

VOLUME 8 · ISSUE 2

JUSWR

A JOURNAL OF UNDERGRADUATE SOCIAL
WORK RESEARCH, POLICY REVIEWS,
& OTHER CREATIVE WORKS

PERSON-CENTERED

TRANSFORMING ·

HUMANITY FIRST ·

BREAKING BARRIERS ·





Table of Contents

About the Journal.....	i
Acknowledgements.....	i
Staff.....	i
Letter.....	ii-iii

Case Study

<i>An Examination of a Local Gender and Sexuality Alliance (GSA): Creating Accessible Resources for Schools</i> Fynn Levery.....	2-10
---	------

Policy Analysis/Review

<i>Policy Analysis: Supplemental Security Income (SSI) Eligibility</i> Chloe Griffin, BSW.....	12-22
<i>Gender Inclusion Policy in Research</i> Annaliese Harper.....	26-36

Research Based Poster Presentation

<i>Recruitment and Engagement Strategies for Equitable Maternal Health and Child Development Research</i> Emma Darbro.....	38-40
---	-------

Research Study

<i>Bullying in Central Illinois: A Mix of Rural and Urban</i> Emily E. Dailey.....	42-55
---	-------

Editor's note: To be accepted for publication, the primary author of all submissions must be an undergraduate student at UIUC. Those authors and peer editors listed as having a bachelor's degree earned it after JUSWR's submission deadline. Congratulations to them.

About the Journal

Acknowledgements

We would like to express our gratitude to Dean Benjamin Lough for supporting our efforts to continue publishing undergraduate student's original work in the Journal of Undergraduate Social Work Research (JUSWR): A Journal of Undergraduate Research, Policy Reviews, and Other Creative Works. We also thank the School of Social Work faculty for the encouragement they extended to the authors of the JUSWR 8th issue. We further wish to acknowledge and extend a very special thanks to the faculty and PhD student advisors for their extraordinary mentoring, guidance, and support on behalf of the student authors.

Dr. Rachel Garthe is our Undergraduate Research Coordinator. She brings her enthusiasm and her extensive knowledge of research to our advisory board. We are grateful for her expertise, guidance, and steady support.

Last, but far from least, the JUSWR Advisory Board and Senior Editor wish to express our pride in and gratitude for our peer editors. These stellar students understood they were making a commitment: to participate in mandatory training, to review materials, and to offer viable, supportive recommendations to the student authors. We especially are grateful for their flexibility and dedication. Well done!

Staff

Senior Editor

Rebecca Dohleman Hawley, MSW

Undergraduate Senior Editors

Tasia Curry

Sharlei Deltang

Riley Murphy, BSW

Brooke Wilson, BSW

Undergraduate Junior Editors

Amari Anderson

Wyatt Beal

Gianna Camacho

Advisory Board

Dr. Rachel Garthe, Undergraduate Research Program Coordinator

Dr. Janet Carter-Black, Teaching Professor

Cover Design & Consultant

Riley Murphy

Becky Ponder

IT Support

Anthony Hillen

Dear Reader:

Welcome to the eighth volume of the Journal of Undergraduate Social Work Research (JUSWR): A Journal of Undergraduate Research, Policy Reviews, and Other Creative Works. This journal is a result of a highly collaborative effort between students, faculty, and staff. Undergraduate peer editors were instrumental in the selecting, editing, and submitting recommendations for research pieces to be accepted for publication. These undergraduate peer editors worked closely with the Senior Editor, Rebecca Dohleman Hawley, who did an outstanding job providing feedback, guidance, and prowess throughout the entire publication process. Faculty members also generously mentored their students in the writing and publication processes, of which we are grateful for their time and energy. Fellow Advisory Board Member, Dr. Jan Carter-Black, provided the team with exceptional guidance and feedback. As the Undergraduate Research Coordinator for the School of Social Work and Advisory Board Member of the JUSWR, I approached my role with commitment and enthusiasm, assisting with the peer editor training and editing process. Together, this collaborative team proudly brings you the eighth volume of JUSWR.

This year, Volume 8 is split into two issues to accommodate the number of excellent pieces submitted. This year's volume includes pieces from students majoring in Social Work, Psychology, Communication, Brain and Cognitive Science, and Gender and Women's Studies. Issue one includes literature reviews (e.g., prevalence of police violence in the disability community; domestic violence risk within immigrant populations), policy analyses (e.g., analysis of a bill enhancing the transition into adulthood for foster youth), and research studies (e.g., sexual communication in sexual education; understanding the number of school social workers in the United States). Issue two includes research studies (e.g., an examination of bullying in Central Illinois; recruitment and engagement strategies for equitable maternal health and child development), policy analyses (e.g., Supplemental Security Income eligibility), a review (e.g., gender inclusion in research within National Institutes of Health policies), and a case study (e.g., examination of a local Gender and Sexuality Alliance).

As you flip through the current and previous issues of this journal, you will see a glimpse into the knowledge, creativity, critical thinking, and thoughtfulness of the authors across these diverse platforms. Students make contributions that advance social and economic justice, further enhancing their own and their readers' appreciation toward our diverse and constantly evolving social world.

As the Undergraduate Research Coordinator for the School of Social Work, I am honored to join such a remarkable editorial team and direct undergraduate research efforts. The journal originated with the aim of supporting undergraduate research and scholarly work, becoming a platform for students to disseminate their findings and work. Some of the ways students can become involved in research at the School of Social Work include: 1) participating as a Research Assistant to a faculty-directed research project, or 2) leading their own area of research with an Independent Study or Project.

Students can find more information about these opportunities in the Course Catalog (SOCW 310, 418, and 480). It is from these projects that many students submit posters and papers to this journal or present at the University of Illinois Undergraduate Research Symposium. Other research opportunities include authoring or co-authoring research papers and presentations for peer-reviewed journals and academic conferences, serving as a peer editor for the journal, or pursuing the Undergraduate Research Certificate Program offered by the Office of Undergraduate Research.

I am pleased to announce the eighth volume of JUSWR. This publication provides clear and compelling evidence of the high quality of undergraduate social work research and creative works that contribute to knowledge permeating the School of Social Work and the University of Illinois at Urbana-Champaign.

Sincerely,

Rachel Garthe, PhD
Associate Professor & Undergraduate Research Coordinator
School of Social Work



Case Study

An Examination of a Local Gender and Sexuality Alliance (GSA): Creating Accessible Resources for Schools

Fynn Lavery

University of Illinois at Urbana-Champaign

Abstract

Having a Gender and Sexuality Alliance (GSA) at school can have numerous benefits for students (e.g., spark a sense of belonging, provide developmentally appropriate activities, and have allied/LGBTQ+ identifying faculty support). GSAs are of critical importance, given that LGBTQ+ youth face disparate rates of victimization and mental health concerns. The current study aims to evaluate a GSA within a local public middle school. This GSA has a student-led and faculty-facilitated structure, and the students are exploring the importance of leadership roles with arms-length guidance from allied/LGBTQ+ sponsors. We will conduct interviews with faculty GSA sponsors and attend the student-led GSA meetings and events. Alongside the sponsors and students, we will co-create a model of their GSA to use as a moldable template for inactive/non-functioning middle school GSAs. Eventually, we plan to further evaluate this GSA by conducting focus groups with student participants and examining possible racial and ethnic disparities in GSA attendance and involvement. This research will create accessible resources for GSA faculty and student leaders, offer considerations for school staff to increase rates of LGBTQ+ student involvement, and raise awareness about the impactful effects of spaces-of-belonging on the lives and wellbeing of LGBTQ+ youth.

Keywords: school social work, LGBTQ+, transgender, GSA, Gender Sexuality Alliance, mental health

About the Author: *Fynn is a senior studying Social Work and Gender & Women's Studies. Fynn is interested in examining how to improve the overall experience of LGBTQ+ individuals throughout various systems without policy intervention.*

Editor's note: *This is a transcript of an oral presentation given at UIUC's Undergraduate Research Symposium, April 24, 2024.*

Hello everyone! Thank you for coming to our presentation today! My name is Fynn Levery, and today we will be looking at An Examination of a Local Gender and Sexuality Alliance (GSA): Creating Accessible Resources for Schools.

Ah, middle school... So many changes ensue during the ages of 11-13. Going through puberty, exploring new social situations, developing sexual and intimate feelings, and of course, going through an emo phase. All of these are pillars of the middle school experience.

Many adults would not go back to middle school if they were asked. To be frank, I wouldn't go back either! It was musty and spiteful and of course, no one in the history of the world had ever gone through what I was experiencing.

Although middle school is a treacherous time for most, developing sexual or intimate feelings and the development of puberty affect one group of tweens a bit differently. LGBTQ+ youth face disparate rates of victimization and mental health concerns in comparison to their non-LGBTQ+ counterparts.

Suicidal Ideation Among Transgender and Gender Expansive Youth: Mechanisms of Risk by Rachel Garthe highlights that transgender and gender-expansive youth experience high rates of bullying, cyberbullying and dating violence, compared to male and female youth. Experiencing victimization based on gender identity is associated with disparate rates of negative mental health outcomes (Garthe et al., 2021). Researchers also found depressive symptoms and suicidal ideation rates are also higher among transgender and gender-expansive youth.

When thinking back to our negative or uncomfortable experiences in middle school, I began to wonder: What would have helped us in middle school? What are some things that would assist LGBTQ+ 11-13 year olds now? And how could we execute assistive practices for the next generation of queer and transgender middle schoolers?

I did not have the luxury of having a Gender and Sexuality Alliance in my middle school.

The introduction of the GSA provides LGBTQ+ youth with spaces that spark a sense of belonging, have developmentally appropriate activities, and allied or LGBTQ+ identifying faculty support (Garthe et al., 2022).

This leads us to the question, what is a GSA? A Gender and Sexuality Alliance, formerly known as a Gay Straight Alliance, is an after-school organization that serves as a safe place for LGBTQ+ individuals to go and be themselves without shame. It's awesome they were able to keep the phrase "GSA", right? Funny how those things work out. The modern format is typically an hour after school, only allowing LGBTQ+ members to be in the space. The former format also ran for an hour after school but allowed anyone to attend meetings regardless of LGBTQ+ status. The Gender and Sexuality Alliance as we know it today, allows for there to be a space that LGBTQ+ individuals can see one another and meet within an in-community space.

Looking into the current study, we contacted nine local middle and high schools to try and get in touch with the sponsors and students from their schools' GSAs. These schools included Edison Middle School, Franklin STEAM Academy, Garden Hills 6-8, International Prep Academy, Jefferson Middle School, Centennial High School, Central High School, Urbana High School, and of course, Urbana Middle School (UMS).

Contacting these middle schools was our first step in evaluating local middle and high schools to pinpoint what made GSAs accepting and engaging spaces from a student's perspective.

From our contact list, four schools and the UPCenter replied to set up a meeting with us. These schools were: Jefferson Middle School, International Prep Academy or IPA, Centennial High School, and Urbana Middle School.

At UMS, we see key components of staff support, school involvement, and a shared sense of belonging. In exploring the success of UMS' GSA, we plan to further explore which elements affected LGBTQ+ students' experiences within school.

Contrarily, Centennial High School's GSA did not have much student interest or involvement, struggled to keep continual attendance, and had wavering faculty direction and leadership.

Jefferson and IPA's schedules, unfortunately, did not align with our availability, but we remained in contact to assist and volunteer with their GSAs throughout the semester.

This process led us to primarily focus on the UMS GSA. When we first began our journey with UMS' GSA, we had no idea what to expect. As students who never had the opportunity to be in a middle school GSA, our expectations were low. But fortunately, we were very pleasantly surprised by UMS' GSA.

UMS' GSA is a premiere example of a functioning middle school organization. With a student-led and faculty-facilitated structure, UMS students are exploring the importance of leadership roles with arms-length guidance from allied and LGBTQ+ sponsors.

What this means for UMS students is they have a democratically voted president who compiles icebreakers and begins their meetings. Their meetings are soon then after guided by conversation starters gifted by the faculty members who are facilitating the group. If there is an activity that the group does, it is chosen and carried out by the GSA members. Administrative tasks are taken care of by the faculty facilitators.

UMS students are served by this model because it gives them an appropriate amount of control and leadership for a larger group of 15-25 students, while allowing there to be accepted and encouraged guidance by the facilitators. UMS students were very respectful and responsive to student leadership and faculty leadership alike.

If any of you are familiar with GSAs and the average turnout and participation in them, you too are shocked at the average student involvement of UMS' GSA with 15-25 students participating in general meetings weekly.

This was something I was also incredibly shocked by. For those of you who are unfamiliar with an average turnout of GSAs, it often looks like four friends hanging out at a set of desks for 30 minutes, then going home.

UMS' GSA balanced facilitated conversation and playtime, with the first 30 minutes of their meeting being free time, and the second half of their meetings being facilitated conversation or

activities. This allowed the students to get their after-school jitters out, have some socialization time, and then feel fulfilled through thoughtful dialogue that touched on current events in the LGBTQ+ community, questions about their identity, and other assorted topics middle schoolers love to talk about. Some of my favorite meeting conversations were about favorite cheeses and hammerhead sharks.

This method of balanced play and facilitated conversation allowed the students to feel engaged and included in conversation that is oftentimes not shared with them. These conversations included heavier topics about the LGBTQ+ community including bullying and victimization, discrimination, and the realities of targeted LGBTQ+ violence.

It is incredibly important to include students in difficult conversations surrounding LGBTQ+ based discrimination and violence because more often than not, the individuals who are facing bullying and targeted LGBTQ+ violence are closer in age to the victim than their safe adult. Although important, these incidents are often incredibly difficult for adults to talk about with tweens and adolescents. Questions arise like: How do I have this conversation? and is this appropriate to share with my 11-13 year old?

All-in-all, LGBTQ+ tweens and adolescents will be exposed to media either via the 10 o'clock news, their cell phones, or through word of mouth with their peers. In sharing a hard conversation with a tween, you are showing them you listen to their feelings toward difficult subject matters, value their input, and respect them and their community enough to work through their questions together. This mutual respect and community building is a large reason for UMS' GSA success.

Conversing may still feel like a daunting task. Who *wants* to discuss violence with 11-13 year olds? It is better to have a conversation and acknowledge that harm has been done than to ignore and say nothing at all. Childhood and adolescence are enriched by hard conversations and a safe and trusting ear. In not allowing children to be curious and ask uncomfortable questions, feelings of loneliness, confusion, and shame begin to fester surrounding difficult subject matters. Moving forward, it should be a goal to center listening, honesty, and open communication to enrich childhood glee.

Once UMS students had the opportunity to share their feelings about LGBTQ+ violence and discrimination, they came back ready to discuss their favorite cheeses, song of the week, and of course, hammerhead sharks.

Throughout our research we have found the pillars of success at UMS' GSA: mutual respect, trust, and safe adult guidance. This semester, to compile our findings we attended weekly GSA meetings at UMS, bringing snacks, having conversations, and making buttons.

With our findings, we hope to work alongside the UMS GSA students and sponsors to create a moldable model GSA. In looking at the structure and effectiveness of UMS' GSA, we believe our findings, when compiled into accessible resources, could greatly help struggling, inactive, and failing GSAs continue their process of being an integral support to middle school students.

This template would include suggested structure guidelines, including information about democratic voting processes, how to facilitate that with middle schoolers, and balancing power in the role of faculty sponsor.

From UMS' GSA, I will take strategies and suggestions from educators and sponsors to inform the manual's details. Furthermore, I will use points of adjustment to educate future manual users of what was ineffective to make an educated decision on what to mold and change about GSA structure and activities.

The template would also include suggestions on how to facilitate group discussion, training on LGBTQ+ cultural competency, and tips on how to hold conversations that may be difficult for the facilitator and the tween attendees. This will assist in navigating through important and uncomfortable conversations as well as going over important LGBTQ+ knowledge and culture to further understand the ever-growing community.

Our template would also include suggestions for meeting format, possible scheduling roadblocks, and activity ideas. Meeting format, as previously mentioned, is important considering the need for social and facilitated time, and making sure there is time for both within the session is integral. For scheduling roadblocks, we found GSA attendance drastically dwindled if it was scheduled overlapping with other school organizations that had high LGBTQ+ attendance such as theater and art club. Activity suggestions are especially important throughout

this template because as important as GSA is for middle schoolers, it is also an additional responsibility for an adult. So giving suggestions that have worked previously allows the facilitator to use less energy and feel more fulfilled by a functioning event if they are in a time crunch or are having a low-energy week.

Eventually, we plan to evaluate the UMS GSA by conducting focus groups with student participants, as well as examining possible racial and ethnic disparities in GSA attendance and involvement.

With our findings, we plan to make these resources available to other local middle and high schools within the broader Champaign-Urbana area. This research has important implications for translating research findings into accessible resources for GSA faculty and student leaders, offering considerations for social workers and school staff to functionally increase rates of LGBTQ+ student involvement within their schools, and increasing awareness about the impactful effects of spaces-of-belonging on the lives and wellbeing of LGBTQ+ youth.

Looking into the future, our project has reserved a grant to continue our research and compensate those who we conduct focus groups with. We also plan to use these funds to further enhance the GSA experience of those in the community who may need our volunteering and programmatic assistance.

Using connections made through this project, I plan to create a queer mentorship Registered Student Organization at the University of Illinois. The organization would work with local LGBTQ+ middle and high school students and connect them to U of I student mentors. We are also hoping to continue this network by giving U of I LGBTQ+ student mentors community-partner mentors (aged 25+). This model is unique and showcases the importance of having a safe-adult guide throughout adolescence and into young adulthood.

Overall, the importance of a functional GSA on the LGBTQ+ middle school experience is integral. It allows students a space to explore themselves, make fellow queer and trans connections, and have important conversations that give them perspective and grace.

Thank you for attending this session today! I'd like to now open for presentation questions and comments.

References

- Adelman, M., Nonnenmacher, S., Borman, B., & Kosciw, J. G. (2022). Gen Z GSAs: Trans-Affirming and Racially Inclusive Gender-Sexuality Alliances in Secondary Schools. *Teachers College Record: The Voice of Scholarship in Education*, 124(8), 192–219. <https://doi.org/10.1177/01614681221123129>
- Baams, L., & Russell, S. T. (2020). Gay-Straight Alliances, School Functioning, and Mental Health: Associations for Students of Color and LGBTQ Students. *Youth & Society*, 53(2), 0044118X2095104. <https://doi.org/10.1177/0044118x20951045>
- De Pedro, K. T., Lynch, R. J., & Esqueda, M. C. (2018). Understanding safety, victimization and school climate among rural lesbian, gay, bisexual, transgender, and questioning (LGBTQ) youth. *Journal of LGBT Youth*, 15(4), 265–279. <https://doi.org/10.1080/19361653.2018.1472050>
- Fields, X., & Wotipka, C. M. (2020). Effect of LGBT anti-discrimination laws on school climate and outcomes for lesbian, gay, and bisexual high school students. *Journal of LGBT Youth*, 19(3), 1–23. <https://doi.org/10.1080/19361653.2020.1821276>
- Garthe, R. C., Blackburn, A. M., Kaur, A., Sarol, J. N., Goffnett, J., Rieger, A., Reinhart, C., & Smith, D. C. (2021). Suicidal Ideation Among Transgender and Gender Expansive Youth: Mechanisms of Risk. *Transgender Health*. <https://doi.org/10.1089/trgh.2021.0055>
- Garthe, R. C., Kaur, A., Rieger, A., Blackburn, A. M., Kim, S., & Goffnett, J. (2021). Dating Violence and Peer Victimization Among Male, Female, Transgender, and Gender-Expansive Youth. *Pediatrics*, 147(4), e2020004317. <https://doi.org/10.1542/peds.2020-004317>
- Garthe, R. C., Rieger, A., Goffnett, J., Kaur, A., Sarol, J. N., Blackburn, A. M., Kim, S., Hereth, J., & Kennedy, A. C. (2022). Grade-level differences of peer and dating victimization among transgender, gender expansive, female, and male adolescents. *Journal of Lgbt Youth*, 20(3), 603–631. <https://doi.org/10.1080/19361653.2022.2132443>
- Graybill, E. C., & Proctor, S. L. (2016). Lesbian, gay, bisexual, and transgender youth: Limited representation in school support personnel journals. *Journal of School Psychology*, 54, 9–16. <https://doi.org/10.1016/j.jsp.2015.11.001>
- Greytak, E. A., Kosciw, J. G., & Boesen, M. J. (2013). Putting the “T” in “Resource”: The Benefits of LGBT-Related School Resources for Transgender Youth. *Journal of LGBT Youth*, 10(1-2), 45–63. <https://doi.org/10.1080/19361653.2012.718522>

- Heck, N. C. (2015). The potential to promote resilience: Piloting a minority stress-informed, GSA-based, mental health promotion program for LGBTQ youth. *Psychology of Sexual Orientation and Gender Diversity*, 2(3), 225–231. <https://doi.org/10.1037/sgd0000110>
- Sievers, A. (2019). *The Importance of a Positive School Climate for LGBTQ Students: A School Counselor's Role*. Winona State University. <https://openriver.winona.edu/cgi/viewcontent.cgi?article=1120&context=counseloreducationcapstones>
- Truong, N. L., & Zongrone, A. D. (2021). The Role of GSA participation, Victimization Based on Sexual orientation, and Race on Psychosocial Well-being among LGBTQ Secondary School Students. *Psychology in the Schools*, 59(1). <https://doi.org/10.1002/pits.22544>
- V. Paul Poteat. (2017). Gay-Straight Alliances: Promoting Student Resilience and Safer School Climates. *The American Educator*, 40(4), 10.
- Walls, N. E., Atteberry-Ash, B., Kattari, S. K., Peitzmeier, S., Kattari, L., & Langenderfer-Magruder, L. (2019). Gender Identity, Sexual Orientation, Mental Health, and Bullying as Predictors of Partner Violence in a Representative Sample of Youth. *The Journal of Adolescent Health : Official Publication of the Society for Adolescent Medicine*, 64(1), 86–92. <https://doi.org/10.1016/j.jadohealth.2018.08.011>



Policy Analysis and Review

Supplemental Security Income Eligibility

Chloe Griffin, BSW

University of Illinois Urbana-Champaign

Abstract

This paper is meant to highlight challenges faced by individuals with disabilities inside the United States, focusing on the personal difficulties in securing employment, funding and benefits, and financial independence. The Social Security Act aims to provide financial support to those who cannot work due to disability. However, the Supplementary Security Income (SSI) program has several weaknesses, including strict eligibility criteria, that often leave many in need without support. Issues such as rigid income caps and biases in determining eligibility contribute to the problem. The paper argues for policy reform to increase the income cap, adjust spousal income considerations, and provide wrap-around support, which would help create a more inclusive and responsive SSI program. These changes aim to better support the diverse needs of individuals with disabilities and ensure they can lead more fulfilling lives without undue financial hardship.

Keywords: benefits, disability, finances, Social Security.

About the Author: *Chloe is a 2024 graduate of UIUC's BSW program. They are interested in pursuing their MSW and doctorate to be able to research disability and mental health.*

Introduction of Social Issue

Disability and sickness are invisible issues that, despite existing for as long as society can remember, have been overlooked and stigmatized. One in four adults living in the United States has a chronic (lasting longer than six months) disability (Disability Impacts, 2023). This substantial portion of the population contributes to society while living with disabilities. Furthermore, for those who have disabilities that make it impossible to work a formal job, it is a constant struggle to be able to care for and provide for themselves and their families. With the unemployment rate twice as high for people with disabilities as it is for their able-bodied counterparts, there are many examples of how difficult it can be for people with disabilities to work (Gonzales, 2023). Many people with disabilities still work or utilize accommodations to work part-time or full-time. But those who are unable to work due to their disability are left defenseless, needing to be dependent on friends and family for help and support.

This issue affects people of all ages. The significance in the population varies from age group to age group. With rates ranging from 10 percent of young adults to almost 50 percent of the aging population, there is a variety in the significance of disability in populations (Institute of Disability, 2023). This difference also affects the perception of disability and inability to work. The younger populations experience more difficulties gaining access and having their accommodations met. Many also report a significant amount of discrimination felt when trying to access the society in which they live (Babik & Gardner, 2021). With differing percentages of disabilities residing in different age groups, some changes in perception can be expected. However, the impact of the changes in perception can make it even more difficult to get accommodations and access the same resources the more 'acceptable' disabled population can.

To what extent has this inability to work affected the disabled population? People with disabilities are more than twice as likely to live in poverty than their able-bodied counterparts (Institute on Disability, 2021). The death and illness rates are higher as well for disabled individuals; according to Forman-Hoffman et al., the death from illness rates for disabled individuals are twice as high as for people without a disability (2015). These statistics display examples of the struggles that disabled individuals face when trying to live their lives in a safe and fulfilling way.

Current Policy in Place

The Social Security Act was enacted in the 1900s to provide resources to U.S. citizens in need of financial support (*Social Security Administration*). This act has been built upon and revised over the last 90 years to include Supplemental Security Income (SSI), a resource that elderly, vision impaired, and chronically disabled people can apply for to gain an income when they cannot work (Understanding SSI, 2023). This aspect of the Social Security Act is specific to this population and offers a more permanent resource pool. Unlike other programs such as Social Security Disability Income (SSDI), SSI is based on need and is funded exclusively from taxes and federal budgets. SSDI, however, is based on the funding and resources of employers and employees. It is a temporary income based on the sudden inability to work (*Overview of Disability*, 2012). These differences draw the line between the typical resource programs brought by the Social Security Act, and what SSI provides.

The disabled population is the primary users of SSI, rather than SSDI. Any SSI applicant who passes the eligibility requirements can access the monthly benefits. The Social Security Administration (SSA) website declares that to be eligible, the applicant must be under the income threshold (< \$1,470 per month), have a documented disability (chronic disability, visual

impairment, or elderly), be a legal resident, and have limited resources (Understanding SSI, 2023). These requirements have strict bearings on an individual's ability to receive SSI benefits, with harsh deadlines and subjective definitions allowing for consistently unequal approval.

The benefits an applicant can receive depend on their eligibility over their income and resources. According to the SSI website, the maximum monthly benefit payout is \$914 for an individual and \$1,371 for a couple (Understanding SSI- Income, 2023). The amount given can be lowered based on any additional income or resources the individual has that meet the criteria. This can significantly bring down the number of benefits someone can receive. The amount can also be lowered based on changes to an individual's living and marriage status, family member's income, and other factors (Understanding SSI- Income, 2023). The current resources given to those who apply and are eligible for SSI are disbursed in one of two ways. Benefits are typically sent electronically via direct deposit into the applicant's bank account, or individuals may opt for a debit card loaded with their funds (Social Security Administration). The SSI user is responsible for ensuring that the banking information is correct, and their benefits are not given away to people other than the individual themselves, or their direct dependents.

Since this federally funded program is needs-based, the money used to give SSI benefits comes from general funds from the U.S. Treasury via income taxes (Understanding SSI, 2023). These finances are considered necessary, so SSI users do not experience budget cuts and reductions unless there is a change to their eligibility, or the policy gets amended. Because of this, SSI benefits are seen as reliable in a macro sense, but complicated when discussing the individual's eligibility.

Strengths of Current Policy

SSI stands as a vital part of the Social Security Act today. It provides access and support to the chronically disabled and aging population. This resource brings a framework to the individuals it serves. SSI offers a realistic pathway to a fulfilling and a safe future for people who otherwise would be dependent on their loved ones for financial support. SSI does more than ensure a stable income; however, it also gives those who qualify access to Medicaid, with more than half of those on SSI also on Medicaid (Bryan, 2020). Medicaid is a key advantage that comes out of the in-depth qualification process. This access significantly reduces financial strain as there is no need to get private insurance. It reduces medical costs for the individual not only for purchasing insurance, but it also lowers co-pays and minimizes hidden fees. This forms a reliable and safe foundation in health insurance, which can decrease the likelihood of sickness.

Not only is there a huge financial support piece to this policy, but there also is an incidental positive that comes from having SSI benefits. SSI benefits allow the SSI user to navigate and understand the framework that has been set before them. Offering a separate way to receive income can be life-changing for people completely unable to work. SSI has become a lifeline for millions of Americans; it allows them to engage in life in other ways while not relying on family for finances. SSI also provides a more holistic support by allowing its users to focus on their social and physical health, rather than trying to work a job. It helps avoid the negative impacts that working can have on someone who is disabled or aging. As a result of simply providing income, SSI helps individuals focus on their needs beyond survival.

Weaknesses of Current Policy

The eligibility of Supplementary Security Income is an issue created by itself. Although it provides support that is beneficial to people with disabilities and the aging population, the stark weaknesses affecting individuals who use SSI contradict the need for SSI to stay as it is. One of the more significant flaws is the difficulties SSI users face trying to live under the income cap. The current income cap and rules around resources keep many SSI users in poverty or not even able to get and maintain their eligibility. It poses challenges for individuals who, despite real need, struggle to make ends meet. This restriction not only undermines the policy's goal of helping people with disabilities out of poverty but also creates a situation for those who experience financial restrictions because of the rigid eligibility criteria.

Not only is the income gap a huge disparity in the SSI policy but there is also an issue supporting different demographics within the population. Issues arise when an SSI user gets married, moves in with a significant other, has a shared family income, and more. There is a lack of understanding of the eligibility requirements. Due to the rigid and overgeneralized rules, someone who needs SSI income desperately may be unable to receive full or any benefits. Disparities occur simply because, on paper, the SSI eligibility criteria do not allow for a more nuanced understanding of income and social ties. An SSI user must decide between meeting social needs like marriage or supporting family and being able to afford a fulfilling life. This lack of equal experiences leads to several different forms of differences, such as those of who are felons or who are of a specific immigration status. Aspects of a person's life can create a life-changing conflict such as not having health insurance and falling extremely ill. This policy rigidity serves as an example of how vulnerable demographics experiences increase the risk of hardships.

To a further point, the strict regulation upon ‘testing’ or proving a person’s ability to work, or lack thereof, presents one of the largest issues of all. The biased narrowing of criteria to define someone as disabled enough can be subjective and troublesome for many people. This qualifier is a critical flaw in SSI policy that affects the very structure on which it is built. One biased experience can result in the exclusion of deserving applicants who may have legitimate barriers to employment. This harsh approach overlooks the nuanced nature of disabilities and the varying capacities of individuals, having the potential to leave those in need without the essential support that they require.

Elements of Distributive Justice

This policy is not adequate to help fully support SSI users. There needs to be more wrap-around support within SSI and more of an emphasis on a safety net beyond small financial assistance. Recognizing the complex nature of not being able to work due to disability is a difficult but needed change within policymakers. Improvements can be made by relaxing the strict rules around eligibility and increasing support given to those eligible. By encompassing a broad range of resources and services, this policy can change to address the intricate aspects of disability and humanity.

This policy is not equitable to all populations. Yes, the policy does have a record of giving benefits to all qualifying individuals, regardless of certain demographics. However, it is uneven for those who, despite needing financial support, have other legally recognizable resources, such as family property or assets attached to their name. The strict regulations surrounding the level of income and resources are too general and do not allow for such family/social issues.

Furthermore, the unequal distribution of support within the policy is influenced by other factors like immigration, felony records, and marital status. The distinctions that separate an applicant from qualifying or not can create limitations affecting specific demographic groups. For example, an individual with a specific immigration status or a non-traditional family structure may encounter a barrier to accessing benefits. Recognizing these disparities in the system will potentially rectify the issue and create a more affectionate social program.

New Policy Recommendations

The complexities of SSI are not easy to solve and will continually have flaws until other issues within the government aid program have fundamental changes. However, changes can create an easier process and lessen the harsh, biased rulings during the application process, some changes can be made. First, the income cap on benefits must be increased. This would include changing the resources requirements so that SSI users do not have their benefits decreased due to family or household member income or resources. This change would allow for a more nuanced understanding of an individual's income and resources. Making over the income cap in a single month out of 12 should not take away benefits. This change would mean critically evaluating the definitions of income and resources that fit into the acceptable criterion.

Second, adjusting the limits with spousal resources and income would increase the amount of money available and the number of individuals eligible for SSI. This change is due to the impactful regulation on the amount of money in the household. Making spousal income carry less value to the SSI user's income levels could mean SSI users can still access full benefits. This change would not only promote better physical and fiscal health, but also emotional health. Many individuals on SSI express worry or inability to get married or live with their significant other due to the potential of losing some or all their benefits.

There is a reason this policy exists, and it is to provide support to people with disabilities and aging populations who cannot work and sustain a fulfilling life. Making the above-proposed adjustments would create a more inclusive and responsive SSI program that would better address the holistic needs of SSI users. Acknowledging the vital role family support has without making it a disqualification will force a better understanding and respect for the SSI user as an individual. Addressing these weaknesses will hopefully help close the loopholes that allow those with disabilities to fall through the cracks.

Conclusion and Discussion

The SSI policy in place is leaps and bounds ahead of previous resources that were given to disabled people and the aging population. However, the flaws in this policy let individuals slip through the cracks. Changing the eligibility rules and creating an easier system for getting and keeping benefits will make a safer, more positive impact on SSI users. Following new recommendations can give space for those with disabilities and the aging population to live a more ideal and fulfilling life, where poverty and risk are not as stark of an issue simply due to access.

References

- Babik, I., & Gardner, E. S. (2021). Factors Affecting the Perception of Disability: A Developmental Perspective. *Frontiers in Psychology*, 12, 702166.
<https://doi.org/10.3389/fpsyg.2021.702166>
- Bryan, B. (2020). *Top Ways Disability Benefits Can Help You if Approved*. Disability Benefits Center. <https://www.disabilitybenefitscenter.org/blog/benefits-of-disability-approval#:~:text=Another%20advantage%20of%20having%20disability,for%20SSDI%2C%20regardless%20of%20income.>
- Disability Impacts All of Us (2023). *CDC – Center for Disease Control*
<https://www.cdc.gov/ncbddd/disabilityandhealth/infographic-disability-impacts-all.html>
- Forman-Hoffman, V. L., Ault, K. L., Anderson, W. L., Weiner, J. M., Stevens, A., Campbell, V. A., & Armour, B. S. (2015). Disability status, mortality, and leading causes of death in the United States community population. *Medical care*, 53(4), 346–354.
<https://doi.org/10.1097/MLR.0000000000000321>
- Gonzales, M. (2023). Employment Rate Rising for People with Disabilities. *Society of Human Resource Movement*. <https://www.shrm.org/topics-tools/news/inclusion-equity-diversity/employment-rate-rising-people-disabilities>
- Institute on Disability*. (2021). The poverty rate among people with and without disabilities in the U.S. from 2008 to 2021 [Graph]. In Statista.
<https://www.statista.com/statistics/979003/disability-poverty-rate-us/>
- Institute on Disability*. (2023). Percentage of people in the U.S. with a disability as of 2021, by age [Graph]. In Statista. <https://www.statista.com/statistics/793952/disability-in-the-us-by-age/>
- SAMSHA* (2012). Overview of Social Security Disability Programs: SSI and SSDI. Overview of Social Security Disability Programs: SSI and SSDI | SOAR Works!
<https://soarworks.samhsa.gov/article/overview-of-social-security-disability-programs-ssi-and-ssdi>
- Social Security Administration* (n.d.). Historical Background and Development of Social Security. <https://www.ssa.gov/history/briefhistory3.html#:~:text=The%20Social%20Security%20Act%20was,a%20continuing%20income%20after%20retirement.>

Social Security Administration (n.d.). Social Security Administration | Direct Deposit.

<https://www.ssa.gov/deposit/#:~:text=There%20are%20two%20ways%20you,Express%C2%AE%20Debit%20Mastercard%C2%AE>

Understanding Supplemental Security Income (SSI)-- SSI eligibility. (2023). Understanding SSI - SSI Eligibility. <https://www.ssa.gov/ssi/text-eligibility-ussi.htm>

Understanding Supplemental Security Income (SSI)-- SSI income. (2023). Understanding SSI - SSI Income. <https://www.ssa.gov/ssi/text-income-ussi.htm>

Gender Inclusion Policy in Research

Annaliese Harper

University of Illinois at Urbana-Champaign

Abstract

This paper analyzes the current National Institutes of Health (NIH) policies around gender inclusion in research. While there have been some improvements over the 30 years since the policy was put in place, the policy needs to be adjusted to further increase the rate of change. Before the passing of the NIH policy, women were rejected from research pools all together. Now, despite changes, women are vastly underrepresented in research on neurodevelopmental disorders, which leads to social ignorance and further underrepresentation. The policy permits this underrepresentation through non-specific language and limited scope of control. This paper analyzes the events and movements that lead to the creation of past and current policies. It compares other organization's policies and the function of the current NIH policy, elaborating on the wording and policy's effect. The paper also suggests some changes to further equalize the presence of women in neurodevelopmental research.

Keywords: policy, gender inclusion, representation, neurodevelopmental disorders

About the Author: *Annaliese is a junior BSW student. She is interested in researching many different aspects of social identity, such as gender and relationships, and how they interact with other aspects of a person's life.*

Introduction

Psychological screenings, diagnoses, and treatments are all the result of research. However, there are many flaws to the research we have about women with neurodevelopmental disabilities, which are mental health disorders characterized by difficulty in common developmental stages, such as ADHD and Autism (American Psychiatric Association, 2022). Currently, in America, “all NIH-funded clinical research must include women and members of racial and ethnic minority groups” (National Institutes of Health, n.d.b). Unfortunately, this still allows gaps in research. There are ways for researchers to get around the wording of the guidelines, and people who obtain funding elsewhere are not required to follow the NIH policy. Protesters fought and increased rights and representation of women as research subjects. Yet, the policy of the United States government remains vague to avoid possible oversteps. Since these factors allow unreliable studies, people assume girls do not experience neurodevelopmental disorders at the same rates, previous studies can be presented as definitive facts, and definitions for neurodevelopmental disorders are set in stone. As a result, many blindly accept the falsehoods and disregard those who are underrepresented and are often left behind.

Populations Impacted

The NIH’s guidelines benefit certain researchers while harming women who are often left out of studies. Without guidelines, researchers can do whatever it takes to get their results, which causes women to be underrepresented in studies. The policies regarding research guidelines benefit researchers who want to get results fast and easily. By not clarifying a certain population amount, the NIH allows researchers to disproportionately exclude women. In a review of the Michigan Institute of Technology’s database of autistic research participants, girls were removed from autism studies 50% of the time, more than males, who were removed 19% of the time

(D’Mello et al., 2022). As women can show slightly different symptoms, removing them from studies can allow researchers to claim more generalizability and validity in their studies without putting in the effort to make it true. In reality, using different screening methods has led to more equal rates of diagnosis in both men and women (D’Mello et al., 2022). This means researchers are allowed to create gaps in information.

This can cause issues for people not in the categories commonly represented in those studies, especially women, who are often left out of studies related to neurodevelopmental disorders. Because of this lack of representation, women often do not know what symptoms to look for, are underdiagnosed, and therefore, more likely to develop anxiety and depression due to their symptoms (French et al., 2023). French concludes women with neurodevelopmental disorders are more at risk for falling behind in many categories due to the lack of representation in research. During these studies, while women can share their experiences, researchers are able to disregard anything they deem invalid from their studies, as mentioned above in the D’Mello (2022) study. This can create barriers toward academic proof of conditions, which will continue to create obstacles toward further screening, assistance, and academic eligibility.

Historical Context

Neurodevelopmental disorders were first conceptualized in 1820 (Morris-Rosendahl & Crocq 2020), although attention deficit hyperactivity disorder (ADHD) was not identified until the 1940s (Romeo, 2021) and autism as we know it only became recognized in the 1970s (Evans, 2013). Even so, these studies all preceded the ethical standards that define research as we know it today, including the protections for human subjects established in the 1970s and 1993’s requirement for women and minorities to be represented.

In the 1960s and 70s, America was in an upheaval over unethical experiments. From

1932 to 1972, researchers at the Tuskegee Institute tested what happened when syphilis went untreated by infecting Black men with the virus without their knowledge and refusing to give them treatment, even when it became widely available (Center for Disease Control, 2023). In addition, in 1971, the Stanford prison experiment was conducted. During this experiment, many participants became physically injured and traumatized due to the dehumanization and violence other test subjects performed, and a lack of intervention and control from the researchers (Stanford Library, n.d.). These two, and many other studies, caused a push for oversight and guidelines from the United States government.

Nationwide protests about unethical experimentation, particularly the Tuskegee experiment, resulted in the 1974 National Research Act being published. It included the creation of the Institutional Review Boards (IRB), as well as certain guidelines for research, in terms of the protection of human subjects (H.R. 7724, 1974). Even so, the act had its limits. For one, it assumed the identities of subjects to be White males. It also did not mention specific consequences for violating those protections. The results of the Stanford Prison Experiment are still frequently considered valid, despite its violation of the guidelines above, and later ones passed.

In the 20 years after the creation of the IRB, studies were being done with more ethical standards, but they commonly left out certain populations. In 1977, the boards specifically recommended barring “women of childbearing potential” from drug studies. Following this, through the 1980s, women and feminists advocated for the representation needed in studies. In 1986, the NIH made a policy that encouraged using female participants (National Institutes of Health, n.d.c), but even then, it was only encouraged, not required, and it only applied to those who obtained funding through the NIH.

Because of this Congress passed the NIH Revitalization Act of 1993, PL 103-43. This is where the policy language of “all NIH-funded clinical research must include women and members of racial and ethnic minority groups” (National Institutes of Health, n.d.b) derives from. The act required representation in studies, but only when applicable. For example, someone who is studying the societal impacts of growing up as a boy in Chicago would not need to include girls in their study. However, application can be subjective, especially with the increasing amount of publicly acceptable gender diversity. The act was revised in 2016, but only to add a header and make one minor wording change.

While some people may regard studies as definitive proof of what we know about many subjects, including neurodevelopmental disorders, even current ethical guidelines for research with human subjects are lacking. Historical guidelines were only created due to the violation of specific protections in studies, and it is important to change the current ones before that happens again.

Current Policies

The current guidelines require all research funded by the NIH must “include women and members of racial and ethnic minority groups” (National Institutes of Health, n.d.d). This is more inclusive and specific than the guidelines set forth by the American Psychological Association (APA), which gives more than 600 scholarships and grants for research (American Psychological Association, n.d.). Both organizations deal with mental health research and have policies relating to the inclusion of women. However, while the NIH requires inclusion in any applicable situation and outlines how to include women and minorities in drug trials, the APA guidelines, titled “Guidelines for Avoiding Sexism in Psychological Research,” are not requirements, but recommendations that include suggestions about using inclusive language and not generalizing

studies to include women when there were not any studied (Denmark et al., 1988). In addition, where NIH reviews their policies every few years, most recently in 2017, the APA guidelines were published in 1988 and have not been updated since (National Institutes of Health, n.d.d, Denmark et al., 1988). The NIH policy is better for inclusion, but still has much to improve on.

NIH Policy Design

The NIH is the U.S. government's research programs, funded through the Department of Health and Human Services (National Institutes of Health, n.d.e). It operates on a macro level, as it is "the largest public funder of biomedical and behavioral research in the world" (National Institutes of Health, n.d.a), which means their policies for funding have a wider influence than other organizations. According to the policy, any researcher who receives the funding for clinical research must include women and minorities when applicable (National Institutes of Health, n.d.d). The policy aims to increase inclusion and generalizability of studies.

Definitions

Defining terms within the policy is important to fully understanding the policy. Clinical research includes any research with human subjects or with the focus of human application (National Institutes of Health, n.d.d). This includes studies on therapeutic intervention and behavioral studies. The definition of what is "applicable" clinical research, however, can vary. The policy includes a clause that investigators, with adequate reasoning, may present a case as to why they should not be required to include the populations (National Institutes of Health, n.d.d). This could be necessary in a study that investigates a specific population, for example, a study on the socialization of teenage boys. The definition of "minority" is up to the director of NIH to interpret, according to the NIH Revitalization Act (1993). The current definition only includes the ethnic and racial categories required by the United States Census (National Institutes of

Health, n.d.d), but future NIH directors may change the definition. These definitions outline who the policy applies to and how it applies, so that researchers must follow the guidelines.

Social Impact of Policy

Pre-Policy

Comparing the progress of the policy is difficult due to the lack of information on how women were included before 1993. This is likely because women of “childbearing potential” were excluded altogether from studies due to the U.S. Department of Health and Human Services’ 1977 recommendations (Phelan et al., 2016). Other texts from around the time suggest there was very little to no inclusion, such as the 1985 Report of the Public Health Service Task Force on Women's Health Issues. Most likely, the current levels of inclusion have risen significantly from the levels pre-policy, however, with no definitive baseline, the policy’s effectiveness is better determined through current representation rather than past statistics.

Post-Policy

Across all institutes of health, the NIH seems to be promoting higher rates of gender inclusion. In cancer research, “NIH-funded trials enrolled a higher proportion of women (48%) compared with industry trials (41%)” (Jenei et al., 2021). Forty-eight percent is almost representative of the general population, where 50.4% of people on the U.S. Census were female, therefore, the NIH policy would have achieved its goal. However, individual studies, especially those in neurodevelopmental studies, reflect differently. Studies about autism and ADHD frequently see discrepancies in the representation of women. One study comparing gender manifestations of executive functioning and autism had only around 28.7% female participants (Kiep and Spek, 2017), which is an underrepresentation of the general population. This is due to screening techniques. D’Mello et al. (2022) found the screening technique used by

Massachusetts Institute of Technology disproportionately removed women. This trend of underrepresentation is also visible in ADHD studies. Girls display more inattentive symptoms, which are less likely to be reported (Mowlem et al., 2019). In one survey, four out of every 10 teachers felt less sure about recognizing ADHD in girls (Quinn & Wigal, 2004). When studies are dependent on a diagnosed population, underreporting leads to further underrepresentation.

Limits of Policy

There are a few reasons the policy failed to create adequate representation and inclusion. As mentioned above, definitions provide loopholes in the policy. In addition, researchers can apply to many different places to get funding. The University of Michigan (n.d.) lists four categories, including public charities, government agencies, crowdsourcing, and commercial investments. Within the category of government agencies, the NIH is only one of seven options listed. When researchers use any other method of funding, they are not required to follow the NIH policy. Even when researchers choose NIH funding, and therefore follow the policy, the levels of inclusion are not specified. Studies on neurodevelopmental disorders can include ratios such as 99 men to 40 women (Keip & Spek, 2017) or 153 men to 48 women (Gallant & Good, 2023). This exclusion of women, which Gallant & Good (2023) describe as “consistent with previous research,” creates exclusion for diagnostic criteria, which can further decrease the sampling pool. Since the policy is non-specific, a study could contain hundreds of men and only one woman.

Recommendations

Specify the Rates

On a mezzo level, the NIH policy needs to specify how many of each population to include, with acceptable ranges for each marginalized population. Currently, the policy only

necessitates some form of representation, which is what allows cases like Keip & Spek (2017) and Gallant & Good (2023) to have such dramatic differences of gender in studies. In the United States, women are 50.4% of the population (U.S. Census Bureau, 2024). For studies to be representative, they should aim to be within a certain range of the population. At the very least, representation should be within 10% of the population. The margin of error could be modified over time as the subject pool evens out, but current populations may make accurate representation more difficult for researchers. Studies about certain topics could still petition to not include genders in non-applicable research. For required inclusion, however, ratios of inclusion should be specified to represent the general population.

Broaden the Policy

At a macro level, the United States government needs to regulate all research to require applicable inclusion. The 1993 NIH Revitalization Act has led to almost representative levels of inclusion for women in some NIH studies, but the same cannot be said for other forms of funding (Jenei et al., 2021). Even after 31 years of the act, not all organizations have followed suit. This is why a government requirement is likely necessary. A requirement without enforcement, however, can lead to no action. Without the ability to enforce the policies, state laws could no longer serve any function, such as what happened with *Lawrence v. Texas (2003)* (Hagood, 2010). Like the NIH policy, arguments could be made for the applicability in certain studies, but the IRBs should have inclusion policies in their necessary ethics review of all human subject studies. This will increase the levels of inclusion in not just NIH-funded research, but all research done in the United States.

Diverse Populations

In order to achieve more equal gender ratios, women, especially women of color, must be

brought into research spaces. As subjects, women can provide information on their experiences that men might not have. For example, women are more likely to mask their autism than men (Russo, 2018). While masking can make it seem like someone is not experiencing dysfunction from a disorder, frequent masking of symptoms can lead to even greater psychological harm (Russo, 2018). As researchers, women can create tests and evaluations that reflect more of their own lived experiences. They can advocate for their client's needs and comforts, since they are on a more even playing field with other researchers than their clients may be. Increasing the representation of women in research positions can further increase their presence in both academic pursuits and testing samples.

Opportunities

If the government regulates inclusion, they can create grants that aim to fund research and offset any costs occurring as a result of incentivizing women to participate in studies. This can include incentives like gift cards or useful items, or it may include advertising. Over time, as more women become integrated into research, the additional funds will be less needed to balance gender inclusion in research. When this happens, the foundation could either continue to fund all research or it could transition to funding research about issues that are more common in women.

In addition to funding research, educational scholarships should be made for women interested in performing research. Reducing cost inequities in education could increase the rates of women in research. Currently, only 33% of researchers are women (United Nations, n.d.). Creating scholarships could help shift the ratio closer to the general population. Some women, however, may change their mind during their education. In cases where someone decides to pursue research later in their education, they should still be allowed to apply. In cases where someone previously interested in research decides to shift their focus, they should not be

penalized by losing their scholarship. There are benefits to an increase of women in almost every STEM field, and even if they do not pursue research, they can still contribute to the knowledge base and reduce stigma.

Challenges/Limitations

There are challenges that a change in policy could create. For example, requiring inclusion may result in tokenization. This is defined by Cambridge University Press (n.d.) as creating inclusion without putting significant effort toward creating change. In research, this means researchers may include the women required but may still norm the results on male results. Some studies, like outlined in D'Mello et al. (2022), may categorize the female results as outliers and remove them from the study. This can lead to women feeling further ignored and misrepresented in research. If women are only being included to meet the criteria but not to create change, women would be less interested in joining research, even with financial incentives. The culture around women in research needs to shift to prevent this.

Conclusion

Women are underrepresented in research, especially research relating to neurodevelopmental disorders. Current policies are the results of people pushing for protection and representation when those ideals were violated, yet the policies fail to fulfill these ideals for women with neurodevelopmental disorders. To fix the inequality, the NIH should include specific rates of inclusion in their policy, and the U.S. government should normalize that policy across all research. This can create opportunities for women in research but can also create challenges in the process that the government should be prepared to counter. With these suggestions, hopefully women will become more represented in all research.

References

- American Psychiatric Association. (2022). Neurodevelopmental Disorders. In Diagnostic and Statistical Manual of Mental Disorders (5th ed., text rev.). https://psychiatryonline-org.proxy2.library.illinois.edu/doi/full/10.1176/appi.books.9780890425787.x01_Neurodevelopmental_Disorders
- American Psychological Association. (n.d.) *Grants, Awards and Funding*. Retrieved April 5, 2024, from <https://www.apa.org/about/awards>.
- Cambridge University Press. (n.d.). Tokenism. In *Cambridge dictionary*. Retrieved April 25, 2024 from <https://dictionary.cambridge.org/us/dictionary/english/tokenism>
- Center for Disease Control (2023). *The USPHS Untreated Syphilis Study at Tuskegee*. Center for Disease Control. <https://www.cdc.gov/tuskegee/index.html>
- Denmark, F., Russo, N. F., Frieze, I. H., Sechzer, J. A. (1998). Guidelines for Avoiding Sexism in Psychological Research. *American Psychological Association* 43(7), 582-585. <https://www.apa.org/about/policy/avoiding-sexism.pdf>
- D'Mello, A. M., Frosch, I. R., Li, C. E., Cardinaux, A. L., & Gabrieli, J. D. E. (2022). Exclusion of females in autism research: Empirical evidence for a “leaky” recruitment-to-research pipeline. *Autism Research*, 15(10), 1929–1940. <https://doi.org/10.1002/aur.2795>
- Evans B. (2013). How autism became autism: The radical transformation of a central concept of child development in Britain. *History of the human sciences*, 26(3), 3–31. <https://doi.org/10.1177/0952695113484320>
- French, B., Daley, D., Groom, M., & Cassidy, S. (2023). Risks associated with undiagnosed ADHD and/or Autism: A mixed-method systematic review. *Journal of Attention Disorders*, 27(12), 1393–1410. <https://doi.org/10.1177/10870547231176862>
- Gallant, C., & Good, D. (2023). Predictors of mental health service use among children and adolescents with and without neurodevelopmental disorders. *Journal of Mental Health Research in Intellectual Disabilities*, 16(2), 142–161. <https://doi-org.proxy2.library.illinois.edu/10.1080/19315864.2022.2105996>
- Hagood, M. A. (2010). South Carolina's Sexual Conduct Law after Lawrence v. Texas. *South Carolina Law Review*, 61(4), 799-822.
- H.R.7724 - 93rd Congress (1973-1974): National Research Service Award Act of 1974. (1974,

- July 12). <https://www.congress.gov/bill/93rd-congress/house-bill/7724>
- Jenei, K., Meyers, D. E., Prasad, V. (2021). The inclusion of women in global oncology drug trials over the past 20 years. *JAMA Oncology*. 7(10), 1569–1570. <https://doi.org/10.1001/jamaoncol.2021.3686>
- Kennedy, A. M. & Supreme Court Of The United States. (2002) *U.S. Reports: Lawrence et al. v. Texas*, 539 U.S. 558. [Periodical] Retrieved from the Library of Congress, <https://www.loc.gov/item/usrep539558/>.
- Kiep, M., & Spek, A. A. (2017). Executive functioning in men and women with an autism spectrum disorder. *Autism research : official journal of the International Society for Autism Research*, 10(5), 940–948. <https://doi.org/10.1002/aur.1721>
- Morris-Rosendahl, D. J., & Crocq, M. A. (2020). Neurodevelopmental disorders-the history and future of a diagnostic concept^{SEP}. *Dialogues in clinical neuroscience*, 22(1), 65–72. <https://doi.org/10.31887/DCNS.2020.22.1/macrocq>
- Mowlem, F.D., Rosenqvist, M.A., Martin, J., Lichtenstein, P., Asherson, P., Larsson, H. (2019) Sex differences in predicting ADHD clinical diagnosis and pharmacological treatment. *European Child + Adolescent Psychiatry* 28, 481–489. <https://doi.org/10.1007/s00787-018-1211-3>
- National Institutes of Health (n.d.a) Impact of NIH Research. Retrieved April 5, 2024 from <https://www.nih.gov/about-nih/what-we-do/impact-nih-research>
- National Institutes of Health (n.d.b) *NIH Inclusion Outreach Toolkit: How to Engage, Recruit, and Retain Women in Clinical Research*. Retrieved March 3, 2024 from <https://orwh.od.nih.gov/toolkit/nih-policies-inclusion/guidelines>.
- National Institutes of Health (n.d.c) *NIH Inclusion Outreach Toolkit: How to Engage, Recruit, and Retain Women in Clinical Research: History*. Retrieved March 3, 2024 from <https://orwh.od.nih.gov/toolkit/nih-policies-inclusion/guidelines>.
- National Institutes of Health (n.d.d) *NIH Policy and Guidelines on The Inclusion of Women and Minorities as Subjects in Clinical Research*. Retrieved April 5, 2024 from <https://grants.nih.gov/policy/inclusion/women-and-minorities/guidelines.htm>
- National Institutes of Health (n.d.e) *Who we are*. Retrieved April 5, 2024 from <https://www.nih.gov/about-nih/who-we-are>

- Phelan, A. L., Kunselman, A. R., Chuang, C. H., Raja-Khan, N. T., & Legro, R. S. (2016). Exclusion of women of childbearing potential in clinical trials of type 2 diabetes medications: a review of protocol-based barriers to enrollment. *Diabetes care*, 39(6), 1004–1009. <https://doi.org/10.2337/dc15-2723>
- Quinn, P., & Wigal, S. (2004). Perceptions of girls and ADHD: results from a national survey. *MedGenMed : Medscape general medicine*, 6(2), 2.
- Romeo, J. (2021). *ADHD: The History of a Diagnosis*. JSTOR Daily. <https://daily.jstor.org/adhd-the-history-of-a-diagnosis/>
- Russo, F. (2018). The costs of camouflaging autism. *Spectrum News*, 21.
- S.1 - 103rd Congress (1993-1994): National Institutes of Health Revitalization Act of 1993. (1993, June 10). <https://www.congress.gov/bill/103rd-congress/senate-bill/1>
- Stanford Library (n.d.) *The Stanford Prison Experiment*. Stanford. Retrieved March 1, 2024 from <https://exhibits.stanford.edu/spe>.
- United Nations (n.d.). *Women in Science Leadership: A New Era for Sustainability*. Retrieved April 25, 2024 from <https://www.un.org/en/observances/women-and-girls-in-science-day>
- U.S. Census Bureau (n.d.). Quick Facts. Retrieved April 6, 2024 from <https://www.census.gov/quickfacts/fact/table/US#>
- Women's health. Report of the Public Health Service Task Force on Women's Health Issues. (1985). *Public health reports (Washington, D.C. : 1974)*, 100(1), 73–106.



*Research Based
Poster Presentation*

Recruitment and Engagement Strategies for Equitable Maternal Health and Child Development Research

Emma Darbro, Dr. Karen Tabb-Dina

University of Illinois at Urbana-Champaign

Abstract

The Illinois Kids Development Study (IKIDS) has long contributed to the greater development of environmental-based maternal health outcomes and awareness. This is accomplished through longitudinal Environmental Influences on Child Health Outcomes (ECHO) cohorts which survey mothers and their children from pregnancy through age seven, with research interests in observing related environmental health and cognitive development markers. Although these findings can have impacts on public health policy and future clinical practices, for the first six years of the IKIDS study, the demographics of the state of Illinois were underrepresented in the Champaign cohort for both race diversity and education level. In 2023, the University of Illinois' School of Social Work began in-person recruitment for IKIDS at local public health centers, like Promise Healthcare and Champaign Urbana Public Health District (CUPHD), to allow prospective participants already seeking pregnancy services at these locations the opportunity to ask questions and increase the humanness of the research. After 6 months of in-person recruitment, the initially underrepresented racial groups, now comprise a majority of the participants recruited during that in-person period. This recruitment strategy will continue, along with the maintenance of Perinatal Connect, an initiative that aims to foster connections amongst families, clinicians, researchers, and community members alike.

Keywords: maternal health, research equity, environmental health

About the Author: *Emma is a senior in the Brain and Cognitive Sciences department, with an interest in the intersection of maternal and mental health outcomes. Her research activities support social work recruitment and engagement strategies for ongoing child development research and a perinatal health promotion program.*

Recruitment and Engagement Strategies for Equitable Maternal Health and Child Development Research



Emma Darbro, Dr. Karen Tabb-Dina, Beckman Institute for Advanced Science and Technology, Interdisciplinary Health Sciences Institute
School of Social Work, College of Liberal Arts and Science, University of Illinois at Urbana-Champaign

BACKGROUND

- Perinatal depression affects nearly 1 in 7 mothers or and 1 in 10 fathers¹
- Impacts of depressive symptoms can extend beyond the individual, affecting the well-being and development of both parent and child, parenting experiences, and family dynamics
- The etiology of perinatal depression involves a complex interaction between psychological, biological, social, and environmental factors

IKIDS

- IKIDS at the University of Illinois aims to investigate the impact of prenatal exposure to phthalates, BPA, and other endocrine-disrupting chemicals (EDCs)

Our Markers

- Physical and brain developments from birth to 5 years of age
- Maternal health outcomes and child bonding

Our Methods

- Enroll expectant mothers during pregnancy
- Conduct visits during 3rd trimester, at birth, and periodically during first 7 years of life
- Obtain metrics to measure presence of EDCs: cord blood, fingernail clippings, weight and height records

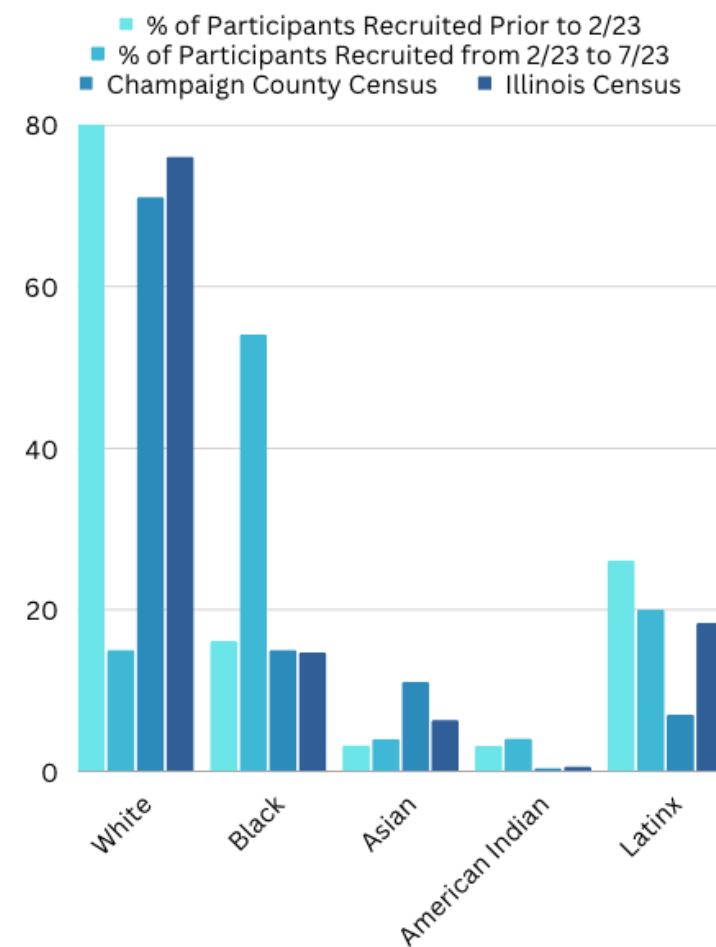


Our recruitment fliers, which were provided to interested participants in both English and Spanish, included an overview of the study and its components

IKIDS RECRUITMENT STRATEGIES

- Prior to February 2023, recruitment was done at Carle Foundation Hospital, but our participants were largely white, college-educated women, and was not representative of Champaign County nor the state of Illinois
- Recruitment was conducted at the Champaign-Urbana Public Health District (CUPHD) from February 2023 through the end of July, and at Promise Healthcare, a federally-qualified clinic, from February 2023 to June 2023
- The purpose of inter-community recruitment was to meet our potential participants in a familiar space where they were already seeking services related to pregnancy

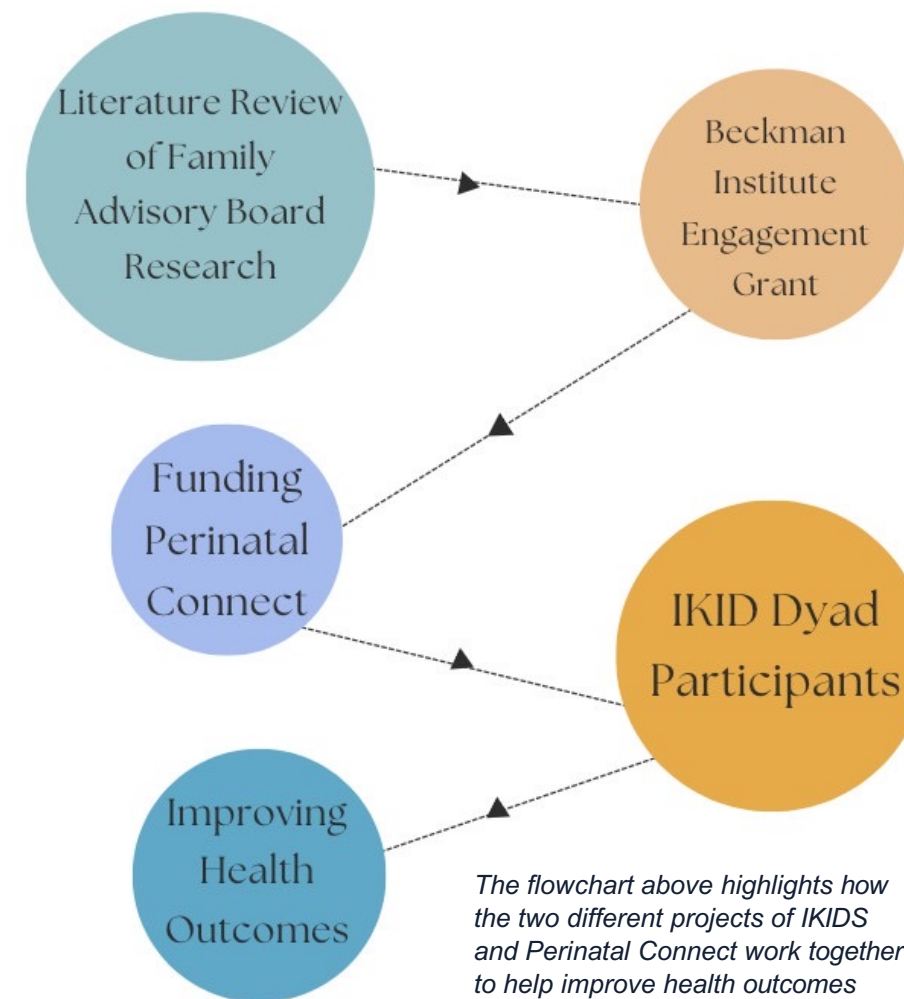
A team of researchers and students from the School of Social Work recruited eligible expectant mothers at CUPHD



The demographics of IKIDS participants during different phases of recruitment, compared to those of the communities we aim to represent

FAMILY STAKEHOLDER INVOLVEMENT AND PERINATAL CONNECT

- Community advisory board interventions aimed to increase rapport amongst care team and patients' families were found to be influential in health outcomes studies²
- Perinatal Connect aims to help build the necessary community and clinical infrastructure to increase patient engagement and promote collaborative care
- We achieve this by interacting with community members to better understand their lived experiences as parents, providers, and researchers
- Our goal is to integrate the feedback from our community advisory board parents to inform how we recruit participants for IKIDS, and to continue investing in the families of Champaign and promote positive mental health outcomes



The flowchart above highlights how the two different projects of IKIDS and Perinatal Connect work together to help improve health outcomes

References:

1. Niel, M. (2020). Perinatal Depression: A review. *Cleveland Clinic Journal of Medicine*, 87 (5) 273-277.
2. Sharma, A. (2017). The impact of patient advisors on healthcare outcomes: a systematic review. *BMC Health Serv Res*, 17(1), 1-10.
3. Gerwig, G. (Director). (2023). *Barbie* [Film]. Mattel Studios.

IMPROVING ENGAGEMENT TECHNIQUES

- For the next seven years of funding, the IKIDS and Perinatal Connect consortium will continue to source improvements in our research and recruitment tactics directly from prospective and active participants
- An application for an engagement grant from the Beckman Institute is currently being proposed, which will help support the logistics necessary to conduct parental focus groups and to continue to make our study accessible

2023 Perinatal Connect Community Event at Hessel Park in Champaign



NEXT STEPS

- Recruitment for the IKIDS project was paused until January 2024 to allow for processing from the previous cohort
- The IKIDS team continues to adapt recruitment strategies to find new locations and build new partnerships in the community
- Perinatal Connect community meetings resumed in the fall of 2023

ACKNOWLEDGEMENTS

I would like to extend a special thank you to Dr. Karen Tabb-Dina, Xavy Ramirez, CUPHD, and the IKIDS leadership team, for their support. To all the moms involved in this project who, much like my mom, "stand still, so our daughters can look to see how far they have come;" you make this work not only impactful, but possible.³



References

Niel, M. (2020). Perinatal Depression: A review. *Cleveland Clinic Journal of Medicine*, 87 (5) 273-277.

Sharma, A. (2017). The impact of patient advisors on healthcare outcomes: a systematic review. *BMC Health Serv Res*.

Gerwig, G. (Director). (2023). *Barbie* [Film]. Mattel Studios.



Research Study

Bullying in Central Illinois: A Mix of Rural and Urban

Emily E. Dailey

University of Illinois Urbana-Champaign

Abstract

Bullying represents a significant public health crisis. An estimated one in five Illinois youth report experiencing a form of bullying in the past year (Garthe et al., 2021a). Experiencing bullying is associated with adverse individual and societal outcomes, illustrating the importance of bullying prevention. Previous research has shown rates of bullying in Illinois were highest in rural counties and counties that are primarily rural with a highly populated city (e.g., Champaign County, which is predominantly rural with Champaign-Urbana as an urban/suburban area). This needs assessment underscores the necessity of investigating bullying rates in specific regions to inform targeted violence prevention efforts. The current study examines rates of bullying across county types in Central Illinois (i.e., counties north of Clay County and south of Stark County), as Central Illinois has a mixture of rural counties and counties with a rural-urban mix. In particular, the current study explored county-level factors in relation to rates of bullying, including socioeconomic and household factors. In a longitudinal study looking at bullying and related factors worldwide, those with a lower socioeconomic status (SES) experienced higher levels of victimization (Hosozawa, et al., 2021). Secondary data analysis was conducted using bullying data from the Illinois Youth Survey and county-level data from the U.S. Census. Results have important implications for school districts and rural service providers in Central Illinois, especially when considering violence prevention programs and policies.

Keywords: bully, rural, violence, urban

About the Author: *Emily, a senior, is a dual degree student in social work and developmental psychology. She is interested in researching identity factors: rural, queer, and/or youth populations are of special interest to her.*

These findings were presented as a poster at the 2024 Undergraduate Research Symposium. Correspondence concerning this article should be addressed to Emily E. Dailey, Violence Prevention Research Laboratory, University of Illinois Urbana-Champaign, 1010 W Nevada St, Urbana, IL 61801, United States. Email: edailey2@illinois.edu

Introduction

Bullying represents a significant public health crisis. One in five Illinois youth annually report they have experienced a form of bullying (Garthe et al., 2021a). According to the American Psychological Association, bullying is an aggressive behavior with two key characteristics: 1, intentionality and 2, repetition (American Psychological Association, 2024). Thus, bullying is a pattern of aggressive behavior with malicious intentions. Bullying is a significant problem with violence prevention for Illinois youth. Previous studies have shown bullying is linked with adverse individual and societal outcomes (Rodkin et al., 2015). Aggressive behavior is a risk factor for poor adjustment and psychopathology over time (Rodkin et al., 2015). This creates a feedback loop as aggressive behavior encourages others to act aggressively and normalizes the practice as an effective social strategy (Rodkin et al., 2015). Thus, addressing the issue of bullying is very complicated due to the levels of violence and harm being passed on. Aggressive behavior is an umbrella term that bullying falls under. Bullying has specific characteristics such as repetitiveness and an asymmetric power relationship (Rodkin et al., 2015). This asymmetric power relationship is key in addressing bullying. In the present study, research will focus specifically on bullying.

Rates of bullying within Illinois were highest in rural counties (Garthe et al., 2021b) illustrating the fact that these counties are overlooked. When people think of violence in Illinois, they typically think of Chicago; violence is often seen as an urban problem. A study from the Illinois Criminal Justice Information Authority (ICJIA) found residents are often unaware of the prevalence of crime in their community but base their perceptions from misconceptions about their neighborhood's violence compared with other neighborhoods (Reichert, J., & Konefal, K., 2017). This extends to urban areas as "There is a positive relationship between levels of fear of

crime and city size” (Reichert, J., & Konefal, K., 2017). (*Figure #1*) Schools in Central Illinois had high rates of bullying and had the lowest compliance to include full bullying policies in their district handbooks (Garthe et al., 2021c). These factors emphasize the importance of addressing bullying specifically in Central Illinois; this area of Illinois is often overlooked.

The present study looked at Central Illinois across county types, both rural and other urban/suburban as classified by the Illinois Youth Survey (IYS). Central Illinois is a unique area as it has many rural communities with some big cities: Champaign-Urbana, Peoria, Springfield, Bloomington-Normal, etc. Thus, it is important to look across county types when researching this area.

Methods

In the context of this study, Central Illinois was defined as counties north of Clay County and south of Stark County. (*Figure #2*) Rates of bullying at the county level were pulled from the 2018 IYS. “The IYS is a self-report survey administered in school settings and is designed to gather information about a variety of health and social indicators including substance use and perceptions, bullying, school climate, nutrition, and physical activity” (University of Illinois, 2022). Questions about bullying were time sensitive. One question asked if students had experienced bullying behavior within the past 12 months. Another question was how often they had been bullied, harassed, or made fun of in the past 12 months for appearance/disability and/or assumptions about religion, sexual orientation, or race/ethnicity.

We were curious how counties were labeled rural or other urban/suburban by the IYS, so we decided to find the biggest city in each county through Google. We then gathered the population and rank of that population compared to all cities in Illinois. Population data came from the United States Census Bureau published in 2022. Rates of SES and household factors at

the county level were pulled from Census data within the Kids County Data Center. These factors were compared with rates of bullying in each county and organized by county type.

(Figures #3 & #4)

Descriptive statistics, which summarize a collection of information, examined rates of bullying for Central Illinois counties that were categorized by rural or other urban/suburban. These rates were compared to the state average of bullying at 29.5%. Correlation analyses examined the association between county-level socio-economic factors and rates of bullying.

Results

Both rural and other urban/suburban county types had higher rates of bullying than the state average of Illinois which is 29.5% from the IYS. *Figure #3 & #4*. County types were defined by the ICJIA County Reports (Garthe et al., 2021a). Note that some counties did not have enough schools to gather a bullying rate (*Figure #3 & #4*). Also noteworthy is that Cook County's bullying rate is 24.5%, below the state average. The average rate for other urban/suburban areas was 38.5% and rural was 39%. These percentages were pulled from the IYS.

Pearson's r correlation analyses were conducted on these results. The association between county poverty level and rates of bullying was $r = 0.18$. *Figure #5*. Associations between population rank and bullying within rural counties was $r = -0.35$. Other urban/suburban counties correlation was $r = 0.47$.

Discussion

Rates of bullying in Central Illinois are significantly higher than the state average. Our analysis speaks to correlation, not causation. There could be another factor involved in causing both. There are several confounding possibilities here. One factor could be school funding.

Schools with more funding may have more effective anti-bullying programs. Furthermore, higher rates of parent engagement in schools could lead to lower rates of bullying through better monitoring of children's behavior. For rural counties, the higher their biggest city ranks in terms of population ($r = -0.35$), the lower the percentage of bullying and vice versa. For other urban/suburban counties, the higher their biggest city ranks, the higher the percentage of bullying ($r = 0.47$).

This information has implications for educators in Central Illinois. These results highlight the importance of strengthening and having more bullying prevention programming in Central Illinois. These findings are consistent with other forms of violence, showing that rural and other urban/suburban counties tend to have high rates of violence. These county types must be included in violence prevention efforts. *Figure #6*.

There is a significant association between county poverty level and rates of bullying. Thus, school districts with higher levels of poverty may benefit from more bullying prevention efforts. The results of city rank and bullying correlation analysis show that counties with mid-size urban areas were at the greatest risk for bullying ($r = 0.47$). This correlation warrants further examination. More violence prevention and bullying prevention efforts are needed within school districts in Central Illinois, across rural and other urban/suburban counties.

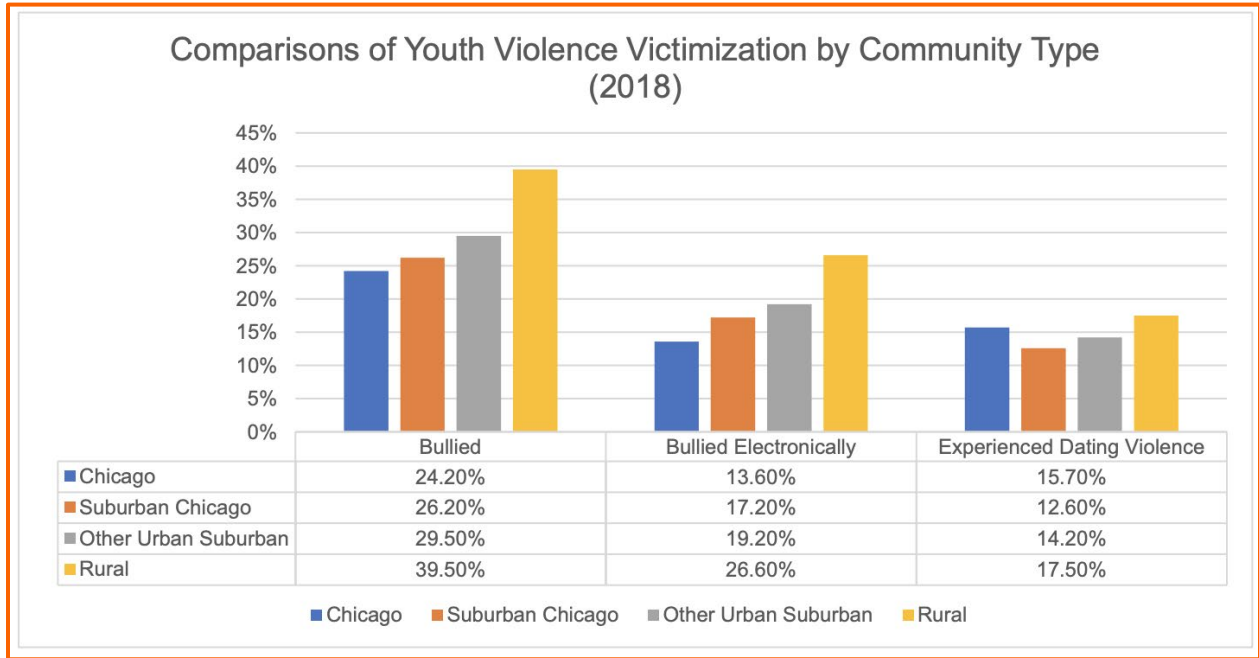
References

- American Psychological Association. (2024). *Bullying*. American Psychological Association. <https://www.apa.org/topics/bullying#:~:text=Bullying%20is%20a%20form%20of,words%2C%20or%20more%20subtle%20actions>.
- Annie E. Casey Foundation. (2023, December). *Children in Poverty in Illinois*. Kids Count Data Center. <https://datacenter.aecf.org/data/tables/8752-children-in-poverty?loc=15&loct=5#detailed/5/2190-2291/false/1095,2048,574,1729,37,871,870,573,869,36/any/21990,17567>
- Garthe, R. C., Smith, D. C., & Freeman, S. (2021). Illinois Criminal Justice Authority Statewide Violence Prevention Plan 2020-2024: Review of Programs and Strategies, Needs Assessment of Violence in Illinois & Recommendations for Funding: County Reports. Illinois Criminal Justice Information Authority.
- Garthe, R. C., Smith, D. C., & Freeman, S. (2021). Illinois Criminal Justice Authority Statewide Violence Prevention Plan 2020-2024: Review of Programs and Strategies, Needs Assessment of Violence in Illinois & Recommendations for Funding: Community Type Reports. Illinois Criminal Justice Information Authority.
- Garthe, R. C., Smith, D. C., & Freeman, S. (2021). Illinois Criminal Justice Authority Statewide Violence Prevention Plan 2020-2024: Review of Programs and Strategies, Needs Assessment of Violence in Illinois & Recommendations for Funding: Needs Assessment of Violence in Illinois. Illinois Criminal Justice Information Authority.
- Hosozawa, M., Bann, D., Fink, E., Elsdén, E., Baba, S., Iso, H., & Patalay, P. (2021). Bullying Victimization in Adolescence: Prevalence and Inequalities by Gender, Socioeconomic Status and Academic Performance Across 71 Countries. *EClinicalMedicine*, 41. <https://doi.org/10.1016/j.eclinm.2021.101142>
- Reichert, J., & Konefal, K. (2017, August 16). *An Examination of Fear of Crime and Social Vulnerability in Chicago Neighborhoods*. ICJIA. <https://icjia.illinois.gov/researchhub/articles/an-examination-of-fear-of-crime-and-social-vulnerability-in-chicago-neighborhoods>
- Rodkin, P. C., Espelage, D. L., & Hanish, L. D. (2015). A Relational Framework for Understanding Bullying: Developmental Antecedents and Outcomes. *American Psychologist*, 70(4), 311–321. <https://doi.org/10.1037/a0038658>

United States Census Bureau. (2022). *Illinois Cities by Population*. Illinois Demographics by Cubit. https://www.illinois-demographics.com/cities_by_population

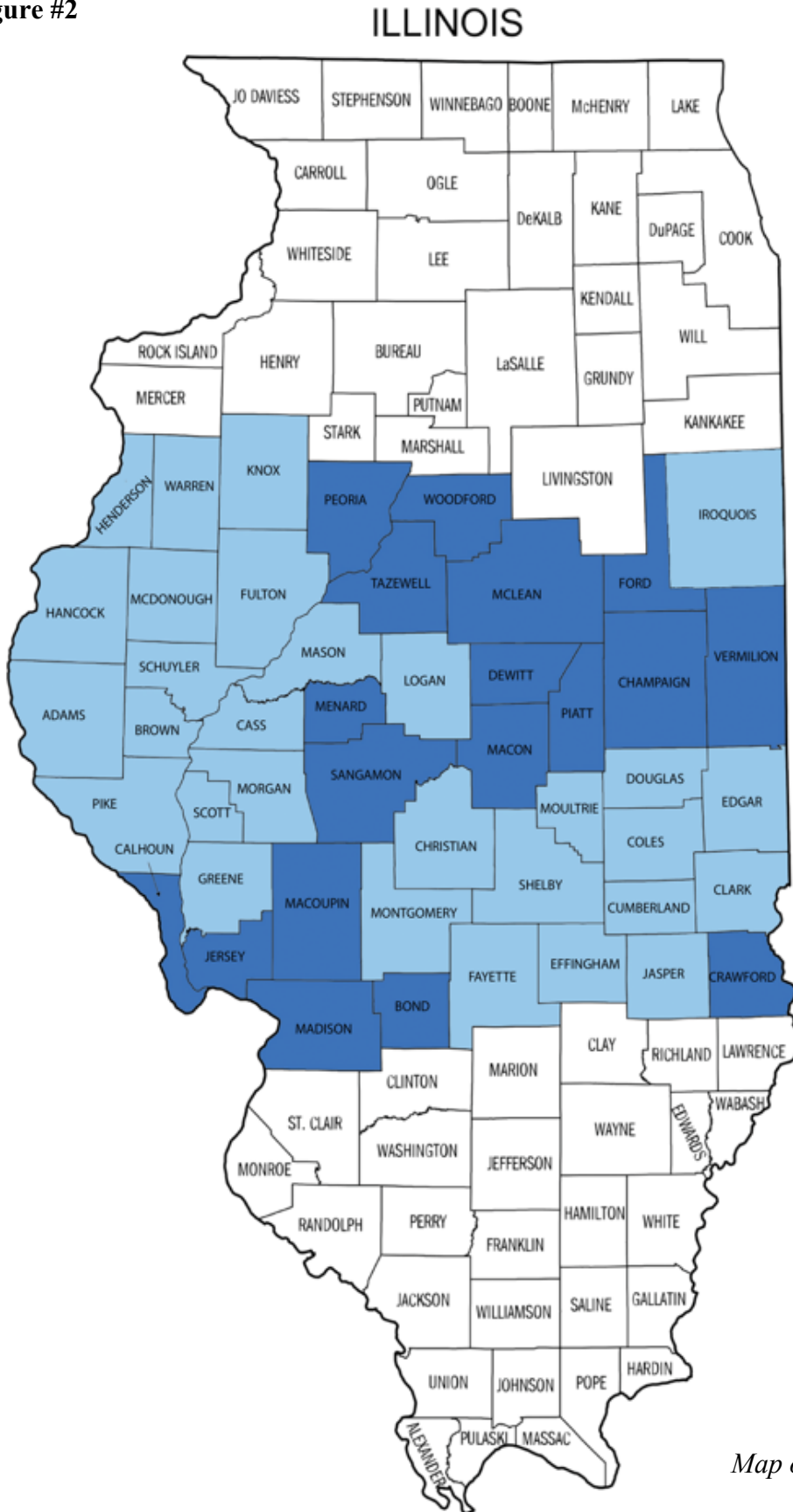
University of Illinois. (2022). *County Reports*. Illinois Youth Survey - Center for Prevention Research & Development. <https://iys.cprd.illinois.edu/results/county>

Figure #1



Comparisons of Youth Violence Victimization by Community Type

Figure #2



Map of Central Illinois

Figure #3

County (Urban/Suburban)	Bullying Rate
Bond	-
Calhoun	-
Champaign	40%
Crawford	40%
De Witt	41.7%
Ford	44.8%
Jersey	-
Macon	-
Macoupin	40.7%
Madison	37.7%
McLean	28%
Menard	47.1%
Peoria	33.3%

Piatt	33.9%
Sangamon	38.9%
Tazewell	37.4%
Vermilion	34.4%
Woodford	28.1%
AVERAGE	38.5%
(State Average)	29.5%

Urban/Suburban Counties in Central Illinois - Bullying Rate Pulled from IYS

Figure #4

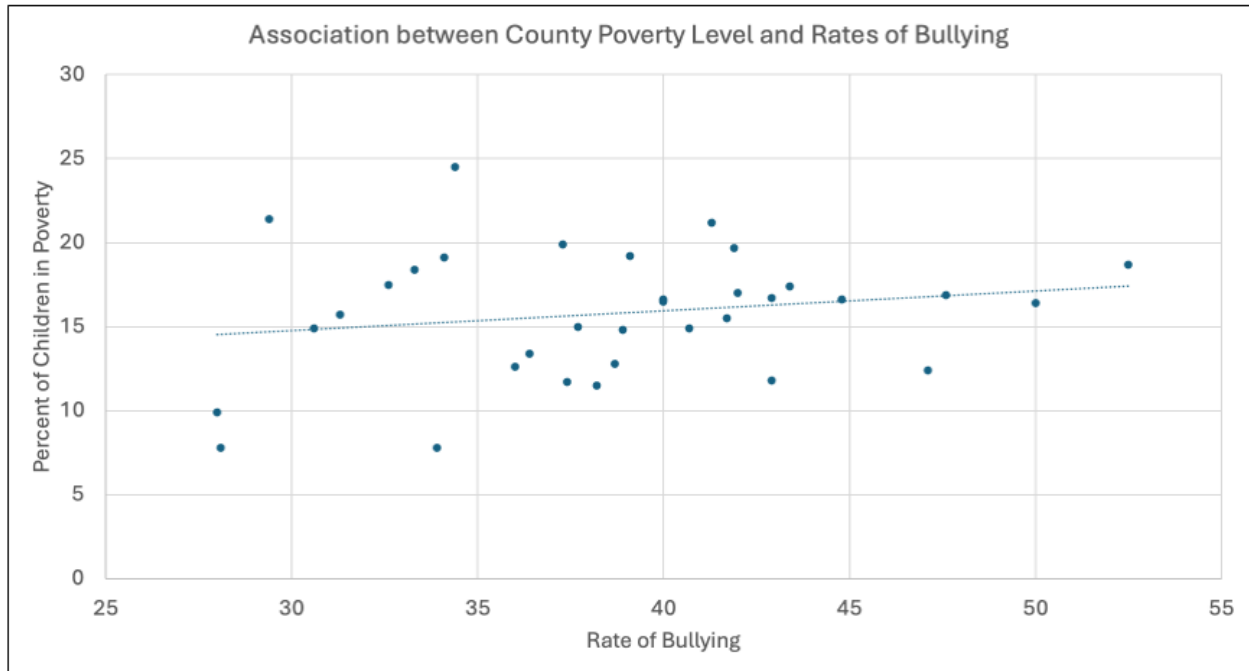
County (Rural)	Bullying Rate
Adams	43.4%
Brown	-
Cass	31.3%
Christian	-
Clark	30.6%

Coles	34.1%
Cumberland	36%
Douglas	38.2%
Edgar	37.3%
Effingham	42.9%
Fayette	-
Fulton	50%
Greene	32.6%
Hancock	-
Henderson	-
Iroquois	42.9%
Jasper	-
Knox	41.9%
Logan	42%
Mason	39.1%

McDonough	29.4%
Montgomery	52.5%
Morgan	47.6%
Moultrie	38.7%
Pike	-
Schuyler	-
Scott	-
Shelby	36.4%
Warren	41.3%
AVERAGE	39%
(State Average)	29.5%

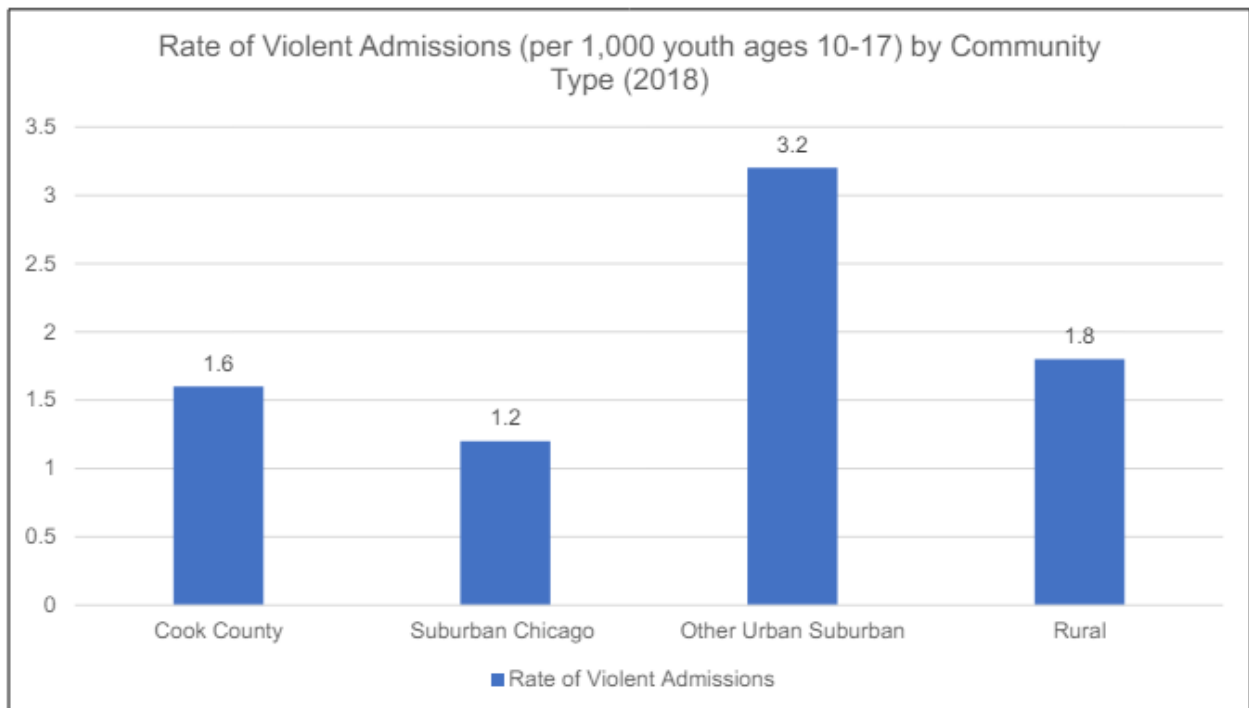
Rural Counties in Central Illinois - Bullying Rate Pulled from IYS

Figure #5



Association Between County Poverty Level and Rates of Bullying

Figure #6



Rate of Violent Admissions by Community Type - Community Reports from ICJIA