Organizational Psychology from Michigan State University.

BRIONA: How has your transition been into your new faculty job at Rice University?
DR. KING: I have had a very exciting and rewarding transition to my faculty job at Rice. My colleagues at Rice are very welcoming and supportive, and the University offers many resources to help new faculty members with the transition (e.g., a reduced teaching load my first semester, monthly new faculty women's lunches, regular meetings with my department chair to assess my needs and offer guidance). It has been a great experience to become a faculty member, as I enjoy developing courses, advising PhD and undergraduate students, and leading a research laboratory. I am thankful that my time at Michigan State helped to prepare me for this transition.

Briona: Can you speak to your time with the AGEP community at MSU, how it helped you during your time in your program at MSU, and how your affiliation with AGEP impacted your transition into your new role?
Dr. King: AGEP was a valuable resource in and following my graduate school experience. As a member of the AGEP community, I was connected with a diverse community of scholars outside my department who were socially and instrumentally supportive. It was great experience to hear about and share research across disciplines, and I still keep in touch with many fellow junior scholars who were in this community alongside me.

Briona: What are you currently researching and teaching?
Dr. King: I currently lead a resilience research laboratory (workingresiliencelab.rice.edu). In that lab we have over 10 current projects that focus on understanding and fostering resilience in unique, understudied populations (i.e., unemployed job seekers, minorities in STEM, single working mothers, teachers, shift workers) and in response to adversities (i.e., microaggressions at work, gender discrimination, vicarious racial trauma from events seen in the media). The undergraduate courses I teach include Introduction to Industrial-Organizational Psychology and the Psychology of Leadership, and the PhD courses I teach include Work Motivation and the Psychology of Leadership.
The Summer Research Opportunities Program (SROP) is a gateway to graduate education at Big Ten Academic Alliance universities. The goal of the program is to increase the number of underrepresented students who pursue graduate study and research careers. SROP helps prepare undergraduates for graduate study through intensive research experiences with faculty mentors and enrichment activities.

The MSU SROP Program provides an opportunity to combine professional development with applied work experience in your career field. This is also an opportunity for Michigan State University faculty to evaluate you as a potential graduate student. MSU SROP typically convenes the third weekend of May and ends the last weekend of July.

Program Benefits

- An opportunity to conduct research at one of the country’s largest and most scenic academic research universities
- A generous stipend for the summer
- Free room and board on MSU campus
- Paid travel to/from East Lansing
- Opportunities to present research locally and regionally
- An opportunity to interact with successful role models who have earned advanced degrees

Eligibility and How to Apply

- U.S. citizen or permanent resident
- Enrolled in a degree-granting program at a college/university in the U.S.
- Cumulative GPA of 3.0 or higher
- Have completed at least 2 semesters of undergraduate education
- Have at least 1 semester of undergraduate education remaining after completing MSU SROP
- Demonstrate a strong interest in graduate study (Masters or Ph.D.)

For more information,

Please write to us at: msusrop@grd.msu.edu
Visit us online at: http://www.grad.msu.edu/SROP
WHAT IS MSU AGEP?

The Alliances for Graduate Education and the Professoriate (AGEP) at Michigan State University (MSU) is a National Science Foundation program that supports recruitment, retention, and graduation of U.S. students in doctoral programs of the natural and social sciences, mathematics, and engineering. The focus of AGEP places special emphasis on a fully inclusive recruitment and development of students from U.S. population groups historically underrepresented in fields of the sciences, technology, engineering and mathematics (STEM); and the social, behavioral, and economic (SBE) sciences.

A goal of AGEP is to promote changes that transform U.S. universities to embrace the responsibility of substantially increasing the number of underrepresented U.S. minorities who will enter the professoriate in STEM and SBE disciplines. Graduate students, post-docs and faculty who participate in building the AGEP Community at MSU will provide a key to changing the culture of U.S. colleges and universities to embrace building world-class STEM and SBE faculty members who fully reflect the diversity in race, gender, culture and intellectual talent of the U.S. population. We have a series of events throughout the year, including monthly community meetings, Fall/Spring Conferences, and student outreach activities. You can follow us on LinkedIn and Facebook and request to be added to our list-serve by emailing the MSU AGEP Program Director, Steven Thomas at msuagep@grd.msu.edu.

For more information about MSU AGEP, feel free to connect us here:

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Bulletin website: https://grad.msu.edu/agep/bulletin

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