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Youth Participatory Action Research: Studies on Mental Health, Psychological Empowerment, and Transformative Social and Emotional Learning

By

Amia Michelle Nash

A dissertation submitted in partial satisfaction of the

requirements for the degree of

Doctor of Public Health

in the

Graduate Division

of the

University of California, Berkeley

Committee in charge:

Professor Emily J. Ozer, Chair
Professor Julianna Deardorff
Professor Valerie B. Shapiro

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Abstract

Youth Participatory Action Research: Studies on Mental Health, Psychological Empowerment, and Transformative Social and Emotional Learning

by

Amia Michelle Nash

Doctor of Public Health

University of California, Berkeley

Professor Emily J. Ozer, Chair

  Youth-led Participatory Action Research (YPAR) is an approach that engages young people and academic researchers as equitable partners in each phase of the research process. YPAR positions youth as experts and aims to increase the power of marginalized groups in advocating for change to address issues that youth want to change. Key principles for YPAR include that it is 1) inquiry-based and topics selected are relevant to youths' lived experiences and concerns, 2) participatory, which means youth are collaborators across research phases and methods, and 3) transformative, which means the purpose of YPAR is to change knowledge and practices through social action to improve the lives of youth and their communities. Engaging youth in participatory research can help address gaps between adolescent developmental needs and traditional school environments, such as increasing self-efficacy, establishing a sense of purpose, and creating supportive social relationships with peers and trusted adults. The continued emergent growth of the YPAR literature provides insights about study methodology, YPAR project characteristics, and the potential for youth and environmental outcomes from participation in YPAR.

  In this body of work, I apply frameworks from the fields of psychological empowerment, transformative social and emotional learning, and the use of research evidence. In the first paper, I conduct a systematic review of the recent YPAR literature published between 2015 and 2022, and report findings related to study methodology, YPAR principles and project characteristics, and youth outcomes. I contribute a unique, theoretically-driven analysis of youth empowerment outcomes with respect to the intrapersonal, interactional, and behavioral components of psychological empowerment. In the second paper, I extend the systematic review by applying a unique, theoretically-driven analysis of transformative social and emotional learning outcomes with respect to the transformative focal constructs of agency, belonging, collaborative problem solving, curiosity, and identity. In the third paper, I describe two YPAR project focal cases in which youth-generated evidence and youth recommendations were utilized in the development and implementation of mental health policies and practices in school settings. Further, I report conditions that facilitate and limit use of YPAR evidence addressing mental health issues in school settings. These findings will be of interest to key stakeholders including school administrators, teachers, and mental health professionals given the importance of theoretical

insights and recommendations into the use of YPAR as an approach for promoting positive youth mental health, psychological empowerment, and transformative social and emotional learning outcomes in community and school settings.

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"If I have seen further than others, it is by standing on the shoulders of giants."

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Hey Dad, I did it. I love you forever.

Paper One
A Systematic Review of Youth Participatory Action Research and Psychological
Empowerment Outcomes

Introduction

Youth Participatory Action Research

Community-Based Participatory Research (CBPR) is a term used in public health to refer to participatory research approaches that engage community members and academic researchers as equitable partners in each step of the research process to address issues that community members want to change (Israel et al., 1998). The knowledge generated by these community-academic partnerships members is thus intended to be culturally relevant, action-oriented, and connected to community members' lived experiences (Wallerstein & Duran, 2010).

Youth-led Participatory Action Research (YPAR) is a form of CBPR that engages youth as researchers in identifying issues relevant to their lives, conducting research, and advocating for change to address issues (Rodríguez & Brown, 2009; Wallerstein et al., 2017). Rather than a research *method*, YPAR is an approach that challenges assumptions about who holds and creates knowledge. Youth are engaged as experts who generate knowledge and data to address issues and change inequitable systems, policies, and practices (Ozer et al., 2020). By supporting youth in having a meaningful voice in identifying and changing issues relevant to them, YPAR approaches aim to increase the power of marginalized groups in improving problems through iterative cycles of inquiry and action (Minkler & Wallerstein, 2003). In the literature, YPAR projects have addressed a range of equity issues in education and health such as school discipline policies, dating violence, bullying, and access to healthy food and physical activity opportunities (Ozer & Piatt, 2018).

From the outset, YPAR requires building trusting relationships and effective communication between the youth researchers and adult facilitators (Wallerstein et al., 2017). YPAR involves iterative phases, beginning with identifying a problem or question they want to address, and that they genuinely care about and want to change. Next, youth select their research design and methods with training to learn which data sources and measurement tools will help answer the research question, followed by data analysis and interpretation. Especially in the final phase, youth researchers identify specific actions that they and adults can take to address the problem, and report their findings to relevant stakeholders to propose solutions.

Rodriguez and Brown (2009) identify three key principles for YPAR: it is inquiry-based and topics selected are relevant to youths' lived experiences and concerns; it is participatory, which means youth are collaborators across research phases and methods; and it is transformative, which means the purpose of YPAR is to change knowledge and practices through social action to improve the lives of youth and their communities. Consistent with these principles, Ozer and Douglas (2015) identified key research processes in YPAR: there is intentional power sharing between youth researchers and adult facilitators over key decisions in the research process; the research and action phases are iterative; and youth are trained in research and advocacy methods, thinking about how to create social change, and building alliances with stakeholders. Through these key processes, YPAR can positively improve settings that influence youth development and health.

Thus, YPAR engages youth in analyzing and working to change the social, economic, and political conditions that shape their schools and communities, which provides developmental opportunities for adolescents, such as increased motivation for goals, enhanced awareness of self-identity, stronger sense of self-identity, passions about specific causes, self-regulation skills increasing, increased independence and autonomy, increased social rights and responsibilities, and identity development in political and religious domains (Ballonoff Suleiman et al., 2021). There are a range of individual differences in adolescent development, which is influenced by biological, economic, cultural, political, and social factors. During adolescence (10-19 years old), there is important awareness of social roles and relationships, as well as of self-identity (Crone & Dahl, 2012). As early adolescents navigate the hormonal and neurodevelopmental transition at puberty, they are seeking acceptance, sense of belonging, relationships with peers and adults, and feelings of autonomy (Ballonoff Suleiman et al., 2021). Characteristics of settings that support positive adolescent development include physical and emotional safety, positive social norms, and opportunities to build new schools. Engaging youth in participatory research can help address gaps between adolescent developmental needs and traditional school environments, such as increasing self-efficacy, establishing a sense of purpose, and creating supportive social relationships with peers and trusted adults (Ozer, Ritterman, & Wanis, 2010). In a recent brief, Ozer, Shapiro, and Duarte (2021) suggested youth empowerment approaches, such as YPAR, may improve youth social and emotional well-being by supporting youth in addressing inequities that affect their well-being. YPAR may facilitate adolescents' emerging agency by engaging their unique expertise, skills, and perspective, as well as, promoting their critical analysis of social issues impacting them and their communities (Ozer, Shapiro, & Duarte, 2021).

Youth Empowerment Framing

Empowerment has been a central focus of participatory action research, including YPAR, for at least two decades (Mitra, 2004; Wilson et al. 2007). Empowerment integrates perceptions of personal control, a proactive approach to life, and a critical understanding of the sociopolitical environment (Zimmerman, 1995). Promoting empowerment is important for adolescent development, and is even more salient for marginalized youth who navigate structural barriers such as poverty, racism, and heterosexism in their journey toward positive development and identity (Watts & Flanagan, 2007; Ozer & Douglas, 2012). YPAR as an approach intends to support positive youth empowerment, such as increases in sense of purpose, perceived support from caring adults, and more positive attitudes towards education and school (Mitra, 2004; Ozer & Douglas, 2012; Wilson et al. 2007). This current research aims to build on our understanding of YPAR as an empowering process for youth.

The conceptualization of psychological empowerment is rooted firmly in a social action framework that includes community change, capacity building, and collectivity (Rappaport, 1981). PE is more than self-perceptions of competence, and includes active engagement in one's community and an understanding of one's sociopolitical environment (Zimmerman, 1995). Zimmerman (1995) describes these three components of PE to understand how individuals perceive their own capability to influence a given context (intrapersonal component), understand how the system works in that context (interactional component), and engage in behaviors to exert control in the context (behavioral component). PE includes beliefs that goals can be achieved, awareness about resources and factors that influence achieving the goals, and efforts to

accomplish the goals. The intrapersonal considers how people think about their capacity to influence social and political systems. It is a self-perception that includes domain-specific perceived control and self-efficacy, motivation to control, perceived competence, and mastery (Zimmerman, 1995). Empowerment at the intrapersonal-level is a process by which individuals gain mastery and control over their lives, and a critical understanding of their environment (Rappaport, 1984). Next, the interactional component is between the individual and their environments, and refers to the understanding people have about their community and related sociopolitical issues (Zimmerman, 1995). PE at the interactional-level requires that individuals develop a critical awareness of their environment, and the ability to understand the resources needed to achieve a desired goal and mobilize resources is an essential aspect of the interactional component of PE. The interactional component of PE includes decision-making, problem solving, and skill development which connects perceived control and taking action to exert control. Lastly, the behavioral component refers to an individual's actions taken to directly influence outcomes. These behaviors influence the social and political environment through participation in community organizations and activities such as neighborhood associations, political groups, church or religious groups, and service organizations (Zimmerman et al., 1992).

Prior Systematic Reviews

Here, I provide an overview of the prior systematic reviews conducted in the literature relevant to YPAR, and consider the unique contributions of the present study in its focus on youth empowerment outcomes. There have been four systematic reviews of the YPAR literature that explore YPAR methodologies, health, and other youth outcomes. An initial systematic review was conducted by Jacquez, Vaughn, and Wagner (2013) and reviewed children and adolescents in community-based participatory research. The authors included 56 studies that involved youth as partners on CBPR projects in the United States and included articles published between 1985 and 2012 (Jacquez, Vaughn, & Wagner, 2013) . The most common issue areas of focus were health issues including, general health issues (n=5), obesity and/or diabetes (n=7), sexual health (n=6), physical activity (n=3), substance use (n=3), environmental health (n=2), and mental health (n= 2) (Jacquez, Vaughn, & Wagner, 2013). In examining the roles and levels of participation of youth in CBPR, they found that often youth were not fully integrated into all aspects of the research. While Jacquez, Vaughn, and Wagner (2013) did not examine youth outcomes, Shamrova & Cummings (2017) subsequently carried out a review of methodology and participatory action research outcomes for youth participants, organizations, and communities, including 45 international studies published between 2009 and 2016. Youth outcomes reported include increases in social justice awareness, social and cognitive development, perceptions of youth as change agents, and stronger relationships with adults and the broader community (Shamrova & Cummings, 2017); empowerment dimensions were not explicitly examined. This research provided initial insights about the methodology, characteristics, and outcomes of the YPAR literature, further suggesting that although the degree of youth involvement can vary across studies, participation in YPAR programs may be associated with important developmental outcomes.

Most recently, Anyon et al. (2018) synthesized findings of the YPAR literature published between 1995 and 2015 in the U.S., including study methodology, youth outcomes, and YPAR principles and project characteristics. Across the 63 articles in the review, key findings included that the YPAR literature was predominantly comprised of qualitative studies, and that the most

common outcomes associated with participation in YPAR were those related to agency and leadership (75%), followed by academic or career (56%), social (37%), interpersonal (35%), and cognitive (23%) outcomes. This systematic review suggested that YPAR may be a useful approach to promote skill development among young people. One of the eight deductively identified categories of youth outcomes was "agency/leadership" (self-determination, self-efficacy, confidence, civic engagement, citizenship, voice, empowerment, social responsibility, participatory behavior, identity, self-awareness). While empowerment was coded as an agency/leadership outcome, there was no additional discussion by the authors describing the specific empowerment outcomes as reported in the literature. Using the same inclusion criteria, Kennedy et al. (2019) extended the review by reporting environmental outcomes in 36 studies of youth inquiry approaches in the United States. Environmental outcomes were organized into Bronfenbrenner's ecological framework and included changes to practitioners, policies, programs, research, and peer group norms (Bronfenbrenner, 1977). The authors found that youth inquiry approaches that utilized advocacy to create change, targeted decision-makers as the audience for the youth's work, and convened for a longer duration were more likely to report improved environmental outcomes.

Current Study

The relative lack of attention to youth empowerment outcomes in the previous systematic reviews underscores a gap in the literature regarding youth outcomes of YPAR participants, especially given the theoretical centrality of empowerment in the participatory research literature (Mitra, 2004; Ozer & Douglas, 2012; Wilson et al., 2007; Zimmerman, 1995). Zimmerman (1995) describes PAR as an approach that exemplifies empowering processes because community members become co-equals in program development and have the opportunity to work together to solve problems, develop skills, become critically aware of their sociopolitical environment, and create mutual support systems. The present study aims to contribute a unique, theoretically-driven analysis of youth empowerment outcomes with respect to the intrapersonal, interactional, and behavioral components of psychological empowerment. Reviewing the literature and reported outcome measures with this lens can help us further understand the specific dimensions of empowerment that youth are experiencing compared to a broad categorization of empowerment like prior reviews. Research questions guiding this systematic review of the YPAR literature include: *What are the characteristics of the studies and YPAR projects that report youth empowerment outcomes? What youth empowerment outcomes are associated with participation in YPAR? How can reported youth outcomes be analyzed by components of youth empowerment?*

Methods

As noted above, the theoretical framework that guides the conceptualization of youth empowerment outcomes in this systematic review is Psychological Empowerment (Zimmerman, 1995). The present study follows the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines for the search and coding process. We focus on the literature published between December 2015 and June 2022, extending Anyon et al.'s (2018) systematic review of YPAR in the United States that included studies published through 2015. Working in collaboration with a key member of the Anyon et al. team, this systematic review

replicates the initial phases of the methodology of the prior study to enable comparisons, as feasible.

Search and Sampling Strategy

Four databases were selected for their relevance to YPAR programming and searched: PubMed, ERIC, Social Service Abstracts, and PsychInfo. In order to identify relevant publications, search terms were entered using the Boolean operators AND/OR, and asterisks to truncate the search terms. The search criteria included terms associated with the study population (separated by OR): student, emerging adult, youth, high school, middle school, minor*, juvenile*, adolescent* and teen* AND search terms associated with intervention (separated by OR): community involvement, youth voice, student voice, youth organizing, student organizing, youth activism, student activism, youth empower*, youth leader*, youth civic, youth advoc*, student advoc*, youth decision-making, student decision-making, social change, participatory action research, youth engage*, youth advisory board, youth advisory council, youth action board, youth action council, youth community development, youth involvement, youth led, youth council, youth coalition, youth outreach, student council, youth adult partner*, youth commission AND search terms associated with study methods (separated by OR): evidence-based, effective*, treatment*, intervention*, outcome*, experimental stud*, quasi-experiment*, case stud*, case-control stud*, cross-sectional, cohort stud*, observational, promising practice*, randomized control trial*, interview*, qualitative, survey, focus group, pre-experiment*, and evaluation.

Eligibility Criteria

The eligibility criteria focuses on five key elements: 1) study characteristics (empirical studies, published in peer-reviewed journals, published in English); 2) population (at least 50% of program participants comprised youth 25 years or younger; for youth of ages 18 to 25 years, samples were excluded if they consisted only of undergraduate or graduate students); 3) intervention (inquiry-based program that involved youth in data collection, and at least one additional component of the research process, such as data analysis or dissemination of findings); 4) youth or environment outcomes (that the study reports on the experiences, outcomes, or impact of the program for the youth participants or their surrounding environment); and 5) systematic methods for data analysis of reported outcomes.

Study Selection

The systematic search process includes multiple phases, and was conducted by a research team consisting of one post-doctoral student, two doctoral students, two masters students, and two undergraduate students. All researchers discussed the eligibility criteria and were involved in searching, screening, and coding the studies. After conducting electronic searches using the databases and search terms described above, the first phase involved preliminary screening of the abstracts to determine whether they met the initial criteria. As shown in Figure 1, our search resulted in 2023 studies, of which 419 were removed as duplicates. In total, 1604 abstracts were screened and 934 were removed for not meeting the eligibility criteria. In cases where insufficient information was provided in the abstract, the articles were retained and moved forward to the next phase. In the next phase, full-text articles were retrieved and further assessed

for meeting the same initial screening criteria. There were 599 records excluded because the studies were: not empirical (*n*=48); not targeting youth as participants (*n*=63); not involving youth meeting more than once (*n*=37); not reporting youth outcomes for youth participants or their surrounding environment (*n*=68); described as service-learning (*n*=3); or were not youth inquiry-based (n= 343) (refer to Figure 1). Inclusion criteria for YPAR projects that were youth inquiry required that youth were involved in the data collection phase, and at least one additional component of the research process, such as data analysis or dissemination of findings.

Data Extraction Process

Phase 1. Adapt Codebook and Code Included Articles

We iteratively developed a detailed codebook for our analyses based on the principles of YPAR and the PRISMA guidelines, building on the systematic review of YPAR in the U.S. conducted by Anyon et al. (2018) (see Appendix A for a detailed list of codebook data items). Sections of the original codebook include study characteristics, YPAR principles, YPAR project characteristics, and youth outcomes associated with YPAR. We adapted the Anyon et al. (2018) codebook to include more differentiated information regarding the studies: (a) study characteristics (e.g., systematic analysis of qualitative or quantitative data); (b) YPAR project characteristics (e.g., training of youth researchers in YPAR research skills, training of adult facilitators, process evaluation, and identified facilitators and barriers to YPAR); and (c) youth outcomes. Youth outcomes were defined as any change or improvement in participants' growth or development as reported by the study authors. The type of growth experienced by participants was qualitatively recorded and categorized into deductively identified categories of youth outcomes: social (connectedness, social support, community attachment, belonging), emotional (stress, symptomology, the ability to identify and express emotions, regulating emotions, anger management), interpersonal (communication skills, assertiveness, empathy taking, active listening, conflict resolution, teamwork), cognitive (problem solving, decision making, and thought appraisal abilities), and/or academic/career (organization, time management, study skills, goal setting, public speaking, writing, planning). Our research team added to this by also reporting the direct language and quotes from the articles related to the specific youth outcomes for reference. For the qualitative data, this included the specific themes reported in the results, and for the quantitative data, this included the specific measures used.

All included articles were coded using Covidence, an online systematic review management software, to promote consistency in coding. First, two research team members used the screening criteria and codebook on Covidence to code articles independently. Areas of disagreement were noted, and the research team members met to address discrepancies through consensus discussion. If researchers were unsure whether a study met any of the criteria, the article and the issue were discussed by the entire research team at the weekly meetings.

Phase 2. Identify Strongest Evidence for Outcomes

We added an inclusion criterion to identify studies that described how they analyzed their data (qualitative, quantitative, and/or mixed methods) for the youth outcomes reported in the study results in order to focus on the strongest and most trustworthy findings. For example, articles were excluded at this phase if the results did not report on youth outcomes, or if the

authors discussed potential youth outcomes in the discussion section of the article, but did not report how they identified or analyzed those youth outcomes. We were highly inclusive in considering any form of data or evidence that was generated by the study authors, whether it was a qualitative theme or a standardized quantitative measure. Two research team members reviewed each article carefully to identify study design and methods, as well as any report of how the authors yielded evidence regarding youth outcomes. Consensus of the articles included was completed at this phase of the review.

Phase 3. Identify Youth Empowerment Outcomes

In order to identify youth empowerment outcomes, the first author and another member of the research team re-analyzed the categorically coded youth outcomes and quotes to identify outcomes that were related to youth psychological empowerment. This analysis applied a theoretically-driven conceptualization of youth empowerment by coding outcomes into intrapersonal, interactional, or behavioral components of psychological empowerment. Youth empowerment outcomes reported as the intrapersonal component relate to how youth self-report about their capacity to influence social and political systems, such as agency, perceived control, motivation to control, self-efficacy, self-esteem, and youth voice. The interactional component is between youth and their environments. Youth empowerment outcomes reported here relate to critical awareness of their community and related sociopolitical issues, interactions with peers and adults, and skill development. The behavioral component refers to youth's actions taken to directly influence outcomes. These behaviors influence the social and political environment through participation in community and activities. Youth empowerment outcomes reported here related to civic engagement, participatory and leadership behaviors, and collective action for change. Two research team members completed coding of the outcomes at this phase of the review and met to address discrepancies through consensus discussion.

Figure 1. Identification, screening, and eligibility of the review sample.

Results

Literature Overview

Study Characteristics

A majority of the studies (*n*=15, 58%) included in this review were published since 2020, suggesting the continued emergent growth of the YPAR literature. Most of the articles (*n*=24, 92%) described their research as YPAR, CBPR, Photovoice or another variant of participatory research (e.g. participatory evaluation); the two articles that did not described the research as "critical making" (Nation, 2019) and "student voice" (Voight & King-White, 2021). Articles included in the review were published across journal types including education (*n*=11, 42%), public health (*n*=5, 19%), psychology (*n*=4, 15%), and interdisciplinary (*n*=5, 19%). The

following study characteristics are referenced in Table 1. The selected YPAR articles primarily utilized qualitative methods (*n*=15, 58%), followed by mixed methods (*n*=8, 31%), with relatively few using quantitative methods (*n*= 3, 12%). The most common study designs included case studies (*n*=15, 58%), pre- and post-studies (*n*=7, 27%), and quasi-experimental studies (*n*=5, 19%). Most studies used multiple forms of data to triangulate their findings, with interviews (*n*=17, 65%), archival/artifacts (*n*=14, 54%), observations (*n*=14, 54%), surveys (*n*=12, 46%), and photos or videos (*n*=11, 42%) being the most popular. Lastly, the studies drew on several sources of data, most commonly including, YPAR youth researchers (*n*=26, 100%) and program staff or facilitators (*n*=12, 46%).

Table 1. Study Characteristics Across Studies

Study Characteristic	n (%)
Methodology (*N*=26)	
Qualitative	15 (58)
Quantitative	3 (12)
Mixed	8 (31)
Design (*N*=26)	
Ethnography	3 (12)
Grounded theory	2 (8)
Phenomenology	1 (4)
Randomized trial	0 (0)
Quasi-experimental	5 (19)
Pre and post	7 (27)
Case study	15 (58)
Data type (*N*=26)	
Administrative	3 (12)
Survey	12 (46)
Archival/artifacts	14 (54)
Observations (field notes)	14 (54)
Interviews	17 (65)
Focus group	2 (8)
Photos or video	11 (42)
Other (e.g., reflections, social network analysis)	1 (4)
Data Source (*N*=26)	
YPAR youth researchers	26 (100)
Program staff or facilitators	12 (46)
Representative from partner organization	2 (8)
Community member	3 (12)
Parent/caregiver	3 (12)
Stage of Research (*N*=26)	
Relationship building between youth and adults	13 (50)
Problem identification	19 (73)
Choice of research design and methods	13 (50)
Data collection	26 (100)
Data analysis and interpretation	25 (96)
Dissemination of findings to stakeholders	23 (89)

YPAR Project Characteristics

The youth sample sizes reported across the YPAR programs range from six to 249 (refer to Table 3). Other characteristics of the study samples were provided less consistently. For example, only two studies (8%) provided data about how the participants identified themselves in terms of their sexuality. Thirteen studies (50%) included information about the participants' socioeconomic status (of these, all 13 had low-income youth represented in the sample). Of the 24 studies (92%) that reported gender, 92% (n=22) included girls, 88% (n=21) included boys, and none reported whether youth identified as cisgender or transgender. The 20 studies that reported race or ethnicity mostly involved youth of color with 80% (n=16) involving Black youth and 55% (n=11) involving Latinx youth. It was less common for these programs to involve White (n=9, 45%), Asian (n=8, 40%), Native American (n=4, 20%), or Pacific Islander (n=2, 10%) participants.

The following YPAR project characteristics across studies are referenced in Tables 2 and 3. The most common YPAR project setting was classroom-based during the school day (n=10, 44%) and in community centers/organizations (n=6, 26%). In the thirteen studies that reported the frequency of YPAR project sessions, 10 (77%) met at least once a week. In the 22 studies that reported the duration of YPAR project, nine projects were shorter than six months (35%), nine projects were between six months and one year (35%), and four projects were longer than one year (15%). The majority of studies occurred in the United States (n=17, 65%), with the remainder occurring in other countries (n=9, 35%) including, Australia, Canada, Ecuador, Israel, Italy, Senegal, South Africa, Spain, and the United Kingdom. Across the 22 studies that reported topics of the YPAR projects, the most common was race/racism (n=4, 18%), followed by drug use (n=3, 14%), environmentalism (n=3, 14%), bullying (n=2, 9%), food environment (n=2, 9%), LGBTQ discrimination (n=2, 9%), mental health (n=2, 9%), physical activity (n=2, 9%), police interactions (n=2, 9%), and youth unemployment (n=2, 9%). The articles reported a variety of YPAR project data types, with the most common being photos or videos (n=13, 50%), interviews (n=13, 50%), and surveys (n=10, 40%). Twenty-one YPAR studies reported youth received YPAR training (81%), and fourteen YPAR studies reported adult training for facilitating YPAR (54%). Across the YPAR studies, youth inquiry and participation varied across the stages of research: relationship building between youth and adults (n=13, 50%), problem identification (n=19, 73%), choice of research design and methods (n=13, 50%), data collection (n=26, 100%), analysis and interpretation of data (n=25, 96%), and dissemination of findings to stakeholders (n=23, 89%) (refer to Table 1).

Twenty-three of the studies provided details about the method of social action used by the youth researchers. Of these, 87% (n=20) reported using an education and awareness approach, involving the dissemination of a presentation, report, or exhibit to educate community/stakeholder group; 44% (n=10), an advocacy approach, involving meeting with decision makers either at the school-, district-, organization- or city-level; 17% (n=4), an intervention/program design approach, creating or modifying an intervention or program design based on YPAR findings; and 17% (n=4), an organizing approach, coalition building or partnering with organizations or individuals to build community momentum around a specific problem/solution. Twenty-two of the studies provided details about the target audience for these social actions, which were mainly social networks: social networks, such as peers, family, siblings, neighbors, and community members (n=14, 64%); schools and community organizations, such as administration, principals, teachers, program staff, and facilitators (n=13,

59%); policy makers, such as government agencies, decision-making bodies at the state-, municipal-, or district-level (e.g. school board, city council) (*n*=11, 50%); and the general public (*n*=8, 36%).

Table 2. YPAR Project Characteristics Across Studies

YPAR Project Characteristic	n (%)
Country of YPAR Project (*N*=26)	
USA	17 (65)
Outside of USA	9 (35)
YPAR Project Setting (*N*=23, 3 missing)	
School (during school/classroom-based)	10 (44)
School (out-of-school time)	4 (17)
Community center/organization	6 (26)
Clinic (hospital or community-based health center)	1 (4)
Shelter	1 (4)
Other	1 (4)
Duration of YPAR Project (*N*=22, 4 missing)	
Shorter than 6 months	9 (35)
Between 6 months and 1 year	9 (35)
Longer than 1 year	4 (15)
YPAR Project Data Type (*N*=25, 1 missing)	
Administrative	2 (8)
Survey	10 (40)
Archival/artifacts Observations	3 (12)
Interviews	13 (52)
Focus group	3 (12)
Photos or video	13 (52)
Other (e.g., mapping, content analysis, forums)	5 (20)
Youth Receive YPAR Training (*N*=26)	
Yes	21 (81)
No	5 (19)
Adult Facilitator Receive YPAR Training	
Yes	14 (54)
No	12 (46)

Table 3. YPAR Project Characteristics by Reference

Reference	Country of YPAR Project	YPAR Project Setting	YPAR Project Topic or Issue(s)	YPAR Project Data Type	Youth Sample Size	Age of Youth	Duration of YPAR Project	Frequency of YPAR sessions
Abraczinskas (2020)	USA	School (out-of-school time)	Physical activity curriculum	Photography/video	64	11-15 years	YPAR Only: 4 weeks YPAR + PA: 7 weeks	YPAR component: Weekly PA component 3x a week
Aldana (2021)	USA		Racial segregation	Observation; Interview; Photography/video	9	14 - 17 years	1 year	Weekly
Anyon (2018)	USA	Other	1) Police brutality, eco-mapping community resources, 2) Discrimination toward the LGBTQ community, 3) Self-care for women, 4) Urban gardens	Archival/artifact Observation Other: Mapping	33	11 - 17 years	6 months	Weekly
Bender (2017)	USA	Shelter	Youth homelessness	Photography/video	22	18 - 20 years	12 weeks for first cohort, 8 weeks for second cohort	Weekly
Bertrand (2018)	USA	School (out-of-school time)	Bullying related to race and LGBTQIA identities	Survey; Interview	15	7th - 8th grades	5 months	Weekly
Boni (2020)	Spain	Community center/organization	1) Youth opportunities, entrepreneurship, migration, 2) Legal instability, politics, education, conservatism, religion, segregation, social justice, 3) Participation,	Photos/video	11	16 - 24 years	1.5 months	

	Country	Setting	Topic	Data collection	n	Age	Duration	Frequency
			voluntarism, young people, monitors, free time					
Duke (2022)	USA	School (during school/classroom-based)	African American student perception of student/teacher relationships across charter schools	Interview	8	14 - 17 years	16 months	Weekly
Fortin (2022)	Senegal		Adolescent sexual and reproductive health and rights	Survey; Interview; Focus Group	12-20	18 - 21 years	8 months	
Halliday (2019)	Australia	School (during school/classroom-based)	Well-being during the school year	Interview; Focus Group	10	14 - 17 years		
Hayik (2021)	Israel	School (during school/classroom-based)	Environmentalism	Photos/video	82	10th - 12th grades		
Koudelka (2021)	USA	School (during school/classroom-based)	Bullying	Survey	10	9th grade	4 months	
Liegghio (2020)	Canada	Clinic (hospitals and community based mental health/health centers)	Stigma of mental illness among psychiatrized youth	Photos/video; Other: Content analysis	7	14 - 17 years	9 months	Weekly
Maker Castro (2021)	USA	School (during school/classroom-based)	Improve school climate for immigrant-origin students	Survey; Interview; Photos/video	20	14 - 18 years	14 weeks	Weekly
Marco-Crespo (2018)	Ecuador	School (during school/classroom-based)	Evaluation of a Chagas disease prevention program	Archival/artifact; Interview; Photos/video; Other: Mural collage diagramming	13	12 - 18 years	5 weeks	

	Country	Setting	Focus	Methods	N	Age	Duration	Frequency
				participatory mapping				
Mosavel (2018)	USA	Community center/organization	Promoting healthy behaviors related to physical activity and food choices	Observation; Interview; Photos/video	13	16 - 19 years		
Nation (2019)	USA	Community center/organization	Latinx girls identifying best and worst qualities of their town	Survey; Archival/artifact; Other: Word cloud	7	12 - 15 years		Biweekly
Prati (2020)	Italy	School (during school/classroom-based)	1) Poverty, 2) Immigration, 3) Environmental issues, 4) Drug abuse	Survey; Observation; Interview	35	15 - 17 years	2 years	
Sprague Martinez (2020)	USA	Community center/organization	1) Police interactions, 2) Gentrification, 3) Stress, 4) Violence and safety, 5) Food environment, 6) Racism/race relations, 7) Sleep, 8) Mental health, 9) Safe sex, 10) Drug use, 11) College access, 12) Teen pregnancy, 13) Stereotypes, 14) Social media, 15) Peer pressure, 16) Unemployment, 17) Mass incarceration, 18) Quality of education	Survey; Observation; Interview; Photos/video	35	13 - 34 years	6 months	
Stoddard (2020)	USA	School (out-of-school time)		Photos/video	43	11 - 14 years	5 weeks	4x a week
Tang Yan (2022)	USA	Community center/organization	1) Structural racism in education, 2) School to prison pipeline, 3) Food access	Interview; Photos/video	10	15 - 17 years	1 year	
Tintiangco-Cubales	USA	School (during school/classroom-based)			25	7 - 21 years	1 year	

(2016)		sed)						
Voight & King-White (2021)	USA	School (during school/classroom-ba sed)		Administrative; Interview	13	9th - 12th grades	1 year	1-4x a month
Voight & Velez (2018)	USA	School (during school/classroom-ba sed)	1) Substance Use, 2) Environmental prevention policies	Survey; Other: Forums	153	9th - 12th grades	1 year	
Warren (2018)	UK		1) School reform, 2) Systems of support, 3) Access to extracurricular activities	Administrative; Survey; Interview; Focus Group	15	14 - 19 years	18 weeks	Weekly
Wood (2021)	South Africa	Community center/organization	Youth employability	Survey	6	21 - 24 years	2 years	2x a month
Zimmerman (2018)	USA	School (out-of-school time)		Photos/video	249	11 - 16 years	4 years (4 schools) 3 years (1 school) 2 years (2 schools) 1 year (6 schools)	

Gray indicates that this information was missing

Youth Empowerment Findings

Outcomes by Components of Youth Empowerment

As shown in Table 4, the most common youth empowerment outcomes associated with participation in YPAR are those related to the interactional component (*n*=21 studies, 81%), followed by the intrapersonal component (*n*=18, 69%), and the behavioral component (*n*=12, 46%). The most frequently reported interactional youth empowerment outcomes are connected to skill development such as: advocacy skills (Voight & King-White, 2021); communication and research skills (Fortin, 2022; Halliday, 2019); interpersonal and group communication skills (Bender, 2017); organizational skills (Mosavel, 2018); sociopolitical skills (Abraczinskas, 2020); and broad skill development, including research skills and public speaking (Sprague Martinez, 2020). The other frequently reported interactional youth empowerment outcomes are associated with building relationships and connection: adult support (Anyon, 2018); support network (Fortin, 2022); building relationships (Warren, 2018); peer and student-adult relationships and social connection (Bender, 2017; Halliday, 2019; Maker Castro, 2021; Voight & King-White, 2021). Further, there were outcomes reported related to the youths' development of critical awareness of their environment (Boni, 2020; Tang Yan, 2022; Tintiangco-Cubales, 2016). Lastly, the interactional component of empowerment connects perceived control to take action, which is reflected in the reported outcomes of youth leadership (Marco-Crespo, 2018; Voight & King-White, 2021), decision-making (Fortin, 2022; Voight & King-White, 2021), and individual and collective responsibility (Hayik, 2021; Voight & King-White, 2021).

The most commonly reported intrapersonal youth empowerment outcomes are related to agency (Hallida, 2019; Koudelka, 2021; Tintiangco-Cubales, 2016; Warren, 2018; Wood, 2021) and confidence (Halliday, 2019; Maker Castro, 2021; Voight & King-White, 2021; Warren, 2018;). Youth empowerment at the intrapersonal level is a process by which individuals gain perceived competence, control over their lives, and capacity to influence social and political systems. Reported outcomes related to an individual's capacity to influence include: youth voice (Anyon, 2018); capability for voice (Boni, 2020); perceived control (Abraczinskas, 2020; Halliday, 2019); sense of control over their lives (Stoddard, 2020); sense of purpose (Warren, 2018; Wood, 2021); motivation to influence (Abraczinskas, 2020; Fortin, 2022); identifying as a change agent (Bender, 2017); self-efficacy (Fortin, 2022; Halliday, 2019); and leadership efficacy (Stoddard, 2020).

Lastly, the behavioral component of youth empowerment refers to an individual's actions taken to directly influence the social and political environment. The most commonly reported behavioral outcomes are related to engagement: civic engagement (Fortin, 2022; Halliday, 2019; Koudelka, 2021); civic development (Aldana, 2021); civic and political participation (Prati, 2020); and school engagement (Voight & Velez, 2018). Other reported outcomes related to community involvement and participation include: participatory behavior (Abraczinskas, 2020); power sharing and working in groups (Fortin, 2022); and collective action and change (Aldana, 2021; Tang Yan, 2022; Tintiangco-Cubales, 2016).

Table 4. Youth Empowerment Outcomes

Psychological Empowerment Component	Reference	Methods	Design	Reported Youth Outcomes	Statistical Significance & Sample (if provided for quant/mixed methods)
Interactional Empowerment	Abraczinskas (2020)	Mixed methods	Quasi-Experimental; Pre and post	Sociopolitical skills	YPAR only: t = .21, p = .84, n = 20 YPAR+PA: t = 3.33, p = .003, n = 43
	Aldana (2021)	Qualitative	Case study	Planning: critical self-reflection about segregation	
				Raising consciousness: creating a collective understanding of segregation	
	Anyon (2018)	Mixed methods	Pre and post	Adult support	
	Bender (2017)	Mixed methods	Pre and post	Interpersonal and group communication skills	t = −4.47, p = 0.002, n = 22
				Social connectedness	
	Boni (2020)	Qualitative	Case study	Awareness capability	
	Duke (2022)	Qualitative	Case study	Acknowledgement of competence in others	
				Realizing and respecting diversity	
	Fortin (2022)	Qualitative	Case study	Communication skills	
				Making decisions	
				Research skills	
				Support network	
	Halliday (2019)	Mixed methods	Case study; Quasi-Experimental	Communication skills	
				Relatedness, school connection	
				Research skills	
	Hayik (2021)	Mixed methods	Case Study	English language skills	
				Individual and collective responsibility	
	Maker Castro (2021)	Qualitative	Ethnography; Grounded theory	Emotional investment - optimism, learning about one another, perspective taking	

Author	Methodology	Study design	Outcomes	Statistics
			Peer relationships - sense of connection, collaboration	
Marco-Crespo (2018)	Qualitative	Pre and post	Youth leadership	
Mosavel (2018)	Mixed methods	Case study	Communication skills	
			Identifying community assets	
			Organizational skills	
Prati (2020)	Quantitative	Quasi-experimental	Institutional trust	**Partial $\eta2$ = .13, n = 35**
			Political alienation	Partial $\eta2$ = .05, n = 35
			Social well-being	**Partial $\eta2$ = .08, n = 35**
Sprague Martinez (2020)	Qualitative	Pre and post; Case study	Skills development and knowledge	
Stoddard (2020)	Mixed methods	Pre and post	Adults as resources	d = -.02; p = .91, n = 43
			School bonding	d = .15; p = .49, n = 43
			School engagement	d = .03; p = .86, n = 43
			Social support	d = -.04; p = .79, n = 43
Tang Yan (2022)	Qualitative	Case study	Critical consciousness	
Tintiangco-Cubales (2016)	Qualitative	Grounded theory; Case study	Critical consciousness	
Voight & King-White (2021)	Qualitative	Case study	Advocacy skills	
			Analyzing evidence and considering multiple perspectives	
			Communication and self-confidence	
			Ethical decision-making and social responsibility	
			Leadership	
			Peer and student–adult relationships, sense of belonging, collaboration, and cooperation	
Warren (2018)	Qualitative	Phenomenology	Building relationships	

Category	Author (year)	Method	Design	Construct	Result
	Zimmerman (2018)	Quantitative	Quasi-experimental; Pre and post	Responsible decision making	**Estimate = 0.57, p < .001, n = 249**
				Adult mentorship	
				Adult resources	
				Resource mobilization	
Intrapersonal Empowerment	Abraczinskas (2020)	Mixed methods	Quasi-Experimental; Pre and post	Perceived control	**YPAR only: t = .25, p = .81, n = 20** **YPAR+PA: t = 2.33, p = .03, n = 43**
				Motivation to influence	YPAR only: t = .27, p = .79, n = 20 YPAR+PA: t = .52, p = .61, n = 43
	Anyon (2018)	Mixed methods	Pre and post	Youth voice	
	Bender (2017)	Mixed methods	Pre and post	Forging a common social identity	
				Identifying as change agents	
				Personal well-being	t = −0.85, p = 0.42, n = 22
				Resilience	**t = −2.26, p = 0.054, n = 22**
				Self-efficacy	t = −1.28, p = 0.236, n = 22
				Self-esteem	t = −0.85, p = 0.42, n = 22
	Bertrand (2018)	Qualitative	Ethnography	Students repositioning themselves with adults and in schools	
	Boni (2020)	Qualitative	Case study	Capability for voice	
	Fortin (2022)	Qualitative	Case study	Influence meaningful change	
				Self-worth, self-esteem, and self-efficacy	
	Halliday (2019)	Mixed methods	Case study; Quasi-Experimental	Autonomy, empowerment, agency	
				Confidence	
				Control/had a say in school affairs	
				Self-efficacy	
	Koudelka (2021)	Mixed methods	Case study	Agency	

	Study	Method	Design	Concept	Statistics
	Liegghio (2020)	Qualitative	Case study	Feeling valued and valuable	
	Maker Castro (2021)	Qualitative	Ethnography; Grounded theory	Individual growth - confidence, curiosity, competence, civic mindedness	
	Nation (2019)	Qualitative	Ethnography	Identity/role as "maker"	
	Prati (2020)	Quantitative	Quasi-experimental	Identification as European	Partial $\eta 2 = .01$, n = 35
	Sprague Martinez (2020)	Qualitative	Pre and post; Case study	Empowerment	
	Stoddard (2020)	Mixed methods	Pre and post	Civic efficacy	$d = -.12; p = .42$, n = 43
				Leadership efficacy	**$d = 0.42; p = .02$, n = 43**
				Self-esteem	$d = -.10; p =.56$, n = 43
				Sense of control over their lives and potential problems	**$d = .43; p = .02$, n = 43**
	Tintiangco-Cubales (2016)	Qualitative	Grounded theory; Case study	Transformative agency	
	Voight & King-White (2021)	Qualitative	Case study	Communication and self-confidence	
	Warren (2018)	Qualitative	Phenomenology	Agency	
				Confidence	
				Purpose	
	Wood (2021)	Qualitative	Case study	Agency	
				Hopeful and sense of purpose	
Behavioral Empowerment	Abraczinskas (2020)	Mixed methods	Quasi-Experimental; Pre and post	Participatory behavior	**YPAR only: t =.71, p = .49, n = 30 YPAR+PA: t = 3.19, p = .005, n = 43**
	Aldana (2021)	Qualitative	Case Study	Collective action: disrupting segregation with intergroup advocacy	

			Community embeddedness: supporting youth civic development	
Bender (2017)	Mixed methods	Pre and post	Civic engagement	t = 0.17, p = 0.87, n = 22
Fortin (2022)	Qualitative	Case study	Power sharing Working in groups Public and civic engagement	
Halliday (2019)	Mixed methods	Case study; Quasi-Experimental	Engagement	
Koudelka (2021)	Mixed methods	Case study	Civic engagement	
Prati (2020)	Quantitative	Quasi-experimental	Civic and political participation	Partial η^2 = .05, n = 35
Stoddard (2020)	Mixed methods	Pre and post	Leadership behavior	d = .07; p = .70, n = 43
Tang Yan (2022)	Qualitative	Case study	Collective action and change	
Tintiangco-Cubales (2016)	Qualitative	Grounded theory; Case study	Community bond through collective action	
Voight & Velez (2018)	Quantitative	Case study; Quasi-experimental	School engagement - attendance rates	Effect Size = 0.18, p < .01, n = 153
Wood (2021)	Qualitative	Case study	Leadership for action	
Zimmerman (2018)	Quantitative	Quasi-experimental; Pre and post	Community engagement	
			Leadership behavior	
			Prosocial behavior	**Estimate = 0.55, p < .001, n = 249**
			School engagement	

Gray indicates that this information was missing.
Bold indicates statistical significance

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Quantitative Youth Empowerment Outcomes

Although a majority of studies were qualitative, there were eleven studies that reported quantitative outcome measures. Six studies reported statistically significant findings, three studies reported effect sizes, and five studies did not report any statistically significant findings for their outcome measures. Here I describe the study designs and reported statistical significance and effect sizes, as shown in Table 4.

Three studies reported statistically significant findings and did not report effect sizes. Using a pre- and post- two group design with no control group, Abraczinskas (2020) implemented YPAR in the context of an afterschool program, comparing YPAR alone (*n*=30) with a combined YPAR/Physical Activity (PA) intervention (*n*=43). Interestingly, the study found relatively robust effects for the combined program but no significant effects for YPAR only: sociopolitical skills (YPAR+PA: t = 3.33, p = .003), participatory behavior (YPAR+PA: t = .3.19, p = .005), and perceived control (YPAR+PA: t = 2.33, p = .03); there were no significant improvements in motivation to influence (refer to Table 4). Further, Bender (2017) assessed outcomes associated with homeless youth participating in Asking for Change, a Photovoice intervention, using a pre- and post-design (*N*=22). There were significant improvements in social connectedness (t = −4.47, p = 0.002) and resilience (t = −2.26, p = 0.054). Other reported outcome measures that were not significant include civic engagement, self-efficacy, self-esteem, and personal well-being (refer to Table 4). Zimmerman (2018) utilized a quasi-experimental design and randomly assigned youth participants to the Youth Empowerment Solutions (YES) program (*n*=249) or usual after-school programing (control) (*n*=118). Using a pre- and post-test design, the author reported estimates for the indirect effects through an adjusted model which indicated that psychological empowerment does mediate the relationship between YES activities and prosocial behavior (Estimate=0.55, p < .001) and responsible decision making (Estimate=0.57, p < .001) at the end of the program. There were also outcome measures that were not significant including adult mentorship, adult resources, resource mobilization, community engagement, school engagement, and leadership behavior.

There are three studies that reported effect sizes. Stoddard (2020) implemented Youth Empowerment Solutions for Positive Futures (YES-PF), a 5-week summer enrichment program, as an intervention for students who exhibit early warning signs for school dropout. Employing a pre- and post-design (*N*=43), the study reported clinical significance by the t value and confidence intervals for t-tests, and by Cohen's d effect size values (0.20 = small, 0.50 = medium, 0.80 = large) (Cohen, 1988). The author found that youth post-intervention had higher levels of leadership efficacy (Cohen's d = 0.42, p<.05) and a greater sense of control over their lives and potential problems (Cohen's d = 0.43, p<.01). There were also outcome measures that were not significant including self-esteem, civic efficacy, adults as resources, leadership behavior, school bonding, school engagement, and social support (refer to Table 4). Using a quasi-experimental design, Prati (2020) evaluated the impact of YPAR in a high school setting (*N*=35). Four classes that were similar in terms of age, gender, number of students, behavioral problems, and overall performance were selected for the intervention. The author reported partial eta squared, a measure of effect size (0.01 = small, 0.06 = medium, and 0.14 = large) (Cohen, 1988). The study reported: identification as European (partial η2 = .01), civic and political participation (partial η2 = .05), political alienation (partial η2 = .05), institutional trust (partial η2 = .13), and social well-being (partial η2 = .08) for the intervention group.

Lastly, Voight & Velez (2018) employed a quasi-experimental design to examine the effects of a school-based YPAR program on the education outcomes of participating high school students. A propensity score matching approach compared the school engagement (attendance rates) of students who voluntarily enrolled in the program (*N*=153) to a control group of non-participating peers (*N*=6,187). Students who were enrolled in the year-long YPAR elective course were considered to be in the YPAR treatment group. Average treatment effect results were presented both in terms of unadjusted measurement units and in terms of effect sizes. Effect size for multiple group effectiveness studies was reported as Hedges's g, the difference between the mean outcome for the intervention group and the mean outcome for the comparison group divided by the pooled within-group standard deviation of the outcome measure (0.2 = small, 0.5 = medium, 0.8 = large) (What Works Clearinghouse, 2014). The study found that the YPAR program significantly improved students' attendance rates (ES = 0.18, $p < .01$).

Discussion

The present study aimed to contribute a unique, theoretically-driven analysis of youth empowerment outcomes with respect to the intrapersonal, interactional, and behavioral components of psychological empowerment. Reviewing the literature and reported outcome measures with this psychological empowerment lens allowed us to further understand the specific dimensions of empowerment that youth are experiencing compared to a broad categorization of empowerment like in prior literature reviews. Across the twenty-six included studies, the most common youth empowerment outcomes associated with participation in YPAR were those related to the interactional component, followed by the intrapersonal component, and the behavioral component. The most frequently reported interactional youth empowerment outcomes were connected to skill development such as advocacy, communication, organizational, research, and sociopolitical skills. The most commonly reported intrapersonal youth empowerment outcomes were related to agency and confidence. Lastly, behavioral youth empowerment outcomes of civic engagement, participatory behavior, and collective action were reported; however, they were not as frequently measured and discussed in the YPAR literature. This fine-grained analysis of empowerment outcomes is a novel contribution to the evidence base of the YPAR field as an empowering process for young people.

Additionally, this systematic review aimed to update the state of the current YPAR literature and provide initial insights about the study methodology and YPAR project characteristics associated with youth empowerment outcomes. This study extends prior reviews by including international studies published between 2015-2022. A majority of the studies included in this review were published since 2020, suggesting the continued emergent growth of the YPAR literature. The selected YPAR articles primarily utilized qualitative methods, followed by mixed methods, and a few utilized quantitative methods. This state of the literature is similar to what was reported in prior reviews (Jacquez, Vaughn, & Wagner, 2013; Shamrova & Cummings, 2017; Anyon et al., 2018). The most common study designs included case studies, pre- and post-studies, and quasi-experimental studies. Of the eleven studies that reported quantitative measures, six studies reported statistically significant findings, three studies reported effect sizes, and five studies did not report any statistically significant findings for their outcome measures.. The studies that reported significant effect size of quantitative outcomes utilized quasi-experimental and pre- and post-designs.

The current study provides a snapshot of the YPAR project topics and relevant issues for youth (e.g. race/racism, drug use, environmentalism, bullying, food environment, LGBTQ discrimination, mental health). The majority of YPAR projects were classroom-based during the school day and in community centers/organizations. Additionally, in the majority of projects youth received YPAR training and utilized photos, interviews and surveys as research methods. Lastly, across the YPAR studies, youth inquiry and participation varied across the stages of research with the most youth participation in data collection, analysis and interpretation of data, and dissemination of findings to stakeholders, and the least involvement in relationship building between youth and adults, problem identification, and choice of research design and methods. This systematic review suggests that YPAR can be a promising approach within educational and community settings to youth engagement in research and to promote youth psychological empowerment. This will be of interest to key stakeholders including school administrators, teachers, and mental health professionals given the importance of theoretical insights and recommendations into the use of YPAR as an approach for positive youth empowerment outcomes in community and school settings.

Future Directions and Implications

Design

In this review, the most common study designs were case studies and pre- and post-studies. There were limited studies that used ethnography, grounded theory, phenomenology, quasi-experimental or randomized trials designs. Further exploration of YPAR and youth empowerment could include evaluating YPAR programs by involving a comparison group of youth who are not participating in the program. Such research could potentially provide practitioners and policymakers with evidence of the causal impact of YPAR on youth development.

We propose multiple reasons for why there is a small literature utilizing experimental and quasi-experimental designs. While we acknowledge that many types of interventions in school settings are highly dynamic, there are unique characteristics of YPAR that differ from traditional school interventions. First, YPAR is a research approach and is not an established intervention. Larger school-based interventions or prevention programs that can be scaled at the school-, county-, or state-level likely have more mandates and funding, which allows for stronger and higher inference evaluation designs. Another characteristic of YPAR is that reported outcomes can differ across domains (e.g. academic, emotional, political, social) and so there are not established outcomes for reporting, which presents challenges for identifying funders when they all have different priorities.

Additionally, a majority of the YPAR literature is focused on YPAR as an approach for youth-inquiry in research. During the screening process of this systematic review, the main reason for exclusion was that studies were describing youth-led research projects and were not reporting on the impact of the YPAR research process. There are also epistemological explanations for why experimental designs are not common in the YPAR literature. In certain subfields of participatory action research, there is value and emphasis placed on YPAR as inquiry-based, participatory, and transformative for the young people involved in it. This approach is emancipatory in this way, and is therefore not aligned with a positivist or a traditional frame around generation of evidence through experimental design.

Measurement

Studies reporting empowerment-related outcomes of YPAR primarily drew on qualitative methodologies to assess youth outcomes; relatively few studies used quantitative (12%) or mixed methods (31%). Importantly, the state of the current literature makes it difficult to draw any firm conclusions regarding patterns of outcomes. We recognize that the focus on qualitative methods is a good fit for studying the impact of YPAR in the context of YPAR projects that involve small groups of youth and would not enable reliable estimation of quantitative effect sizes. Qualitative methods also offer strengths with respect to identifying themes related to the dynamic and nuanced processes of empowerment at the individual and environmental levels. More discussion of how authors analyze their qualitative data would strengthen the trustworthiness of the findings in the YPAR field.

Although there were eleven studies that reported quantitative outcome measures, five studies did not report any statistically significant findings and six studies did report statistical significance, of which, only three studies reported effect sizes. In reporting and interpreting studies, both the substantive significance (effect size) and statistical significance (p value) are essential results to be reported (Sullivan & Feinn, 2012). Reporting only the statistical significance (p value) for an analysis is not adequate to fully interpret the results because significance by itself does not predict effect size. Unlike significance tests, effect size is independent of sample size. It is important to acknowledge that the sample sizes of the quantitative and mixed methods studies included in this review are generally very small. The small sample sizes in these studies are not sufficiently powered to detect effect if there is one, which can create a reporting bias. Future quantitative studies should determine what sample size will be sufficient to ensure (to a particular degree of certainty) that the study has acceptable power to detect effect.

In their 2013 review, Jacquez, Vaughn, & Wagner had noted that, "although researchers often remark on the empowerment their youth partners experience through the research process, measures of these outcome variables are rare" (p. 186). Future research should include more complete reporting of study methods and outcome measures to enable researchers to make meaningful comparisons across YPAR projects and draw conclusions about project impacts. While the quantitative measurement of nuanced empowerment outcomes is no doubt challenging, there have been multiple efforts over the past two decades to develop measures of empowerment appropriate to the assessment of YPAR effects (Ozer & Schotland, 2011). Since the previous literature reviews (Anyon et al., 2018; Shmrova & Cummings, 2017), advances have been made to use established quantitative measures for analyzing youth empowerment outcomes. In this review, we found three studies that used published quantitative measures of distinctive dimensions of empowerment, which does enable some cross-comparison of outcomes (Abraczinskas, 2020; Stoddard, 2020; Zimmerman, 2018).

Consistent Reporting

A majority of the studies included in this review were published since 2020, suggesting the continued emergent growth of the YPAR literature. However, the large amount of missing data in our review also suggests that there is a need to begin establishing more consistency in reporting guidelines for the way YPAR studies are presented and published. For example, future publications would contribute to the YPAR field by explicitly reporting on key YPAR principles

and processes followed in their projects, such as power sharing between youth researchers and adult facilitators in the research process.

I argue that clarifying and describing the forms and levels of youth inquiry and youth participation as collaborators in the research methodological process is imperative to building a stronger YPAR literature. In this systematic review, we found that youth inquiry and level of participation in the research process varied, and often youth were not fully integrated into all aspects of the research. The majority of studies engaged youth in latter stages of research (collecting data, analyzing and interpreting data, and disseminating findings), which may be an important component of YPAR projects in empowering youth participants. However, few studies reported youth involvement in the earlier stages of research (relationship building, identifying the problem, choosing and research design and methods). More consistent reporting of youth involvement could enable future research to consider how involving youth in these earlier stages of the research process relates to youth empowerment outcomes.

Further, because a key process of YPAR is that it is potentially transformative for youth, meaning it changes knowledge and practices through social action, it is important to describe the method of social action and/or advocacy used by the youth researchers. This review reported that a majority of the YPAR studies used an education and awareness approach, involving the dissemination of a presentation, report, or exhibit to educate community/stakeholder groups. Taking social action is likely to be an important component of YPAR projects in empowering youth participants. A large gap in the current literature is that authors report the social action by youth, but then do not report the outcomes that result from the social actions (eg. policy development, program development). The last key process of YPAR to include in reporting is around youth training in research and advocacy methods and adult training to facilitate YPAR programs. YPAR programs aiming to increase youth empowerment may intentionally build in time and space for youth training in the beginning of the project. It would strengthen the literature to have reporting on training, and it would be helpful to describe in detail what the training entailed so that it can be replicated by those wanting to implement their own YPAR projects. Additionally, in this review, only half of studies reported that adult facilitators received YPAR training. This offers implications for future YPAR projects to include adult training and to include in more consistent reporting.

Other missing information in the papers that undermined our analysis of youth empowerment outcomes were the demographics of youth participants. Considering that YPAR aims to increase the power of marginalized groups by strengthening youth voice in identifying issues relevant to them (Minkler & Wallerstein, 2003), future studies should report demographic information of youth participants (e.g. self-identified race, sexuality, age, and socioeconomic status) to the extent it does not risk harm to young people.

Study Limitations

There are limitations related to the search criteria used for inclusion and exclusion of studies in the review. The search included only studies published in the English language, which may exclude literature publishing on international YPAR projects and result in a gap in our understanding of how YPAR is being implemented to address different issues relevant to youth in unique cultures and settings. Additionally, this review included peer-reviewed empirical studies and excluded any relevant gray literature, book chapters, commentaries, and non-peer reviewed sources, such as community presentations and organization evaluation reports or

websites. The decision was made to limit the review to peer-reviewed publications of empirical studies (using any methods) to identify the strongest body of empirical research. The publication of YPAR findings conducted in community or school settings in academic journals is limited by institutional support, including funding, access to institutional review, and lack of resources and time in assessing YPAR projects. It is important to acknowledge that engaging youth in research can be done successfully outside of academic researchers partnering with community-based organizations and schools, and that the findings of YPAR projects can be disseminated in various forms that are not academic peer-review literature. There is also potential publication bias in reporting positive youth outcomes associated with participation in YPAR, although we certainly found multiple papers that reported no significant findings. In general, positive youth outcomes are more commonly reported than negative youth outcomes and experiences. Possible negative outcomes need additional attention and investigation in order to establish YPAR as an ethical epistemological paradigm.

The YPAR or "participatory action research" terminology is not consistently operationalized in the numerous disciplines represented in the YPAR field. As discussed in previous YPAR literature reviews (Anyon et al., 2018; Jacquez, Vaughn, & Wagner, 2013; Shamrova & Cummings, 2017), youth involvement in research can be described and named in different ways depending on the project and publication from field to field. While the majority of the articles in this review described the research as YPAR, CBPR, or Photovoice, there may be studies that were not included and analyzed due to the ways authors name or describe their work. Consistent either the core principles and definition of YPAR as youth-led research, this systematic review included studies per our "youth inquiry" criterion based on the stages of research in which youth were actively involved: our inclusion criteria required that youth were involved not only in collecting data—but also played a role in either data analysis/interpretation phase or the dissemination of findings phase. The justification for this criteria is that it captures a key process to YPAR that involves youth collaboration and power sharing between youth and adults *throughout* the research process. It is possible that our approach inadvertently excluded studies that actually did partner with youth in multiple phases of research but did not describe the youth roles clearly enough for the reviewers to interpret it as youth inquiry. We acknowledge that the diversity and breadth of youth inquiry extends beyond the scope of this review focused on YPAR.

Study Strengths

This study is the first systematic review to report an in-depth analysis of how youth empowerment outcomes are associated with participation in YPAR. This theoretically-driven approach to conceptualizing the youth empowerment outcomes represents a key strength of this study because it has not been done in prior reviews. We used a top-down approach to engage in a detailed and close review of the reported outcomes. We conducted a close review of the qualitative, quantitative, and mixed method studies and how the direct verbiage describing the youth outcome was reported. For the qualitative data, this included the specific themes reported in the results, and for the quantitative data, this included the specific measures used. Prior systematic reviews only reported the broad categories of youth outcomes, and not the specific findings from the studies. This reporting of youth outcomes differs from the previous YPAR systematic reviews by focusing on the components of psychological empowerment. This conceptualization and analysis offers a unique contribution to the YPAR literature to understand

the empowerment processes that can potentially occur when participating in YPAR and the resulting youth outcomes.

This review extends previous YPAR systematic reviews reporting youth outcomes (Anyon et al., 2018; Jacquez, Vaughn, & Wagner, 2013; Shamrova & Cummings, 2017) by adding more refined inclusion criteria that the studies needed to describe how they generated and analyzed evidence for the youth outcomes reported. We believe that this adds value to the field by identifying and analyzing the strongest body of evidence, noting that we were intentionally highly inclusive of the forms of qualitative and quantitative evidence we included in our review.

In consideration of the inherently complex and contextualized nature of youth inquiry work, an additional strength of this systematic review is a more strict interpretation of youth inquiry in the research process compared to prior literature reviews. Although our initial search strategy resulted in almost 600 full-text article reviews, the majority were excluded for not including youth inquiry, aligned with core principles and definitions of YPAR. There were many studies that described their research as participatory action research, and yet were excluded from the review because, in close review, we found that youth were not involved in roles beyond being data collectors. This strengthens our review of the literature because it is aligned with key YPAR processes that involve youth collaboration and power sharing between youth and adults in the research process.

Reviewing the reported outcome measures with respect to the intrapersonal, interactional, and behavioral components of psychological empowerment can help us further understand the specific dimensions of empowerment that youth participating in YPAR are experiencing. Importantly, the state of the current literature makes it difficult to draw any firm conclusions regarding patterns of outcomes. Future directions of the YPAR literature can strengthen the evidence base and trustworthiness of findings through a greater variety of study designs, systematic qualitative and quantitative methods for measures of youth outcomes, and improved reporting of YPAR project characteristics and key processes.

Paper Two
A Systematic Review of Youth Participatory Action Research and Transformative Social and Emotional Well-being

Introduction

Youth Participatory Action Research

Community-Based Participatory Research (CBPR) is a term used in public health to refer to participatory research approaches that engage community members and academic researchers as equitable partners in each step of the research process to address issues that community members want to change (Israel et al., 1998). The knowledge generated by these community-academic partnerships members is thus intended to be culturally relevant, action-oriented, and connected to community members' lived experiences (Wallerstein & Duran, 2010).

Youth-led Participatory Action Research (YPAR) is a form of CBPR that engages youth as researchers in identifying issues relevant to their lives, conducting research, and advocating for change to address issues (Rodríguez & Brown, 2009; Wallerstein et al., 2017). Rather than a research *method*, YPAR is an approach that challenges assumptions about who holds and creates knowledge. Youth are engaged as experts who generate knowledge and data to address issues and change inequitable systems, policies, and practices (Ozer et al., 2020). By supporting youth in having a meaningful voice in identifying and changing issues relevant to them, YPAR approaches aim to increase the power of marginalized groups in improving problems through iterative cycles of inquiry and action (Minkler & Wallerstein, 2003). In the literature, YPAR projects have addressed a range of equity issues in education and health such as school discipline policies, dating violence, bullying, and access to healthy food and physical activity opportunities (Ozer & Piatt, 2018).

From the outset, YPAR requires building trusting relationships and effective communication between the youth researchers and adult facilitators (Wallerstein et al., 2017). YPAR involves iterative phases, beginning with identifying a problem or question they want to address, and that they genuinely care about and want to change. Next, youth select their research design and methods with training to learn which data sources and measurement tools will help answer the research question, followed by data analysis and interpretation. Especially in the final phase, youth researchers identify specific actions that they and adults can take to address the problem, and report their findings to relevant stakeholders to propose solutions.

Rodriguez and Brown (2009) identify three key principles for YPAR: it is inquiry-based and topics selected are relevant to youths' lived experiences and concerns; it is participatory, which means youth are collaborators across research phases and methods; and it is transformative, which means the purpose of YPAR is to change knowledge and practices through social action to improve the lives of youth and their communities. Consistent with these principles, Ozer and Douglas (2015) identified key research processes in YPAR: there is intentional power sharing between youth researchers and adult facilitators over key decisions in the research process; the research and action phases are iterative; and youth are trained in research and advocacy methods, thinking about how to create social change, and building alliances with stakeholders. Through these key processes, YPAR can positively improve settings that influence youth development and health.

Thus, YPAR engages youth in analyzing and working to change the social, economic, and political conditions that shape their schools and communities, which provides developmental opportunities for adolescents, such as increased motivation for goals, enhanced awareness of self-identity, stronger sense of self-identity, passions about specific causes, self-regulation skills increasing, increased independence and autonomy, increased social rights and responsibilities, and identity development in political and religious domains (Ballonoff Suleiman et al., 2021). There are a range of individual differences in adolescent development, which is influenced by biological, economic, cultural, political, and social factors. During adolescence (10-19 years old), there is important awareness of social roles and relationships, as well as of self-identity (Crone & Dahl, 2012). As early adolescents navigate the hormonal and neurodevelopmental transition at puberty, they are seeking acceptance, sense of belonging, relationships with peers and adults, and feelings of autonomy (Ballonoff Suleiman et al., 2021). Characteristics of settings that support positive adolescent development include physical and emotional safety, positive social norms, and opportunities to build new schools. Engaging youth in participatory research can help address gaps between adolescent developmental needs and traditional school environments, such as increasing self-efficacy, establishing a sense of purpose, and creating supportive social relationships with peers and trusted adults (Ozer, Ritterman, & Wanis, 2010). In a recent brief, Ozer, Shapiro, and Duarte (2021) suggested youth empowerment approaches, such as YPAR, may improve youth social and emotional well-being by supporting youth in addressing inequities that affect their well-being. YPAR may facilitate adolescents' emerging agency by engaging their unique expertise, skills, and perspective, as well as, promoting their critical analysis of social issues impacting them and their communities (Ozer, Shapiro, & Duarte, 2021).

Transformative Social and Emotional Learning Framing

The Collaborative for Academic, Social, and Emotional Learning (CASEL) defines social and emotional learning (SEL) as "the process through which all young people and adults acquire and apply the knowledge, skills, and attitudes to develop healthy identities, manage emotions and achieve personal and collective goals, feel and show empathy for others, establish and maintain supportive relationships, and make responsible and caring decisions" (California Department of Education, 2021). The CASEL framework for systemic SEL applies an ecological approach that recognizes families, schools, and communities are all part of broader systems that shape learning, development, and experiences (CASEL, 2022). Across these systems, inequities based on race, ethnicity, class, gender identity, sexual orientation, and other factors influence SEL. Unfortunately, some youth do not experience opportunities and environments that maximize their learning potential. In this way, systemic SEL advances a focus on educational equity by supporting youth and seeking to close gaps in educational opportunities and outcomes (CASEL, 2022). Systemic SEL promotes authentic school-family-community partnerships, as well as, trusting and collaborative relationships between students and adults (CASEL, 2022). This framing supports many short- and long-term youth outcomes such as improved attitudes about self and others, positive social behaviors and relationships, less emotional stress, academic success, and engaged citizenship (CASEL, 2022).

The CASEL framework for systemic SEL supports the strengthening of knowledge, skills, and attitudes across five interrelated core social and emotional competencies that support learning and development: 1) self-awareness, or the ability to understand one's own emotions,

thoughts, and values and how they influence behavior; 2) self-management, or the ability to manage one's emotions, thoughts, and behaviors effectively in different situations; 3) social awareness, or the ability to understand the perspectives of and empathize with others, including those from diverse backgrounds, cultures, and contexts; 4) relationship skills, or the ability to establish and maintain healthy and supportive relationships and to effectively navigate settings with diverse individuals and groups; and 5) responsible decision-making, or the ability to make caring and constructive choices about personal behavior and social interactions across diverse situations (CASEL, 2022). The CASEL framework helps establish developmentally-appropriate learning standards for what youth should know and be able to do for academic success, school and civic engagement, and health and well-being.

In recent years, Jagers, Rivas-Drake, and Williams (2019) introduced the concept of transformative social and emotional learning (tSEL) to mitigate educational, social, and economic inequities. They propose that in order for SEL to adequately serve and promote positive developmental outcomes for youth from underrepresented communities, it requires youth to have the knowledge and skills required for critical examination of individual and contextual factors that contribute to inequities, and collaborative action to address root causes (Jagers, Rivas-Drake, & Williams, 2019). In this way, tSEL is a part of the civic development process, in which youth can develop social and emotional skills needed for school and community engagement to create more equitable educational environments.

tSEL applies an equity lens to the CASEL framework to elaborate five focal constructs: identity, agency, collaborative problem solving, belonging, and curiosity. Identity is focal among self-awareness competencies and refers to how an individual views themselves as part of the world around them (CASEL, 2022). In our society, determinants of social status are defining aspects of identity, such as culture, race/ethnicity, socioeconomic status, and gender. Next, agency is focal among self-management competencies and refers to feeling empowered to make choices and produce positive change through purposeful action. Specifically, political agency is the belief in one's own knowledge and skills to act socially and politically. This is a component of sociopolitical development in which people take community and political action when they believe that their voice and action can make a difference (Jagers, Rivas-Drake, & Williams, 2019). Collaborative problem solving is focal among relationship skills competencies and refers to building shared understanding with others and working together to solve a problem by pooling knowledge, skills, and efforts to reach solutions. Further, belonging is focal among social awareness competencies and involves experiences of acceptance, respect, connectedness, and inclusion within a group or community (Jagers et al., 2021). A transformative form of belonging involves relationship-building, people authentically partnering in or leading the process to engage in co-creating an equitable community (Jagers, Rivas-Drake, & Williams, 2019). Lastly, curiosity is focal among responsible decision-making competencies and leads to pursuing different perspectives and new experiences to generate knowledge about oneself in relation to others and the world. It contributes to the attention, engagement, learning, and informed decision making that sparks critical self and social analysis (Jagers et al., 2021).

Prior Systematic Reviews

Here, I provide an overview of the prior systematic reviews conducted in the literature relevant to YPAR, and consider the unique contributions of the present study in its focus on tSEL. There have been four systematic reviews of the YPAR literature that explore YPAR

methodologies, health, and other youth outcomes. An initial systematic review was conducted by Jacquez, Vaughn, and Wagner (2013) and reviewed children and adolescents in community-based participatory research. The authors included 56 studies that involved youth as partners on CBPR projects in the United States and included articles published between 1985 and 2012 (Jacquez, Vaughn, & Wagner, 2013). The most common issue areas of focus were health issues including, general health issues (n=5), obesity and/or diabetes (n=7), sexual health (n=6), physical activity (n=3), substance use (n=3), environmental health (n=2), and mental health (n=2) (Jacquez, Vaughn, & Wagner, 2013). In examining the roles and levels of participation of youth in CBPR, they found that often youth were not fully integrated into all aspects of the research. While Jacquez, Vaughn, and Wagner (2013) did not examine youth outcomes, Shamrova & Cummings (2017) subsequently carried out a review of methodology and participatory action research outcomes for youth participants, organizations, and communities, including 45 international studies published between 2009 and 2016. Youth outcomes reported include increases in social justice awareness, social and cognitive development, perceptions of youth as change agents, and stronger relationships with adults and the broader community (Shamrova & Cummings, 2017). One of the tSEL focal constructs, belonging, is described as "experiences of equal participation in problem identification and development of ways to address and implement social change" and "learn[ing] what it means to participate in community life and how to engage positively in creating change" (Shamrova & Cummings, 2017, p. 406). While none of the other tSEL focal constructs were explicitly named in the study findings, there are other youth outcomes described that are dimensions of tSEL but are not analyzed in this review with a tSEL framing (e.g., "becoming agents of change within their own community" is an outcome that is a capacity of the tSEL focal construct of agency). This research provided initial insights about the methodology, characteristics, and outcomes of the YPAR literature and suggested that although the degree of youth involvement can vary across studies, participation in YPAR programs may be associated with important developmental outcomes.

Further, Anyon et al. (2018) synthesized findings of the YPAR literature published between 1995 and 2015 in the U.S., including study methodology, youth outcomes, and YPAR principles and project characteristics. Across the 63 articles in the review, key findings included that the YPAR literature was predominantly comprised of qualitative studies, and that the most common outcomes associated with participation in YPAR were those related to agency and leadership (75%), followed by academic or career (56%), social (37%), interpersonal (35%), and cognitive (23%) outcomes. This systematic review suggested that YPAR may be a useful approach to promote skill development among young people. One of the eight deductively identified categories of youth outcomes was "agency/leadership" (self-determination, self-efficacy, confidence, civic engagement, citizenship, voice, empowerment, social responsibility, participatory behavior, identity, self-awareness). Two of the tSEL focal constructs, identity and agency, were coded together in this agency/leadership category. However, there were no specific outcomes reported in the systematic review results to get a clear understanding of how these separate tSEL focal constructs were represented in the literature. Additionally, Anyon et al. (2018) coded youth outcomes as "social" (connectedness, social support, community attachment, belonging). The tSEL focal construct of belonging is described by this "social" category, however, the other tSEL focal constructs are not. Interestingly, there was an "emotional" youth outcomes category (stress, symptomology, the ability to identify and express emotions, regulating emotions, anger management), and yet, the authors found that none of the studies included in the literature reported emotional outcomes based on their definition. Using

the same inclusion criteria, Kennedy et al. (2019) extended the review by reporting environmental outcomes in 36 studies of youth inquiry approaches in the United States. Environmental outcomes were organized into Bronfenbrenner's ecological framework and included changes to practitioners, policies, programs, research, and peer group norms (Bronfenbrenner, 1977). The authors found that youth inquiry approaches that utilized advocacy to create change, targeted decision-makers as the audience for the youth's work, and convened for a longer duration were more likely to report improved environmental outcomes.

Most recently, Nash (2023) conducted a systematic review of the YPAR literature published between 2015 and 2022. Twenty-six international studies were included and reported findings related to study methodology, YPAR principles and project characteristics, and youth empowerment outcomes. A majority of the studies included in this review were published since 2020 and utilized qualitative methods, suggesting the continued emergent growth of the YPAR literature. This review applies a theoretically-driven analysis of youth empowerment outcomes with respect to the intrapersonal, interactional, and behavioral components of psychological empowerment (Zimmerman,1995). This review provided greater understanding of the specific dimensions of empowerment that youth participating in YPAR experience compared to the broad categorization of empowerment described in prior literature reviews.

Current Study

The relative lack of attention to tSEL focal constructs in the previous systematic reviews underscore a gap in the literature regarding youth outcomes of YPAR participants, especially given the potential relevance of tSEL to the participatory research literature (Jagers, Rivas-Drake, & Williams, 2019; Ozer, Shapiro, & Duarte, 2021). These approaches intentionally position students as experts of their own lived experience and capable of working with peers and adults to leverage academic content and skills to devise and iteratively test ways to advance health and well-being. tSEL is currently an underutilized approach to effectively address issues such as power, privilege, prejudice, discrimination, and social justice (Jagers, Rivas-Drake, & Williams, 2019). Jagers, Rivas-Drake, and Williams (2019) proposed project-based learning and YPAR as approaches consistent with promotion of tSEL focal constructs. The implementation of YPAR has potential to support tSEL by 1) addressing systemic inequities and 2) focusing on the transformative focal constructs outlined above that SEL programs do not explicitly address (Jagers, Rivas-Drake, & Borowski, 2018; Jagers, 2016). Specifically, YPAR is useful in efforts to address racial and class-based equity concerns, and the approach engages students in collaborative problem solving around student-generated concerns.

The present study aims to contribute a unique, theoretically-driven analysis of tSEL outcomes with respect to the transformative focal constructs of identity, agency, belonging, collaborative problem solving, and curiosity. There has not been an empirical synthesis of YPAR studies that report explicitly about tSEL focal constructs. Applying this fine-grained analysis of tSEL outcomes will contribute to the evidence base of the YPAR and tSEL fields as complementary processes for promoting youth development outcomes. Identifying these outcomes can inform how schools target and develop school-based interventions, inform measurement, and evaluate program efficacy. Research questions guiding this systematic review include: *What are the characteristics of the studies and YPAR projects that report transformative social and emotional outcomes? What transformative social and emotional learning outcomes*

are associated with participation in YPAR? How can reported youth outcomes be analyzed by transformative social and emotional learning focal constructs?

Methods

As noted above, the theoretical framework that guides the conceptualization of tSEL outcomes in this systematic review is the CASEL framework and extended transformative focal constructs (CASEL, 2022). The present study follows the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines for the search and coding process. We focus on the literature published between December 2015 and June 2022, extending Anyon et al.'s (2018) systematic review of YPAR in the United States that included studies published through 2015. Working in collaboration with a key member of the Anyon et al. team, this systematic review replicates the initial phases of the methodology of the prior study to enable comparisons, as feasible.

Search and Sampling Strategy

Four databases were selected for their relevance to YPAR programming and searched: PubMed, ERIC, Social Service Abstracts, and PsychInfo. In order to identify relevant publications, search terms were entered using the Boolean operators AND/OR, and asterisks to truncate the search terms. The search criteria included terms associated with the study population (separated by OR): student, emerging adult, youth, high school, middle school, minor*, juvenile*, adolescent* and teen* AND search terms associated with intervention (separated by OR): community involvement, youth voice, student voice, youth organizing, student organizing, youth activism, student activism, youth empower*, youth leader*, youth civic, youth advoc*, student advoc*, youth decision-making, student decision-making, social change, participatory action research, youth engage*, youth advisory board, youth advisory council, youth action board, youth action council, youth community development, youth involvement, youth led, youth council, youth coalition, youth outreach, student council, youth adult partner*, youth commission AND search terms associated with study methods (separated by OR): evidence-based, effective*, treatment*, intervention*, outcome*, experimental stud*, quasi-experiment*, case stud*, case-control stud*, cross-sectional, cohort stud*, observational, promising practice*, randomized control trial*, interview*, qualitative, survey, focus group, pre-experiment*, and evaluation.

Eligibility Criteria

The eligibility criteria focuses on four key elements: 1) study characteristics (empirical studies, published in peer-reviewed journals, published in English); 2) population (at least 50% of program participants comprised youth 25 years or younger; for youth of ages 18 to 25 years, samples were excluded if they consisted only of undergraduate or graduate students); 3) intervention (inquiry-based program that involved youth in data collection, and at least one additional component of the research process, such as data analysis or dissemination of findings); 4) youth or environment outcomes (that the study reports on the experiences, outcomes, or impact of the program for the youth participants or their surrounding environment); and 5) systematic methods for data analysis of reported outcomes..

Study Selection

The systematic search process includes multiple phases, and was conducted by a research team consisting of one post-doctoral student, two doctoral students, two masters students, and two undergraduate students. All researchers discussed the eligibility criteria and were involved in searching, screening, and coding the studies. After conducting electronic searches using the databases and search terms described above, the first phase involved preliminary screening of the abstracts to determine whether they met the initial criteria. As shown in Figure 1, our search resulted in 2023 studies, of which 419 were removed as duplicates: 1604 abstracts were screened in total and 934 were removed for not meeting the eligibility criteria. In cases where insufficient information was provided in the abstract, the articles were retained and moved forward to the next phase. In the next phase, full-text articles were retrieved and further assessed for meeting the same initial screening criteria. There were 599 records excluded because the studies were: not empirical (n=48); not targeting youth as participants (n=63); not involving youth meeting more than once (n=37); not reporting youth outcomes for youth participants or their surrounding environment (n=68); described as service-learning (n=3); or were not youth inquiry-based (n= 343) (refer to Figure 1). Inclusion criteria for YPAR projects that were youth inquiry required that youth were involved in the data collection phase, and at least one additional component of the research process, such as data analysis or dissemination of findings.

Data Extraction Process

Phase 1. Adapt Codebook and Code Included Articles

We iteratively developed a detailed codebook for our analyses based on the principles of YPAR and the PRISMA guidelines, building on the systematic review of YPAR in the U.S. conducted by Anyon et al. (2018) (see Appendix B for a detailed list of codebook data items). Sections of the original codebook include study characteristics, YPAR principles, YPAR project characteristics, and youth outcomes associated with YPAR. We adapted the Anyon et al. (2018) codebook to include more differentiated information regarding the studies: (a) study characteristics (e.g., systematic analysis of qualitative or quantitative data); (b) YPAR project characteristics (e.g., training of youth researchers in YPAR research skills, training of adult facilitators, process evaluation, and identified facilitators and barriers to YPAR); and (c) youth outcomes. Youth outcomes were defined as any change or improvement in participants' growth or development as reported by the study authors. The type of growth experienced by participants was qualitatively recorded and categorized into deductively identified categories of youth outcomes: social (connectedness, social support, community attachment, belonging), emotional (stress, symptomology, the ability to identify and express emotions, regulating emotions, anger management), interpersonal (communication skills, assertiveness, empathy taking, active listening, conflict resolution, teamwork), cognitive (problem solving, decision making, and thought appraisal abilities), and/or academic/career (organization, time management, study skills, goal setting, public speaking, writing, planning). Our research team added to this by also reporting the direct language and quotes from the articles related to the specific youth outcomes for reference. For the qualitative data, this included the specific themes reported in the results, and for the quantitative data, this included the specific measures used.

All included articles were coded using Covidence, an online systematic review management software, to promote consistency in coding. First, two research team members used

the screening criteria and codebook on Covidence to code articles independently. Areas of disagreement were noted, and the research team members met to address discrepancies through consensus discussion. If researchers were unsure whether a study met any of the criteria, the article and the issue were discussed by the entire research team at the weekly meetings.

Phase 2. Identify Strongest Evidence for Outcomes

We added an inclusion criterion to identify studies that described how they analyzed their data (qualitative, quantitative, and/or mixed methods) for the youth outcomes reported in the study results in order to focus on the strongest and most trustworthy findings. For example, articles were excluded at this phase if the results did not report on youth outcomes, or if the authors discussed potential youth outcomes in the discussion section of the article, but did not report how they identified or analyzed those youth outcomes. We were highly inclusive in considering any form of data or evidence that was generated by the study authors, whether it was a qualitative theme or a standardized quantitative measure. Two research team members reviewed each article carefully to identify study design and methods, as well as any report of how the authors yielded evidence regarding youth outcomes. Consensus of the articles included was completed at this phase of the review.

Phase 3. Identify Transformative Social and Emotional Outcomes

In order to identify tSEL outcomes, the first author and another member of the research team re-analyzed the categorically coded youth outcomes and quotes to identify outcomes that were dimensions of tSEL focal constructs. This analysis applied a theoretically-driven conceptualization of tSEL by coding outcomes into the tSEL focal constructs of agency, belonging, collaborative problem solving, curiosity, and identity. tSEL outcomes reported as the identity focal construct relate to how an individual views themselves and how others view them as individuals and as part of the world around them. Youth outcomes for the agency focal construct relate to feeling empowered to make choices and produce positive change through purposeful action.. The belonging focal construct involves experiences of acceptance, respect, connectedness, and inclusion within a group or community. tSEL outcomes for this focal construct includes relationship-building, people authentically partnering in or leading the process to engage in co-creating an equitable community. tSEL outcomes reported as the collaborative problem solving focal construct relate to building shared understanding with others and working together to solve a problem by pooling knowledge, skills, and efforts to reach solutions. Lastly, curiosity leads to pursuing different perspectives and new experiences to generate knowledge about oneself in relation to others and the world. It contributes to attention, engagement, learning, and informed decision making that sparks critical self and social analysis. Two research team members completed coding of the outcomes at this phase of the review and met to address discrepancies through consensus discussion.
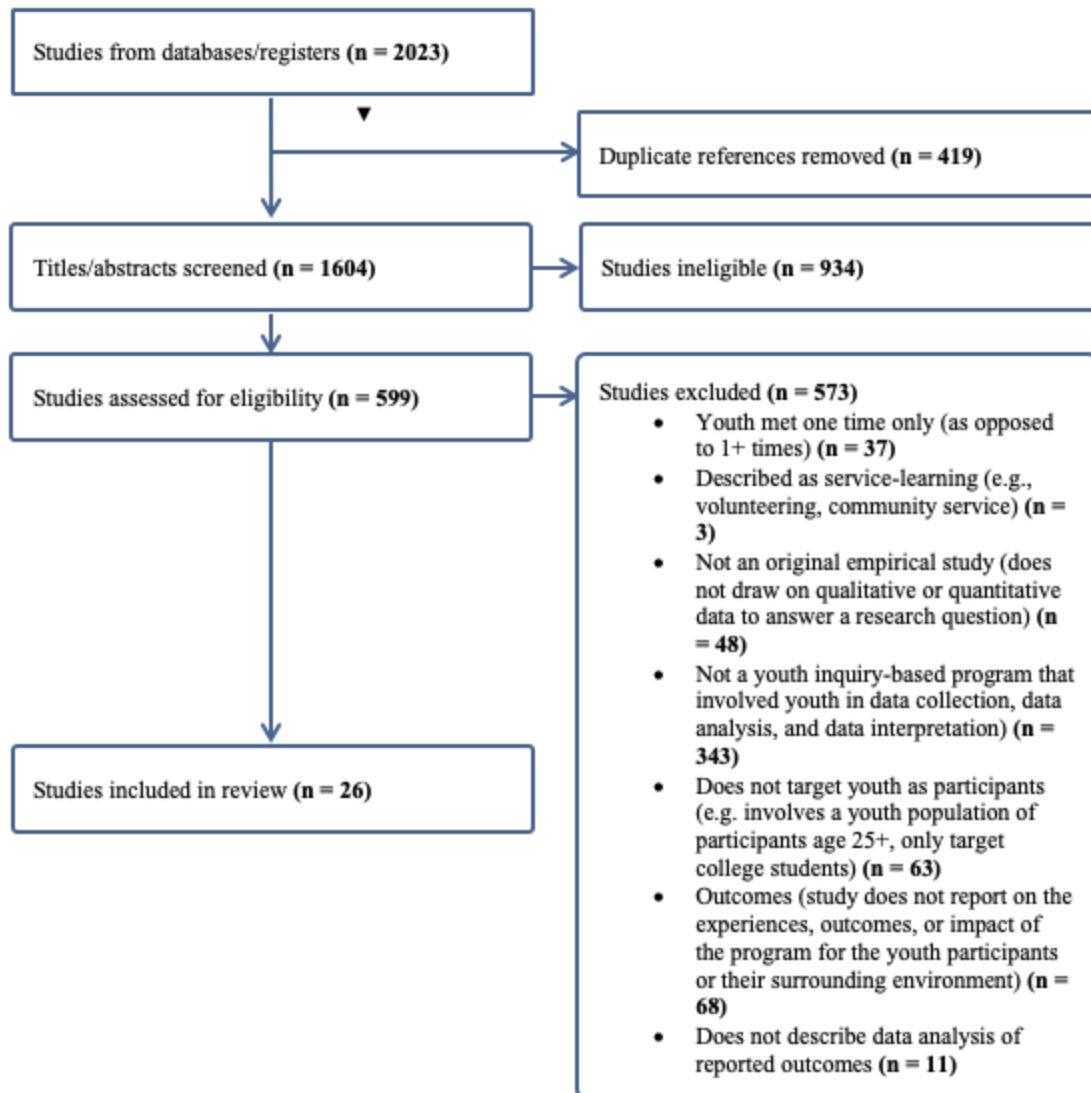
Figure 1. Identification, screening, and eligibility of the review sample.

Results

Literature Overview

Study Characteristics

A majority of the studies (*n*=15, 58%) included in this review were published since 2020, suggesting the continued emergent growth of the YPAR literature. Most of the articles (*n*=24, 92%) described their research as YPAR, CBPR, Photovoice or another variant of participatory research (e.g. participatory evaluation); the two articles that did not described the research as "critical making" (Nation, 2019) and "student voice" (Voight & King-White, 2021). Articles included in the review were published across journal types including education (*n*=11, 42%),

public health (*n*=5, 19%), psychology (*n*=4, 15%), and interdisciplinary (*n*=5, 19%). The following study characteristics are referenced in Table 1. The selected YPAR articles primarily utilized qualitative methods (*n*=15, 58%), followed by mixed methods (*n*=8, 31%), with relatively few using quantitative methods (*n*= 3, 12%). The most common study designs included case studies (*n*=15, 58%), pre- and post-studies (*n*=7, 27%), and quasi-experimental studies (*n*=5, 19%). Most studies used multiple forms of data to triangulate their findings, with interviews (*n*=17, 65%), archival/artifacts (*n*=14, 54%), observations (*n*=14, 54%), surveys (*n*=12, 46%), and photos or videos (*n*=11, 42%) being the most popular. Lastly, the studies drew on several sources of data, most commonly including, YPAR youth researchers (*n*=26, 100%) and program staff or facilitators (*n*=12, 46%).

Table 1. Study Characteristics Across Studies

Study Characteristic	n (%)
Methodology (N = 26)	
Qualitative	15 (58)
Quantitative	3 (12)
Mixed	8 (31)
Design (N = 26)	
Ethnography	3 (12)
Grounded theory	2 (8)
Phenomenology	1 (4)
Randomized trial	0 (0)
Quasi-experimental	5 (19)
Pre and post	7 (27)
Case study	15 (58)
Data type (N = 26)	
Administrative	3 (12)
Survey	12 (46)
Archival/artifacts	14 (54)
Observations (field notes)	14 (54)
Interviews	17 (65)
Focus group	2 (8)
Photos or video	11 (42)
Other (e.g., reflections, social network analysis)	1 (4)
Data Source (N = 26)	
YPAR youth researchers	26 (100)
Program staff or facilitators	12 (46)
Representative from partner organization	2 (8)
Community member	3 (12)
Parent/caregiver	3 (12)

YPAR Project Characteristics

The youth sample sizes reported across the YPAR programs range from six to 249 (refer to Table 3). Other characteristics of the study samples were provided less consistently. For example, only two studies (8%) provided data about how the participants identified themselves

in terms of their sexuality. Thirteen studies (50%) included information about the participants' socioeconomic status (of these, all 13 had low-income youth represented in the sample). Of the 24 studies (92%) that reported gender, 92% (*n*=22) included girls, 88% (*n*=21) included boys, and none reported whether youth identified as cisgender or transgender. The 20 studies that reported race or ethnicity mostly involved youth of color with 80% (*n*=16) involving Black youth and 55% (*n*=11) involving Latinx youth. It was less common for these programs to involve White (*n*=9, 45%), Asian (*n*=8, 40%), Native American (*n*=4, 20%), or Pacific Islander (*n*=2, 10%) participants.

The following YPAR project characteristics across studies are referenced in Tables 2 and 3. The most common YPAR project setting was classroom-based during the school day (*n*=10, 44%) and in community centers/organizations (*n*=6, 26%). In the thirteen studies that reported the frequency of YPAR project sessions, 10 (77%) met at least once a week. In the 22 studies that reported the duration of YPAR project, nine projects were shorter than six months (35%), nine projects were between six months and one year (35%), and four projects were longer than one year (15%). The majority of studies occurred in the United States (*n*=17, 65%), with the remainder occurring in other countries (*n*=9, 35%) including, Australia, Canada, Ecuador, Israel, Italy, Senegal, South Africa, Spain, and the United Kingdom. Across the 22 studies that reported topics of the YPAR projects, the most common was race/racism (*n*=4, 18%), followed by drug use (*n*=3, 14%), environmentalism (*n*=3, 14%), bullying (*n*=2, 9%), food environment (*n*=2, 9%), LGBTQ discrimination (*n*=2, 9%), mental health (*n*=2, 9%), physical activity (*n*=2, 9%), police interactions (*n*=2, 9%), and youth unemployment (*n*=2, 9%). The articles reported a variety of YPAR project data types, with the most common being photos or videos (*n*=13, 50%), interviews (*n*=13, 50%), and surveys (*n*=10, 40%). Twenty-one YPAR studies reported youth received YPAR training (81%), and fourteen YPAR studies reported adult training for facilitating YPAR (54%). Across the YPAR studies, youth inquiry and participation varied across the stages of research: relationship building between youth and adults (*n*=13, 50%), problem identification (*n*=19, 73%), choice of research design and methods (*n*=13, 50%), data collection (*n*=26, 100%), analysis and interpretation of data (*n*=25, 96%), and dissemination of findings to stakeholders (*n*=23, 89%) (refer to Table 1).

Twenty-three of the studies provided details about the method of social action used by the youth researchers. Of these, 87% (*n*=20) reported using an education and awareness approach, involving the dissemination of a presentation, report, or exhibit to educate community/stakeholder group; 44% (*n*=10), an advocacy approach, involving meeting with decision makers either at the school-, district-, organization- or city-level; 17% (*n*=4), an intervention/program design approach, creating or modifying an intervention or program design based on YPAR findings; and 17% (*n*=4), an organizing approach, coalition building or partnering with organizations or individuals to build community momentum around a specific problem/solution. Twenty-two of the studies provided details about the target audience for these social actions, which were mainly social networks: social networks, such as peers, family, siblings, neighbors, and community members (*n*=14, 64%); schools and community organizations, such as administration, principals, teachers, program staff, and facilitators (*n*=13, 59%); policy makers, such as government agencies, decision-making bodies at the state-, municipal-, or district-level (e.g. school board, city council) (*n*=11, 50%); and the general public (*n*=8, 36%).

Table 2. YPAR Project Characteristics Across Studies

YPAR Project Characteristic	n (%)
Country of YPAR Project (N = 26)	
USA	17 (65)
Outside of USA	9 (35)
YPAR Project Setting (N = 23, 3 missing)	
School (during school/classroom-based)	10 (44)
School (out-of-school time)	4 (17)
Community center/organization	6 (26)
Clinic (hospital or community-based health center)	1 (4)
Shelter	1 (4)
Other	1 (4)
Duration of YPAR Project (n = 22, 4 missing)	
Shorter than 6 months	9 (35)
Between 6 months and 1 year	9 (35)
Longer than 1 year	4 (15)
YPAR Project Data Type (N = 25, 1 missing)	
Administrative	2 (8)
Survey	10 (40)
Archival/artifacts Observations	3 (12)
Interviews	13 (52)
Focus group	3 (12)
Photos or video	13 (52)
Other (e.g., mapping, content analysis, forums)	5 (20)
Youth Receive YPAR Training (N = 26)	
Yes	21 (81)
No	5 (19)
Adult Facilitator Receive YPAR Training	
Yes	14 (54)
No	12 (46)

Table 3. YPAR Project Characteristics by Reference

Reference	Country of YPAR Project	YPAR Project Setting	YPAR Project Topic or Issue(s)	YPAR Project Data Type	Youth Sample Size	Age of Youth	Duration of YPAR Project	Frequency of YPAR sessions
Abraczinskas (2020)	USA	School (out-of-school time)	Physical activity curriculum	Photography/video	64	11-15 years	YPAR Only: 4 weeks YPAR + PA: 7 weeks	YPAR component: Weekly PA component 3x a week
Aldana (2021)	USA		Racial segregation	Observation; Interview; Photography/video	9	14 - 17 years	1 year	Weekly
Anyon (2018)	USA	Other	1) Police brutality, eco-mapping community resources, 2) Discrimination toward the LGBTQ community, 3) Self-care for women, 4) Urban gardens	Archival/artifact Observation Other: Mapping	33	11 - 17 years	6 months	Weekly
Bender (2017)	USA	Shelter	Youth homelessness	Photography/video	22	18 - 20 years	12 weeks for first cohort, 8 weeks for second cohort	Weekly
Bertrand (2018)	USA	School (out-of-school time)	Bullying related to race and LGBTQIA identities	Survey; Interview	15	7th - 8th grades	5 months	Weekly
Boni (2020)	Spain	Community center/organization	1) Youth opportunities, entrepreneurship, migration, 2) Legal instability, politics, education, conservatism,	Photos/video	11	16 - 24 years	1.5 months	

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Author (year)	Country	Setting	Topic	Method	N	Age	Duration	Frequency
			religion, segregation, social justice, 3) Participation, voluntarism, young people, monitors, free time					Weekly
Duke (2022)	USA	School (during school/classroom-based)	African American student perception of student/teacher relationships across charter schools	Interview	8	14 - 17 years	16 months	
Fortin (2022)	Senegal		Adolescent sexual and reproductive health and rights	Survey; Interview; Focus Group	12-20	18 - 21 years	8 months	
Halliday (2019)	Australia	School (during school/classroom-based)	Well-being during the school year	Interview; Focus Group	10	14 - 17 years		
Hayik (2021)	Israel	School (during school/classroom-based)	Environmentalism	Photos/video	82	10th - 12th grades		
Koudelka (2021)	USA	School (during school/classroom-based)	Bullying	Survey	10	9th grade	4 months	
Liegghio (2020)	Canada	Clinic (hospitals and community based mental health/health centers)	Stigma of mental illness among psychiatrized youth	Photos/video; Other: Content analysis	7	14 - 17 years	9 months	Weekly
Maker Castro (2021)	USA	School (during school/classroom-based)	Improve school climate for immigrant-origin students	Survey; Interview; Photos/video	20	14 - 18 years	14 weeks	Weekly

Author (Year)	Country	Setting	Topic	Data collection methods	N	Age	Duration	Frequency
Marco-Crespo (2018)	Ecuador	School (during school/classroom-based)	Evaluation of a Chagas disease prevention program	Archival/artifact; Interview; Photos/video; Other: Mural collage diagramming, participatory mapping	13	12 - 18 years	5 weeks	
Mosavel (2018)	USA	Community center/organization	Promoting healthy behaviors related to physical activity and food choices	Observation Interview Photos/video	13	16 - 19 years		
Nation (2019)	USA	Community center/organization	Latinx girls identifying best and worst qualities of their town	Survey Archival/artifact Other: Word cloud	7	12 - 15 years		Biweekly
Prati (2020)	Italy	School (during school/classroom-based)	1) Poverty, 2) Immigration, 3) Environmental issues, 4) Drug abuse	Survey; Observation; Interview	35	15 - 17 years	2 years	
Sprague Martinez (2020)	USA	Community center/organization	1) Police interactions, 2) Gentrification, 3) Stress, 4) Violence and safety, 5) Food environment, 6) Racism/race relations, 7) Sleep, 8) Mental health, 9) Safe sex, 10) Drug use, 11) College access, 12) Teen pregnancy, 13) Stereotypes, 14) Social media, 15) Peer pressure, 16) Unemployment, 17) Mass incarceration, 18) Quality of education	Survey; Observation; Interview; Photos/video	35	13 - 34 years	6 months	
Stoddard (2020)	USA	School (out-of-school time)		Photos/video	43	11 - 14 years	5 weeks	4x a week

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	Country	Setting	Topic/Focus	Methods	N	Age	Duration	Frequency
Tang Yan (2022)	USA	Community center/organization	1) Structural racism in education, 2) School to prison pipeline, 3) Food access	Interview; Photos/video	10	15 - 17 years	1 year	
Tintiangco-Cubales (2016)	USA	School (during school/classroom-based)			25	7 - 21 years	1 year	
Voight & King-White (2021)	USA	School (during school/classroom-based)		Administrative; Interview	13	9th - 12th grades	1 year	1-4x a month
Voight & Velez (2018)	USA	School (during school/classroom-based)	1) Substance Use, 2) Environmental prevention policies	Survey; Other: Forums	153	9th - 12th grades	1 year	
Warren (2018)	UK		1) School reform, 2) Systems of support, 3) Access to extracurricular activities	Administrative; Survey; Interview; Focus Group	15	14 - 19 years	18 weeks	
Wood (2021)	South Africa	Community center/organization	Youth employability	Survey	6	21 - 24 years	2 years	Weekly
Zimmerman (2018)	USA	School (out-of-school time)		Photos/video	249	11 - 16 years	4 years (4 schools) 3 years (1 school) 2 years (2 schools) 1 year (6 schools)	2x a month

Gray indicates that this information was missing

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Transformative Social and Emotional Learning Findings

Outcomes by tSEL Focal Constructs

As shown in Table 4, the most common tSEL outcomes associated with participation in YPAR are those that are dimensions of agency (*n*=18, 69%), followed by collaborative problem solving (*n*=15, 58%), belonging (*n*=13, 50%), curiosity (*n*= 8, 31%), and identity (*n*=5, 19%). The most frequently reported agency outcomes are agency (Halliday, 2019; Koudelka, 2021; Tintiangco-Cubales, 2016; Warren, 2018; Wood, 2021) and confidence (Halliday, 2019; Maker Castro, 2021; Voight & King-White, 2021; Warren, 2018). Other reported outcomes related to agency and feeling empowered to make choices and take actions include: perceived control (Abraczinskas, 2020; Halliday, 2019); sense of control over their lives (Stoddard, 2020); sense of purpose (Warren, 2018; Wood, 2021); youth voice (Anyon, 2018) and capability for voice (Boni, 2020); self-efficacy (Fortin, 2022; Halliday, 2019) and leadership efficacy (Stoddard, 2020); motivation to influence (Abraczinskas, 2020; Fortin, 2022); and identifying as a change agent (Bender, 2017) (refer to Table 4). The transformative and justice-oriented components of agency reported in the literature include empowerment (Halliday, 2019; Sprague Martinez, 2020; Zimmerman, 2018), raising consciousness (Aldana, 2021), critical consciousness (Tang Yan, 2022; Tintiangco-Cubales, 2016), and sociopolitical development (Abraczinskas, 2020).

The most common collaborative problem solving outcomes are related to skill development: advocacy skills (Voight & King-White, 2021); communication skills (Bender, 2017; Fortin, 2022; Halliday, 2019; Mosavel, 2018); interpersonal skills (Bender, 2017); research skills (Fortin, 2022; Halliday, 2019); and organizational skills (Mosavel, 2018) (refer to Table 4). Other reported outcomes that are dimensions of collaborative problem solving and working together to come to solutions include: youth leadership (Marco-Crespo, 2018; Stoddard, 2020; Voight & King-White, 2021; Wood, 2021); individual and collective responsibility (Hayik, 2021; Voight & King-White, 2021); decision making (Fortin, 2022; Voight & King-White, 2021; Zimmerman, 2018); participatory behavior (Abraczinskas, 2020); prosocial behavior (Zimmerman, 2018); power sharing and working in groups (Fortin, 2022); and collective action and change (Aldana, 2021; Tang Yan, 2022; Tintiangco-Cubales, 2016). Collaborative problem solving outcomes are also related to participatory behavior: civic development (Aldana, 2021); and civic and political participation (Prati, 2020).

Further, the reported belonging outcomes include: adult support (Anyon, 2018); relatedness (Halliday, 2019); support network (Fortin, 2022); building relationships (Warren, 2018); and peer and student-adult relationships (Maker Castro, 2021; Voight & King-White, 2021) (refer to Table 4). Other belonging outcomes related to acceptance and inclusion within a group or community include: social connection (Bender, 2017; Halliday, 2019; Maker Castro, 2021); community embeddedness (Aldana, 2021); and community bond (Tintiangco-Cubales, 2016). Next, the most commonly reported curiosity outcome is decision making (Fortin, 2022; Voight & King-White, 2021; Zimmerman, 2018), followed by learning about one another and perspective taking (Maker Castro, 2021), realizing and respecting diversity (Duke, 2020), and analyzing evidence and considering multiple perspectives (Voight & King-White, 2021) (refer to Table 4). Lastly, the reported outcomes that are dimensions of identity include: forging a common social identity (Bender, 2017); critical self-reflection about segregation (Aldana, 2021); self-worth and self-esteem (Fortin, 2022); identification as European (Prati, 2020); and feeling valued and valuable (Liegghio, 2020).

Table 4. Transformative Social and Emotional Learning Outcomes

Transformative Social and Emotional Focal Construct	Reference	Methods	Design	Reported Youth Outcomes	Statistical Significance & Sample (if provided for quant/mixed methods)
Agency	Abraczinskas (2020)	Mixed methods	Quasi-Experimental; Pre and post	Motivation to influence	YPAR only: t = .27, p = .79, n = 30; YPAR+PA: t = .52, p = .61, n =43
				Perceived control	**YPAR only: t = .25, p = .81, n = 30; YPAR+PA: t = 2.33, p = .03, n = 43**
				Sociopolitical skills	**YPAR only: t = .21, p = .84, n = 30; YPAR+PA: t = 3.33, p = .003, n = 43**
	Aldana (2021)	Qualitative	Case study	Raising consciousness: creating a collective understanding of segregation	
	Anyon (2018)	Mixed methods	Pre and post	Youth voice	
	Bender (2017)	Mixed methods	Pre and post	Identifying as change agents	
				Personal well-being	t = −0.85, p = 0.42, n = 22
				Resilience	**t = −2.26, p = 0.054, n = 22**
				Self-efficacy	t = −1.28, p = 0.236, n = 22
				Self-esteem	t = −0.85, p = 0.42, n = 22
	Bertrand (2018)	Qualitative	Ethnography	Students repositioning themselves with adults and in schools	

Author (year)	Methodology	Study design	Construct	Results
Boni (2020)	Qualitative	Case study	Capability for voice	
Fortin (2022)	Qualitative	Case study	Influence meaningful change	
			Self-worth, self-esteem, and self-efficacy	
Halliday (2019)	Mixed methods	Case study; Quasi-Experimental	Autonomy, empowerment, agency	
			Confidence	
			Control/had a say in school affairs	
			Self-efficacy	
Koudelka (2021)	Mixed methods	Case study	Agency	
Maker Castro (2021)	Qualitative	Ethnography; Grounded theory	Individual growth - confidence, curiosity, competence, civic mindedness	
Sprague Martinez (2020)	Qualitative	Pre and post; Case study	Empowerment	
Stoddard (2020)	Mixed methods	Pre and post	Civic efficacy	$d = -.12; p = .42, n = 43$
			Leadership efficacy	**$d = 0.42; p = .02, n = 43$**
			Self-esteem	$d = -.10; p = .56, n = 43$
			Sense of control over their lives and potential problems	**$d = .43; p = .02, n = 43$**
Tang Yan (2022)	Qualitative	Case study	Critical consciousness	
Tintiangco-Cubales (2016)	Qualitative	Grounded theory; Case study	Critical consciousness	
			Transformative agency	

Theme	Author	Method	Design	Construct	Results
	Voight & King-White (2021)	Qualitative	Case study	Communication and self-confidence	
	Warren (2018)	Qualitative	Phenomenology	Agency	
				Confidence	
				Purpose	
	Wood (2021)	Qualitative	Case study	Agency	
				Hopeful and sense of purpose	
	Zimmerman (2018)	Quantitative	Quasi-experimental; Pre and post	Psychological empowerment	
Belonging	Aldana (2021)	Qualitative	Case study	Community embeddedness: supporting youth civic development	
	Anyon (2018)	Mixed methods	Pre and post	Adult support	
	Bender (2017)	Mixed methods	Pre and post	Social connectedness	**$t = -4.47$, $p = 0.002$, $n = 22$**
	Fortin (2022)	Qualitative	Case study	Support network	
	Halliday (2019)	Mixed methods	Case study; Quasi-Experimental	Relatedness, school connection	
	Maker Castro (2021)	Qualitative	Ethnography; Grounded theory	Peer relationships - sense of connection, collaboration	
	Prati (2020)	Quantitative	Quasi-experimental	Institutional trust	Partial $\eta^2 = .13$, $n = 35$
				Social well-being	Partial $\eta^2 = .08$, $n = 35$
	Stoddard (2020)	Mixed methods	Pre and post	Adults as resources	$d = -.02$; $p = .91$, $n = 43$

Category	Author	Method	Design	Outcome	Statistics
				School bonding	d = .15; p = .49, n = 43
				School engagement	d = .03; p = .86, n = 43
				Social support	d = -.04; p = .79, n = 43
	Tintiangco-Cubales (2016)	Qualitative	Grounded theory; Case study	Community bond through collective action	
	Voight & Velez (2018)	Quantitative	Case study; Quasi-experimental	School engagement	**Effect Size = 0.18, p < .01, n = 153**
	Voight & King-White (2021)	Qualitative	Case study	Peer and student–adult relationships, sense of belonging, collaboration, and cooperation	
	Warren (2018)	Qualitative	Phenomenology	Building relationships	
	Zimmerman (2018)	Quantitative	Quasi-experimental; Pre and post	Adult mentorship	
				Adult resources	
				Community engagement	
				School engagement	
Collaborative Problem Solving	Abraczinskas (2020)	Mixed Methods	Quasi-Experimental; Pre and post	Participatory behavior	**YPAR only: t =.71, p = .49, n = 30** **YPAR+PA: t = .3.19, p = .005, n = 43**
	Aldana (2021)	Qualitative	Case study	Collective action: disrupting segregation with intergroup advocacy	
	Bender (2017)	Mixed methods	Pre and post	Interpersonal and group communication skills	
	Fortin (2022)	Qualitative	Case study	Communication skills	
				Making decisions	

Study	Methodology	Design	Outcome	Effect size
			Power sharing	
			Research skills	
			Working in groups	
Halliday (2019)	Mixed methods	Case study; Quasi-Experimental	Communication skills	
			Research skills	
Hayik (2021)	Mixed methods	Case study	Individual and collective responsibility	
Marco-Crespo (2018)	Qualitative	Pre and post	Youth leadership	
Mosavel (2018)	Mixed methods	Case study	Communication skills	
			Organization skills	
Prati (2020)	Quantitative	Quasi-experimental	Civic and political participation	Partial η2 = .05, n = 35
Stoddard (2020)	Mixed methods	Pre and post	Leadership behavior	d = .07; p = .70, n = 43
Tang Yan (2022)	Qualitative	Case study	Critical consciousness	
			Collective action and change	
Tintiangco-Cubales (2016)	Qualitative	Grounded theory; Case study	Critical consciousness	
Voight & King-White (2021)	Qualitative	Case study	Advocacy skills	
			Ethical decision-making and social responsibility	
			Leadership	
Wood (2021)	Qualitative	Case study	Leadership for action	

Category	Author (Year)	Method	Study design	Theme/Finding	Statistics
	Zimmerman (2018)	Quantitative	Quasi-experimental; Pre and post	Leadership behavior	
				Prosocial behavior	**Estimate = 0.55, p < .001, n = 249**
				Responsible decision making	**Estimate = 0.57, p < .001, n = 249**
Curiosity	Boni (2020)	Qualitative	Case study	Awareness capability	
	Duke (2022)	Qualitative	Case study	Realizing and respecting diversity	
	Fortin (2022)	Qualitative	Case study	Making decisions	
	Maker Castro (2021)	Qualitative	Ethnography; Grounded theory	Emotional investment - optimism, learning about one another, perspective taking	
	Mosavel (2018)	Mixed methods	Case study	Identifying community assets	
	Sprague Martinez (2020)	Qualitative	Pre and post; Case study	Skills development and knowledge	
	Voight & King-White (2021)	Qualitative	Case study	Analyzing Evidence and Considering Multiple Perspectives	
				Ethical decision-making and social responsibility	
	Zimmerman (2018)	Quantitative	Quasi-experimental; Pre and post	Responsible decision making	**Estimate = 0.57, p < .001, n = 249**
Identity	Aldana (2021)	Qualitative	Case study	Planning: critical self-reflection about segregation	
	Bender (2017)	Mixed methods	Pre and post	Forging a common social identity	
	Liegghio (2020)	Qualitative	Case study	Feeling valued and valuable	
	Nation (2019)	Qualitative	Ethnography	Identity/role as "maker"	

	Prati (2020)	Quantitative	Quasi-experimental	Identification as European
				Partial $\eta2$ = .01, n = 35

Gray indicates that this information was missing
Bold indicates statistical significance

Quantitative tSEL Outcomes

Although a majority of studies were qualitative, there were eleven studies that reported quantitative outcome measures. Six studies reported statistically significant findings, three studies reported effect sizes, and five studies did not report any statistically significant findings for their outcome measures. Here I describe the study designs and reported statistical significance and effect sizes, as shown in Table 4.

Three studies reported statistically significant findings and did not report effect sizes. Using a pre- and post- two group design with no control group, Abraczinskas (2020) implemented YPAR in the context of an afterschool program, comparing YPAR alone (*n*=30) with a combined YPAR/Physical Activity (PA) intervention (*n*=43). Interestingly, the study found relatively robust effects for the combined program but no significant effects for YPAR only: sociopolitical skills (YPAR+PA: t = 3.33, p = .003), participatory behavior (YPAR+PA: t = .3.19, p = .005), and perceived control (YPAR+PA: t = 2.33, p = .03); there were no significant improvements in motivation to influence (refer to Table 4). Further, Bender (2017) assessed outcomes associated with homeless youth participating in Asking for Change, a Photovoice intervention, using a pre- and post-design (*N*=22). There were significant improvements in social connectedness (t = −4.47, p = 0.002) and resilience (t = −2.26, p = 0.054). Other reported outcome measures that were not significant include civic engagement, self-efficacy, self-esteem, and personal well-being (refer to Table 4). Zimmerman (2018) utilized a quasi-experimental design and randomly assigned youth participants to the Youth Empowerment Solutions (YES) program (*n*=249) or usual after-school programing (control) (*n*=118). Using a pre- and post-test design, the author reported estimates for the indirect effects through an adjusted model which indicated that psychological empowerment does mediate the relationship between YES activities and prosocial behavior (Estimate=0.55, p < .001) and responsible decision making (Estimate=0.57, p < .001) at the end of the program. There were also outcome measures that were not significant including adult mentorship, adult resources, resource mobilization, community engagement, school engagement, and leadership behavior.

There are three studies that reported effect sizes. Stoddard (2020) implemented Youth Empowerment Solutions for Positive Futures (YES-PF), a 5-week summer enrichment program, as an intervention for students who exhibit early warning signs for school dropout. Employing a pre- and post-design (*N*=43), the study reported clinical significance by the t value and confidence intervals for t-tests, and by Cohen's d effect size values (0.20 = small, 0.50 = medium, 0.80 = large) (Cohen, 1988). The author found that youth post-intervention had higher levels of leadership efficacy (Cohen's d = 0.42, p<.05) and a greater sense of control over their lives and potential problems (Cohen's d = 0.43, p<.01). There were also outcome measures that were not significant including self-esteem, civic efficacy, adults as resources, leadership behavior, school bonding, school engagement, and social support (refer to Table 4). Using a quasi-experimental design, Prati (2020) evaluated the impact of YPAR in a high school setting (*N*=35). Four classes that were similar in terms of age, gender, number of students, behavioral problems, and overall performance were selected for the intervention. The author reported partial eta squared, a measure of effect size (0.01 = small, 0.06 = medium, and 0.14 = large) (Cohen, 1988). The study reported: identification as European (partial η2 = .01), civic and political participation (partial η2 = .05), political alienation (partial η2 = .05), institutional trust (partial η2 = .13), and social well-being (partial η2 = .08) for the intervention group.

Lastly, Voight & Velez (2018) employed a quasi-experimental design to examine the effects of a school-based YPAR program on the education outcomes of participating high school students. A propensity score matching approach compared the school engagement (attendance rates) of students who voluntarily enrolled in the program (*N*=153) to a control group of non-participating peers (*N*=6,187). Students who were enrolled in the year-long YPAR elective course were considered to be in the YPAR treatment group. Average treatment effect results were presented both in terms of unadjusted measurement units and in terms of effect sizes. Effect size for multiple group effectiveness studies was reported as Hedges's g, the difference between the mean outcome for the intervention group and the mean outcome for the comparison group divided by the pooled within-group standard deviation of the outcome measure (0.2 = small, 0.5 = medium, 0.8 = large) (What Works Clearinghouse,2014). The study found that the YPAR program significantly improved students' attendance rates (ES = 0.18, p < .01).

Discussion

The present study aimed to contribute a unique, theoretically-driven analysis of transformative social and emotional learning (tSEL) outcomes with respect to the focal constructs of agency, belonging, collaborative problem solving, curiosity, and identity. Across the twenty-six included studies, the most common tSEL outcomes associated with participation in YPAR were dimensions of the agency focal construct. The most common outcomes reported for the other focal constructs include: leadership and participatory behavior as dimensions of collaborative problem solving; building relationships and support as dimensions of belonging; and decision making as a dimension of curiosity. The identity focal construct was the least frequently reported. Applying this fine-grained analysis of tSEL outcomes contributes to the evidence base of the YPAR and tSEL fields as complementary processes for promoting youth development outcomes. Identifying these outcomes is a contribution to both fields because it can inform how schools target and develop school-based interventions, inform measurement, and evaluate program efficacy.

Additionally, this systematic review aimed to update the state of the current YPAR literature and provide initial insights about the study methodology and YPAR project characteristics associated with tSEL. This study extends prior reviews by including international studies published between 2015-2022. A majority of the studies included in this review were published since 2020, suggesting the continued emergent growth of the YPAR literature. The selected YPAR articles primarily utilized qualitative methods, followed by mixed methods, and a few utilized quantitative methods. This state of the literature is similar to what was reported in prior reviews (Jacquez, Vaughn, & Wagner, 2013; Shamrova & Cummings, 2017; Anyon et al., 2018). The most common study designs included case studies, pre- and post-studies, and quasi-experimental studies. Of the eleven studies that reported quantitative measures, six studies reported statistically significant findings, three studies reported effect sizes, and five studies did not report any statistically significant findings for their outcome measures. The studies that reported significant effect size of quantitative outcomes utilized quasi-experimental and pre- and post-designs.

The current study provides a snapshot of the YPAR project topics and relevant issues for youth (e.g. race/racism, drug use, environmentalism, bullying, food environment, LGBTQ discrimination, mental health). These topics address issues of power, privilege, and equity, and support the implementation of YPAR as an approach to promote tSEL. Additionally, the study

found that the majority of YPAR projects were classroom-based during the school day. Since tSEL is aimed at educational equity and fostering more equitable learning environments, the YPAR project characteristics reported in this study can support tSEL promotion in school settings. This systematic review suggests that YPAR can be a promising approach within educational and community settings to youth engagement in research and to promote tSEL in youth. This will be of interest to key stakeholders including school administrators, teachers, and mental health professionals given the importance of theoretical insights and recommendations into the use of YPAR as an approach for promoting tSEL in community and school settings.

Reviewing the literature and reported outcome measures with the tSEL lens can help us further understand the specific tSEL focal constructs that YPAR may promote, as compared to a broad categorization of agency and other social outcomes like prior reviews (Anyon et al. 2018; Nash, 2023). The current study's conceptualization and analysis of tSEL learning builds on Nash's (2023) systematic review of YPAR and psychological empowerment outcomes. The two systematic reviews utilize the same methods for eligibility criteria, study selection, and coding. They differ in that they apply two parallel theoretical frameworks to identify youth outcomes associated with participation in YPAR, which entailed the development of two separate sets of outcome codes based on the conceptualization and measurement of psychological empowerment versus tSEL. We found that there was a strong but not full overlap of the psychological empowerment and tSEL outcomes.

The two thematic coding processes of the youth outcomes were overlapping such that they resulted in the same 26 studies included in both systematic reviews. Here, I consider the overlap of specific youth outcomes between the studies in more detail. The intrapersonal component of psychological empowerment relates to an individual's capacity to influence social and political systems, such as agency, perceived control, motivation to control, self-efficacy, self-esteem, and youth voice; this component directly overlaps with the tSEL focal constructs of agency and identity. The interactional component of psychological empowerment relates to youth critical awareness of their community and related sociopolitical issues, interactions with peers and adults, and skill development. This component overlaps with the tSEL focal constructs of identity, agency, belonging, collaborative problem solving, and curiosity. Lastly, the behavioral component of psychological empowerment refers to youth's actions taken to directly influence outcomes. These behaviors influence the social and political environment through participation in community and activities. This component overlaps with the tSEL focal constructs of belonging and collaborative problem solving.

Further, there are notable differences between the two reviews in how some of the youth outcomes were coded. For example, empowerment was a reported outcome in three studies that were included in this review and coded as the agency focal construct of tSEL, however, these empowerment outcomes were excluded in the Nash (2023) review because they were too broad to be coded as one of the psychological empowerment components. Another difference is there are some youth outcomes in the current review that are coded as two tSEL focal constructs. Critical consciousness is coded as both 1) agency, because it requires critical awareness and motivation to achieve an in-depth understanding of the world and 2) collaborative problem solving, because it requires critical action and creating social change to reduce inequities. Decision making is coded as both 1) collaborative problem solving, because it requires building shared understanding and working together to come to solutions and 2) curiosity, because it requires pursuing knowledge, different perspectives, and social action. These youth outcomes findings specifically offer how engaging youth in sociopolitical development is an embedded

part of tSEL that differentiates it from psychological empowerment alone. Jagers, Rivas-Drake, & Williams (2019) argued that for social and emotional learning to adequately serve those from underrepresented communities, and promote the optimal developmental outcomes for all youth, it must cultivate in them the knowledge and skills required for critical examination and collaborative action to address root causes of inequities. The current review contributes a unique theoretically-driven analysis of tSEL outcomes to the evidence base of both the tSEL and YPAR fields as complementary processes for promoting youth developmental outcomes.

Future Directions and Implications

Design

In this review, the most common study designs were case studies and pre- and post-studies. There were limited studies that used ethnography, grounded theory, phenomenology, quasi-experimental or randomized trials designs. Further exploration of YPAR and TSEL could include evaluating YPAR programs by involving a comparison group of youth who are not participating in the program. Such research could potentially provide practitioners and policymakers with evidence of the causal impact of YPAR on youth development.

We propose multiple reasons for why there is a small literature utilizing experimental and quasi-experimental designs. While we acknowledge that many types of interventions in school settings are highly dynamic, there are unique characteristics of YPAR that differ from traditional school interventions. First, YPAR is a research approach and is not an established intervention. Larger school-based interventions or prevention programs that can be scaled at the school-, county-, or state-level likely have more mandates and funding, which allows for stronger and higher inference evaluation designs. Another characteristic of YPAR is that reported outcomes can differ across domains (e.g. academic, emotional, political, social) and so there are not established outcomes for reporting, which presents challenges for identifying funders when they all have different priorities.

Additionally, a majority of the YPAR literature is focused on YPAR as an approach for youth-inquiry in research. During the screening process of this systematic review, the main reason for exclusion was that studies were describing youth-led research projects and were not reporting on the impact of the YPAR research process. There are also epistemological explanations for why experimental designs are not common in the YPAR literature. In certain subfields of participatory action research, there is value and emphasis placed on YPAR as inquiry-based, participatory, and transformative for the young people involved in it. This approach is emancipatory in this way, and is therefore not aligned with a positivist or a traditional frame around generation of evidence through experimental design.

Measurement

Studies reporting tSEL-related outcomes of YPAR primarily drew on qualitative methodologies to assess youth outcomes; relatively few studies used quantitative (12%) or mixed methods (31%). Importantly, the state of the current literature makes it difficult to draw any firm conclusions regarding patterns of outcomes. We recognize that the focus on qualitative methods is a good fit for studying the impact of YPAR in the context of YPAR projects that involve small groups of youth and would not enable reliable estimation of quantitative effect sizes. Qualitative

methods also offer strengths with respect to identifying themes related to the nuanced transformative focal constructs of tSEL. More discussion of how authors analyze their qualitative data would strengthen the trustworthiness of the findings in the YPAR field.

This systematic review found that the majority of the statistically significant quantitative outcomes were related to the agency (Abraczinskas, 2020; Bender, 2017; Stoddard, 2020;) or belonging focal constructs (Bender, 2017; Voight & Velez, 2018). Although there were eleven studies that reported quantitative outcome measures, five studies did not report any statistically significant findings and six studies did report statistical significance, of which, only three studies reported effect sizes. The quantitative measurement of nuanced tSEL outcomes is no doubt challenging, and there are future implications for developing quantitative measures for the other transformative focal constructs around collaborative problem solving, curiosity, and identity. In reporting and interpreting studies, both the substantive significance (effect size) and statistical significance (p value) are essential results to be reported (Sullivan & Feinn, 2012). Reporting only the statistical significance (p value) for an analysis is not adequate to fully interpret the results because significance by itself does not predict effect size. Unlike significance tests, effect size is independent of sample size. It is important to acknowledge that the sample sizes of the quantitative and mixed methods studies included in this review are generally very small. The small sample sizes in these studies are not sufficiently powered to detect effect if there is one, which can create a reporting bias. Future quantitative studies should determine what sample size will be sufficient to ensure (to a particular degree of certainty) that the study has acceptable power to detect effect.

Consistent Reporting

A majority of the studies included in this review were published since 2020, suggesting the continued emergent growth of the YPAR literature. However, the large amount of missing data in our review also suggests that there is a need to begin establishing more consistency in reporting guidelines for the way YPAR studies are presented and published. For example, future publications would contribute to the YPAR field by explicitly reporting on key YPAR principles and processes followed in their projects, such as power sharing between youth researchers and adult facilitators in the research process, which is an essential component to TSEL (Jagers, Rivas-Drake & Williams, 2019).

I argue that clarifying and describing the forms and levels of youth inquiry and youth participation as collaborators in the research methodological process is imperative to building a stronger YPAR literature. In this systematic review, we found that youth inquiry and level of participation in the research process varied, and often youth were not fully integrated into all aspects of the research. The majority of studies engaged youth in latter stages of research (collecting data, analyzing and interpreting data, and disseminating findings), which may be an important component of YPAR projects in promoting tSEL. However, few studies reported youth involvement in the earlier stages of research (relationship building, identifying the problem, choosing and research design and methods). More consistent reporting of youth involvement could enable future research to consider how involving youth in these earlier stages of the research process relates to the tSEL focal constructs of agency, belonging, collaborative problem solving, curiosity, and identity.

Further, because a key process of YPAR is that it is potentially transformative for youth, meaning it changes knowledge and practices through social action, it is important to describe the

method of social action and/or advocacy used by the youth researchers. This review reported that a majority of the YPAR studies used an education and awareness approach, involving the dissemination of a presentation, report, or exhibit to educate community/stakeholder groups. Taking social action is an important component of YPAR projects in promoting tSEL because it requires critical examination and collaborative action to address root causes of inequities. A large gap in the current literature is that authors report the social action by youth, but then do not report the outcomes that result from the social actions (eg. policy development, program development). The last key process of YPAR to include in reporting is around youth training in research and advocacy methods and adult training to facilitate YPAR programs. YPAR programs aiming to increase tSEL may intentionally build in time and space for youth training in the beginning of the project. It would strengthen the literature to have reporting on training, and it would be helpful to describe in detail what the training entailed so that it can be replicated by those wanting to implement their own YPAR projects. Additionally, in this review, only half of studies reported that adult facilitators received YPAR training. This offers implications for future YPAR projects to include adult training and to include in more consistent reporting.

Other missing information in the papers that undermined our analysis of tSEL outcomes were the demographics of youth participants. Considering that YPAR aims to increase the power of marginalized groups by strengthening youth voice in identifying issues relevant to them (Minkler & Wallerstein, 2003) and that tSEL aims to serve and promote educational equity for youth from marginalized communities, future studies should report demographic information of youth participants (e.g. self-identified race, sexuality, age, and socioeconomic status) to the extent it does not risk harm to young people.

Study Limitations

There are limitations related to the search criteria used for inclusion and exclusion of studies in the review. The search included only studies published in the English language, which may exclude literature publishing on international YPAR projects and result in a gap in our understanding of how YPAR is being implemented to address different issues relevant to youth in unique cultures and settings. Additionally, this review included peer-reviewed empirical studies and excluded any relevant gray literature, book chapters, commentaries, and non-peer reviewed sources, such as community presentations and organization evaluation reports or websites. The decision was made to limit the review to peer-reviewed publications of empirical studies (using any methods) to identify the strongest body of empirical research. The publication of YPAR findings conducted in community or school settings in academic journals is limited by institutional support, including funding, access to institutional review, and lack of resources and time in assessing YPAR projects. It is important to acknowledge that engaging youth in research can be done successfully outside of academic researchers partnering with community-based organizations and schools, and that the findings of YPAR projects can be disseminated in various forms that are not academic peer-review literature. There is also potential publication bias in reporting positive youth outcomes associated with participation in YPAR, although we certainly found multiple papers that reported no significant findings. In general, positive youth outcomes are more commonly reported than negative youth outcomes and experiences. Possible negative outcomes need additional attention and investigation in order to establish YPAR as an ethical epistemological paradigm.

The YPAR or "participatory action research" terminology is not consistently operationalized in the numerous disciplines represented in the YPAR field. As discussed in previous YPAR literature reviews (Anyon et al., 2018; Jacquez, Vaughn, & Wagner, 2013; Shamrova & Cummings, 2017), youth involvement in research can be described and named in different ways depending on the project and publication from field to field. While the majority of the articles in this review described the research as YPAR, CBPR, or Photovoice, there may be studies that were not included and analyzed due to the ways authors name or describe their work. Consistent either the core principles and definition of YPAR as youth-led research, this systematic review included studies per our "youth inquiry" criterion based on the stages of research in which youth were actively involved: our inclusion criteria required that youth were involved not only in collecting data—but also played a role in either data analysis/interpretation phase or the dissemination of findings phase. The justification for this criteria is that it captures a key process to YPAR that involves youth collaboration and power sharing between youth and adults *throughout* the research process. It is possible that our approach inadvertently excluded studies that actually did partner with youth in multiple phases of research but did not describe the youth roles clearly enough for the reviewers to interpret it as youth inquiry. We acknowledge that the diversity and breadth of youth inquiry extends beyond the scope of this review focused on YPAR.

Lastly, tSEL was first articulated in 2019, and as a very young literature, it is not entirely clear where the boundaries of various focal constructs will settle. Over time, our codebook may prove to be overly inclusive or exclusive of concepts found in the YPAR literature, but serves as an important starting point for research synthesis, jumping off point for further inquiry, and is transparently described to facilitate deliberation.

Study Strengths

This study is the first systematic review to report an in-depth analysis of how tSEL outcomes are associated with participation in YPAR. This theoretically-driven approach to conceptualizing tSEL outcomes represents a key strength of this study because there is no published literature exploring YPAR as a promising approach for tSEL. We used a top-down approach to engage in a detailed and close review of the reported outcomes. We conducted a close review of the qualitative, quantitative, and mixed method studies and how the direct verbiage describing the youth outcome was reported. For the qualitative data, this included the specific themes reported in the results, and for the quantitative data, this included the specific measures used. Prior systematic reviews only reported the broad categories of youth outcomes, and not the specific findings from the studies. This conceptualization and analysis offers a unique contribution to the YPAR literature to understand tSEL that can potentially occur when participating in YPAR and the resulting youth outcomes.

This review extends previous YPAR systematic reviews reporting youth outcomes (Anyon et al., 2018; Jacquez, Vaughn, & Wagner, 2013; Shamrova & Cummings, 2017) by adding more refined inclusion criteria that the studies needed to describe how they generated and analyzed evidence for the youth outcomes reported. We believe that this adds value to the field by identifying and analyzing the strongest body of evidence, noting that we were intentionally highly inclusive of the forms of qualitative and quantitative evidence we included in our review.

In consideration of the inherently complex and contextualized nature of youth inquiry work, an additional strength of this systematic review is a more strict interpretation of youth

inquiry in the research process compared to prior literature reviews. Although our initial search strategy resulted in almost 600 full-text article reviews, the majority were excluded for not including youth inquiry, aligned with core principles and definitions of YPAR. There were many studies that described their research as participatory action research, and yet were excluded from the review because, in close review, we found that youth were not involved in roles beyond being data collectors. This strengthens our review of the literature because it is aligned with key YPAR processes that involve youth collaboration and power sharing between youth and adults in the research process.

This study contributes to the emerging tSEL literature by utilizing a unique, theoretically-driven analysis of how participation in YPAR is associated with TSEL outcomes. Reviewing the reported outcome measures with respect to transformative focal constructs of agency, belonging, collaborative problem solving, curiosity, and identity can help us further understand the potential of YPAR as an approach for promoting TSEL. Findings from this review suggest that there is a growing body of YPAR literature supporting youth outcomes related to agency, collaborative problem solving and belonging, however, the overall strength of the evidence is weak. There is a gap and opportunity to study youth outcomes specifically related to curiosity and identity to understand how YPAR can be used as an approach to develop these transformative focal constructs. Future directions of the YPAR literature can strengthen the evidence base and trustworthiness of findings through a greater variety of study designs, systematic qualitative and quantitative methods for measures of youth outcomes, and improved reporting of YPAR project characteristics and key processes.

Paper Three
The Use of Research Evidence of Youth Participatory Action Research addressing Mental Health in COVID-19: A Case Study from Two School Districts

Introduction

Adolescent Mental Health

Adolescence is a critical and formative period of social, emotional, and neurodevelopmental transitions from childhood to adulthood that influence the way young people learn and engage with the world around them (Crone & Dahl, 2012; World Health Organization, 2021). Adolescence begins with the onset of puberty and extends through the social transition of assuming adult rights, roles, and responsibilities (approximately 10-25 years old) (Sawyer, et al., 2018). As adolescents navigate the hormonal and neurodevelopmental transition at puberty, they are seeking acceptance, sense of belonging, relationships with peers and adults, and feelings of autonomy (Ballonoff Suleiman et al., 2021). Mental health has generally been defined as "a state of wellbeing in which the individual realizes their own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to their community" (World Health Organization, 2021). Depression, anxiety and behavioral disorders are among the leading causes of illness and disability among adolescents, and suicide is the fourth leading cause of death among 15-29 year-olds (World Health Organization, 2021). Additionally, childhood behavioral disorders are the second leading cause of disease burden in adolescents aged 10-14 years old including attention deficit hyperactivity disorder and conduct disorder. Untreated mental health problems among adolescents often result in negative outcomes including poor school performance, school dropout, strained family relationships, involvement with the child welfare or juvenile justice systems, substance abuse, and engaging in risky sexual behaviors (Schwarz, 2009).

There are a range of physical, emotional, and social changes during adolescent development, as well as environmental and structural stressors (e.g. poverty, racism) that can make adolescents vulnerable to mental health problems. Associations between adverse childhood experiences (ACEs) and adult mental and behavioral health outcomes are well documented in the literature, establishing the need for prevention. The long-term impacts of childhood adversity were examined in the landmark CDC-Kaiser Permanente ACEs Study, which utilized a cumulative index that combines both child abuse and child neglect ACEs (i.e., physical abuse, emotional abuse, sexual abuse, physical neglect, and emotional neglect) with household challenges ACEs (i.e., parental divorce or separation, parental incarceration, a household member with substance abuse problems, and a household member with mental illness) (Felitti et al., 1998). Not only are ACEs common, but they are also associated with future violence and victimization, health risk behaviors, chronic health conditions, mental illness, decreased life potential, and premature death in a dose-response pattern – as an individual's exposure to ACEs increases, their risk for experiencing poorer adult outcomes also increases (Felitti et al., 1998; Gilbert et al., 2015). However, ACE scores on a count of events that have different magnitude of effects, which often dismisses that there can be just one major risk factor that has high intensity or frequency that can lead to worse outcomes than smaller less frequent risk factors. Additionally, ACE scores do not capture developmental period of exposure to adversity which may influence risk.

The literature on resilience in development refers to a class of phenomena characterized by patterns of positive adaptation in the context of significant risk or adversity. Masten & Reed (2002) define protective factors as measurable characteristics that "predict positive outcomes in the context of risk or adversity" and "that have a larger positive effect on outcomes when risk is high compared with when risk is low" (p. 76). Findings from the literature on resilience in youth offer a set of individual and environmental protective factors associated with good adjustment and development under a variety of conditions across cultural contexts. These protective factors measure attributes of: the child (e.g., cognitive abilities, problem solving, positive self-perceptions and self-efficacy, sense of meaning in life, emotional self-regulation); the family (e.g., close relationships with caregiving adults, organized home environment, positive family climate, postsecondary education of parents, parents involved in child's education, socioeconomic advantages); other relationships (e.g., close relationships to competent and supportive adults and prosocial peers); and the community in which youth develop (e.g., effective schools, involvement in prosocial organizations, high levels of public safety) (Masten & Reed, 2002). Promoting protective factors in adolescents against adverse experiences and risk factors is critical for mental health during adolescence, as well as for their physical and mental well-being in adulthood.

Adolescent Mental Health in COVID-19

During the global pandemic, youth have experienced dramatic disruptions to their everyday lives, including social isolation, lacking peer interactions, remote and virtual education, increased technology use, and lost supports, extra-curricular activities, and other programming no longer accessible through schools and communities. Panchal et al. (2023) conducted a systematic review of 61 articles that were published between the start of the pandemic until April 2021 to report the impact of COVID-19 lockdown on child and adolescent mental health. The sample sizes within the included studies ranged 15–7,772 participants, (n=54,999). The mean age of participants was 11.3 years (range: 1–19 years) and 49.7% of participants were female. Most studies were cross-sectional studies (n=45) while the rest were longitudinal studies (n=16). Included studies took place across five continents: Europe (n=35), Asia (n=22), Australia (n=1), North America (n=1), South America (n=1), and across more than one continent (n=1). The systematic review found anxiety and depression symptoms were the most common outcomes and ranged 1.8–49.5% and 2.2–63.8%, respectively (Panchal et al., 2023). Prior to the pandemic, rates of clinically significant generalized anxiety and depressive symptoms in large youth cohorts were approximately 11.6% (Tiirikainen et al., 2018) and 12.9% (Lu, 2019), respectively. Irritability (range = 16.7–73.2%) and anger (range = 30.0–51.3%) were the next most frequently reported by children and adolescents (Panchal et al., 2023). Other associated outcomes were symptoms of ADHD, sleep disturbances, boredom, loneliness, fear, stress, psychological distress, and non-suicidal self-injury, suicidal ideation, suicide planning, and suicide attempts. The review identified risk (e.g., lack of routine, female sex, excessive exposure to COVID information and media, previous mental health problems, and having a relative who was a frontline worker related to COVID-19) and protective factors (e.g. all types of routine, family communication, social support, and appropriate play and leisure) for anxiety symptoms (Panchal et al., 2023).

In 2023, the Centers for Disease Control and Prevention published the Youth Risk Behavior Survey (YRBS) data summary and trends report: 2011-2021, which provides the most recent surveillance data on health behaviors and experiences among high school students in the

United States related to adolescent health and well-being (Centers for Disease Control and Prevention, 2023). These data also represent the first YRBS data collected since the start of the COVID-19 pandemic. Collected in Fall 2021, 42% of youth experienced persistent feelings of sadness or hopelessness, 29% experienced poor mental health, 18% made a suicide plan, 10% attempted suicide (Centers for Disease Control and Prevention, 2023). Female students and LGBQ+ students were more likely than their peers to experience poor mental health and suicidal thoughts and behaviors (Centers for Disease Control and Prevention, 2023). This report suggests an increased need for mental health care utilization and resources to address adolescent mental health concerns.

School-Based Mental Health Promotion

Primary prevention in mental health is defined as an intervention designed to reduce the future incidence of adjustment and behavioral problems, as well as, promote positive mental health (Durlak & Wells, 1997). In primary prevention, there are two main approaches to the level of intervention: individual centered, which services individuals without attempting major environmental change, or ecological, which modifies environments to indirectly change individuals (Durlak & Wells, 1997). Additionally, primary prevention has two main approaches to the population selection: a universal strategy, in which all members of a population receive the intervention irrespective of risk, or a targeted strategy, which focuses on vulnerable or at-risk individuals (Mackenzie & Williams, 2018). Primary prevention is oriented towards mental health promotion which builds on strengths, resources, knowledge and assets for positive health.

There have been several systematic reviews and meta-analyses conducted to review the effectiveness of school-based mental health interventions at both the universal and targeted levels. A meta-analysis of adolescent mental health program components by Skeen et al. (2019) found that: 1) universally delivered interventions improve mental health; and 2) several content-related program components are associated with effect size (Skeen et al., 2019). Seven intervention components predicted only positive effects and were associated with more successful programs: interpersonal skills, emotional regulation, alcohol and drug education, mindfulness, problem solving, assertiveness training, and stress management (Skeen et al., 2019). Developing skills to improve interpersonal relationships is associated with improved effects for positive mental health, depression and anxiety prevention, and prevention of substance use. Emotional regulation was associated with greater effectiveness in improving positive mental health and greater reductions in depressive and anxious symptomatology. Six intervention components found mixed results across the different outcomes: conflict resolution, coping skills, goal setting, relaxation, skills to resist peer pressure, and self-efficacy training (Skeen et al., 2019). Lastly, six components that did not have a clear relationship to effectiveness included cognitive restructuring, mental health literacy, self-monitoring, social skills, support networking, and behavioral activation (Skeen et al., 2019).

Similarly, O'Mara and Lind (2013) conducted an integrative review of school mental health promotion programs and concluded that a whole school approach with a focus on promoting positive mental health promotion rather than preventing mental illness is most effective. Additionally, interventions that are long-term (over a year), include evaluations or follow-ups, extend beyond practice in the classroom, and involve multiple stakeholders including school nurses, teachers, administrators, students, parents and community organizations, are most promising in promoting health and preventing mental health issues in youth (O'Mara & Lind,

2013). Despite acknowledgement of the importance of mental health promotion and prevention in adolescent mental health and well-being, there remains a gap between needs and resources for the high quality implementation of effective strategies.

Youth Participatory Action Research

Community-Based Participatory Research (CBPR) is a term used in public health to refer to participatory research approaches that engage community members and academic researchers as equitable partners in each step of the research process to address issues that community members want to change (Israel et al., 1998). The knowledge generated by these community-academic partnerships is thus intended to be culturally relevant, action-oriented, and connected to community members' lived experiences (Wallerstein & Duran, 2010).

Youth-led Participatory Action Research (YPAR) is a form of CBPR that engages youth as researchers in identifying issues relevant to their lives, conducting research, and advocating for change to address issues (Rodríguez & Brown, 2009; Wallerstein et al., 2017). More than a research *method*, YPAR is an approach that challenges assumptions about who holds and creates knowledge. Youth are engaged as experts who generate knowledge and data to address issues and change inequitable systems, policies, and practices (Ozer et al., 2020). By supporting youth in having a meaningful voice in identifying and changing issues relevant to them, YPAR approaches aim to increase the power of marginalized groups in improving problems through iterative cycles of inquiry and action (Minkler & Wallerstein, 2003). In the literature, YPAR projects have addressed a range of equity issues in education and health such as school discipline policies, dating violence, bullying, and access to healthy food and physical activity opportunities (Ozer & Piatt, 2018).

Rodriguez and Brown (2009) identify three guiding principles for YPAR: 1) YPAR is inquiry based and topics selected are relevant to youths' lived experiences and concerns; 2) YPAR is participatory, which means youth are collaborators across research phases and methods; and 3) YPAR is transformative, which means the purpose of YPAR is to change knowledge and practices through social action to improve the lives of youth and their communities. Consistent with these principles, Ozer and Douglas (2015) identified key processes in YPAR: There is intentional power sharing between youth researchers and adult facilitators over key decisions in the research process; the research and action phases are iterative; and youth are trained in research and advocacy methods, thinking about how to create social change, and building alliances with stakeholders. Through these key processes, YPAR can positively improve settings that influence youth development and health.

From the outset, YPAR requires building trusting relationships and effective communication between the youth researchers and adult facilitators. Before engaging in YPAR, youth researchers and adult facilitators must build trusting relationships and effective communication (Wallerstein et al., 2017). YPAR involves iterative phases that begin with youth identifying a problem or question that they genuinely care about and want to change. Next, youth select their research design and methods with training to learn which data sources and measurement tools will help answer the research question, followed by data analysis and interpretation. In the final phase, youth researchers identify specific actions that they and adults can take to address the problem and report their findings to relevant stakeholders to propose solutions.

YPAR engages youth in analyzing and working to change the social, economic, and political conditions that shape their schools and communities, which provides developmental opportunities for adolescents, such as increased motivation for goals, enhanced awareness of self-identity, stronger sense of self-identity, passions about specific causes, improved self-regulation skills, increased independence and autonomy, increased social rights and responsibilities, and identity development in political and religious domains (Ballonoff Suleiman et al., 2021). Characteristics of settings that support positive adolescent development include physical and emotional safety and positive social norms. Engaging youth in participatory research can help address gaps between adolescent developmental needs and traditional school environments, such as increasing self-efficacy, establishing a sense of purpose, and creating supportive social relationships with peers and trusted adults (Ozer, Ritterman, & Wanis, 2010). In a recent brief, Ozer, Shapiro, and Duarte (2021) suggested youth empowerment approaches, such as YPAR, improve youth social and emotional well-being by supporting youth in addressing inequities that affect their well-being. YPAR can facilitate adolescents' emerging agency by engaging their unique expertise, skills, and perspective, as well as promoting their critical analysis of social issues impacting them and their communities (Ozer, Shapiro, & Duarte, 2021).

Use of Research Evidence

Studying how and to what extent research is used in policy and practice has been the subject of research for several decades, with a recent resurgence in what is now termed the Use of Research Evidence (URE) literature. While YPAR is oriented to social action and change with youth generating evidence and recommendations aimed to promote equity-focused and culturally responsive policies and practices, there is a gap in the URE literature considering the implications of participatory research. Specifically, the field lacks consideration of how YPAR evidence influences the perceptions and/or actions of adult policymakers or practitioners. The URE literature identifies different types of use: instrumental use occurs when research evidence is directly applied to decision-making; conceptual use occurs when research evidence influences or enlightens how policymakers and practitioners think about issues, problems, or potential solutions; tactical use, also referred to as political, strategic, and symbolic use, occurs when research evidence is used to justify specific positions such as supporting legislation or a reform effort; imposed use occurs when there are mandates to use research evidence, such as when government funding requires that practitioners adopt programs backed by research evidence; and process use occurs when practitioners discuss what they learned while participating in research (e.g. how being involved in the research made them see or think about things differently) (Nutley, Walter, & Davies, 2007).

A systematic review of twenty-four studies conducted primarily in North America and Europe on the use of research evidence by school practitioners identified multiple factors that predict use: characteristics of the research (e.g. accessible and timely, objective and true, easy to understand and implement, connected to school/classroom context, and relevant); characteristics of practitioners and schools (e.g. school staff had some competency and familiarity with research, a positive attitude toward research, and/or when their schools encouraged evidence-based decision-making and innovation); and characteristics of communication about the research (e.g. created practitioner-friendly research products and sustained collegial interactivity between researchers and practitioners) (Dagenais et al., 2012).

Similarly, Ozer et al. (2020) identifies the characteristics of YPAR that may be particularly impactful for facilitating use of evidence in educational decisions: YPAR projects identify local stakeholders and audiences to whom the research evidence will be directed once generated, and the action phase of YPAR entails dissemination to those audiences with a focus on improving practice and/or policy; YPAR participation fosters relationships between researchers and decision-makers; YPAR involves youth in issue identification and data collection; YPAR research evidence is presented in terms of descriptive and/or visual data and thus should be understandable for educational decision-makers; and YPAR is timely in the sense that school-based research cycles typically occur over a semester or year, even while larger YPAR efforts and partnerships can occur over many years. Additionally, Ozer et al. (2020) identified two potential barriers to use of YPAR evidence including deficit-based assumptions by adult decision-makers about the rigor, trustworthiness, and value of YPAR evidence; and students' positionality in educational settings in the absence of any exceptionally strong adult mandates or motivations to counterbalance their lack of power. Their analysis of facilitators and barriers led to the identification of contextual and process factors and characteristics of YPAR that could be either facilitative or constraining depending on context: state or district mandates to elicit student input; communication channels between youth researchers and adult decision-makers; and adults' perceived quality and credibility of youth-generated research.

Current Study

This study can contribute to the current gap in the YPAR literature around the use of research evidence. There are potential contributions of the findings for theoretical insights to the URE literature around the use of YPAR as a form of research evidence produced by key educational stakeholders – the students themselves. This study will describe focal cases in which youth-generated evidence and youth recommendations were utilized in the development and implementation of mental health policies and practices in school settings. Also, this study aims to contribute novel findings to the URE literature by describing conditions that facilitate and limit use of YPAR evidence addressing mental health issues, which will be of interest to school administrators, teachers, and mental health professionals who aim to promote adolescent mental health. Research questions guiding this qualitative study are: 1) *How has YPAR been used to inform the development and implementation of policy and practices to promote adolescent mental health in the context of the COVID-19 pandemic?* 2) *What conditions facilitate and limit use of YPAR evidence generated by youth to address mental health issues in school settings?*

Literature Review

Here, I provide an overview of the prior systematic reviews conducted of the YPAR literature relevant to the present study and its focus on adolescent mental health. An initial systematic review was conducted by Jacquez, Vaughn, and Wagner (2013) and reviewed children and adolescents in community-based participatory research. The authors included 56 studies that involved youth as partners on CBPR projects in the United States and included articles published between 1985 and 2012 (Jacquez, Vaughn, & Wagner, 2013). The most common issue areas of focus were health issues including, general health issues (*n*=5), obesity and/or diabetes (*n*=7), sexual health (*n*=6), physical activity (*n*=3), substance use (*n*=3), environmental health (*n*=2), and mental health (*n*=2) (Jacquez, Vaughn, & Wagner, 2013). The first of the two included

studies focused on mental health used participatory research strategies to examine Cape Verdean adolescent girls' experiences of losing someone to violence, incarceration, and/or deportation (Christiansen, 2010). Youth were involved in identifying priorities, goals, and research questions, designing and conducting the research, analyzing and interpreting data, and disseminating and translating research findings. However, there was no discussion of how the youth-generated evidence was used by stakeholders. The second study utilized CBPR to adapt and implement an intervention to promote mental health service utilization for African American adolescents (Mance et al., 2010). While youth actively gave input into the research and were involved in identifying priorities, goals, and research questions, they were not involved in conducting the research, analyzing data, or disseminating findings, and thus, no youth-generated evidence.

In a more recent review of the YPAR literature, Kennedy et al. (2019) synthesized findings of youth inquiry approaches published between 1995 and 2015 in the United States, including study methodology, YPAR principles and project characteristics, and environmental outcomes. Environmental outcomes reported in each study were qualitatively recorded and categorized into five inductively identified categories applying Bronfenbrenner's ecological framework (Bronfenbrenner, 1977): at the micro-system level, practitioner growth (i.e., adults changed their attitudes, perspectives, understanding and behaviors) and peer group norms (i.e., increase in knowledge or change in attitudes about health-related topics); at the meso-system level, program development or improvement (i.e., the creation of new programs, enrichment of services, spaces, or funding for services) and research benefits (i.e., improvements in recruitment, data quality, interpretation of results, or perspective gained); and lastly, at the exo-system level, policy adoption (i.e., passage of school, city, or state-level policies). Across the 36 articles included in the review, the outcomes included: practitioner growth (n=12), change in peer norms (n=6), program development or enhancement (n=19), research benefits (n=14), and policy development (n = 5; 13.9%). Fifty-four percent of the studies reported the addition or improvement of services offered in school, agency, and community contexts. Relevant to the current study on the use of YPAR evidence, programs were created or enhanced to address physical and mental health-related topics such as bullying prevention, substance abuse, and healthy eating; these programs were created in both school and community settings (Christens & Kirshner, 2011; Frerichs et al., 2015; Kirshner, 2009; Voight, 2015). Additionally, 14% of studies included in the review reported that one or more policies had been adopted as a result of engaging with youth in inquiry. Although none of the policies implemented were related to mental health, these findings offer the potential of YPAR evidence to be utilized in the development and implementation of mental health policies and practices.

Relevant to the current study's focus on adolescent mental health and COVID-19, there were two YPAR studies published that focused on mental health issues for youth during the pandemic. These are case studies of YPAR projects that focused on mental health issues for youth during the pandemic, however, only one describes use of YPAR evidence in decision-making. The first is a case study of a virtual youth photovoice program implemented across three regions of the United States (Macias et al., 2023). The purpose of the program was to engage youth in research on a social issue relevant to them during an unprecedented year marked by two public health crises, COVID-19 and anti-Black racial violence. Themes captured in the first online gallery of youth photos include tools for mental health, meaningful connection, and advocacy to bring attention to community strengths and structural issues. Although youth findings were disseminated through blogs, social media, and an online art gallery of their photographs with youth recordings of their narratives, there was no further discussion of the use

of YPAR evidence in the development and implementation of mental health policies and practices.

The second case study is a YPAR project involving predominantly Latine immigrant middle- and high-school students serving on a youth advisory council (Rocha et al., 2022). The youth researchers observed their peers struggling with the transition to remote learning and found very few mental health and academic resources available within the school during the pandemic. Youth researchers conducted a survey measuring students' emotional and academic wellness and found 38% of students scored within the moderate to severe range for depression and anxiety. Emergent themes from students' qualitative responses regarding the most challenging aspect of COVID-19 included homework overload, anxiety over COVID-19, missing family and friends, difficulty managing responsibilities, distractions, and lack of motivation. The youth researchers presented these findings to the City Manager, the Unified School District Superintendent, the County Health Director, and the County Board of Supervisors. The YPAR project resulted in the city and the school district collaborating to hire additional licensed clinical social workers to support youth and their families. Youth researchers provided peers with mental health resources via Instagram, including hotline numbers to text or call, self-care tactics, inspirational messages, tips for coping, and self-care reminders throughout the pandemic. This case study offers an example of how YPAR evidence can be utilized to implement numerous practices to promote positive mental health for youth.

This current study will describe focal cases in which youth-generated evidence and youth recommendations were utilized in the development and implementation of mental health policies and practices in school settings. Additionally, this study aims to contribute novel findings to the URE literature by describing conditions that facilitate and limit use of YPAR evidence addressing mental health issues in school settings.

Methods

The current study will use a two-case study design consisting of distinct YPAR programs implemented in schools and districts in two U.S. states between 2020 and 2022. The districts vary in policy and implementation contexts for YPAR, community characteristics (e.g. urbanicity, SES, demographics), and are diverse in terms of their student populations and academic performance. The distinctiveness of these sites enables us to examine how the YPAR process interacted with the diverse features of the settings and students. The aim of this study is to use focal cases to describe how YPAR evidence is perceived and utilized by educational decision-makers in schools and districts to implement mental health policy and practices during COVID-19, including an examination of the contextual conditions that facilitate and limit the use of research evidence.

School District Sites

School District 1 - ASD

ASD covers one of the largest geographic areas of any district in a large western state, encompassing urban, suburban, and rural geographies. ASD serves approximately 24,000 students in grades K–12, the majority of whom are Latine and low income, as indicated by eligibility for free and reduced-priced meals. The ASD system includes eleven elementary

schools, three K–8 schools, four middle schools, four comprehensive high schools, one alternative high school, and one independent-study high school. The district began implementing YPAR as a Peer Leaders Uniting Students (PLUS) high school elective course in the 2014–15 school year in six district high schools. PLUS is a positive school climate-focused peer education program that supports a form of YPAR. PLUS student leaders interview for the position and are selected based on their ability to influence their peers rather than achievement. Students voluntarily enroll and are trained to set positive behavioral norms in the school/resolve conflict, and gain leadership, communication, and research skills. The course initially involves training in facilitation, and the teams' first activities include facilitating whole-school student forums to identify and discuss issues that affect the well-being of local youth. The teams also administer surveys to their peers to generate quantitative data to aid in issue identification. Based on the outcomes of forums and surveys, student leadership teams from each school collaborate to identify a common cross-district issue to serve as the basis for subsequent research and action.

School District 2 - BSD

BSD is located in the midwest and serves approximately 39,000 students, 65% of whom are African American and 15% of whom are each Latine and White. About 9% of students have limited English proficiency and 22% have a disability. Because of the high proportion of district families who meet income eligibility for federal free and reduced-price meals, all students in the district are eligible. BSD is in an urban city and as of 2012, had the second highest poverty rate of all U.S. cities over 250,000 in population. In 2013, BSD implemented a major reform initiative encoded in state law that mandated the formation of Student Advisory Councils (SAC) in all district high schools. These councils were required to be diverse in membership and to meet regularly with school and district administrators to allow students input in school improvement decision-making, including four district-wide meetings of all councils per year with the district Superintendent. A study of the councils in 2015-16 found that some schools had incorporated YPAR-like elements in the work of their councils while others had no research component. One school uses YPAR as a framework for a 9th grade capstone requirement as part of its International Baccalaureate curriculum in which all 9th grade students in the school participate. Over two dozen disparate YPAR projects are underway in this school. A second school, which utilizes a project-based learning (PBL) model, is implementing YPAR as an elective PBL course in which 11th and 12th grade students enroll, including SAC members. A third school implements YPAR with 7th and 8th grade students as part of an elective course. In all three schools, YPAR participants share their research evidence with school administrators, and the students in grades 9-12 also share their evidence with district leadership. This project was conducted through a research practice partnership between BSD and a state university that works to identify effective school improvement strategies and is supported by the U.S. Department of Education Institute of Education Sciences.

District Site	# of high schools in study	# of high schools in district	# of students in district	Major ethnicities	Students eligible for free or reduced-price lunch	English Language Learners	Policy and program context relevant to youth voice and YPAR
ASD	2	4	21,797	59% Latine; 26% White; 8% Black; 4% Multiracial	81%	12%	State Local Control and Accountability Plan; PLUS program version of YPAR currently implemented
BSD	3	42	39,125	65% Black; 16% Latine; 15% White; 3% Multiracial	100%	8%	State legislature requires student advisory committees at every school to guide principal's reform efforts

Table 1. Overview of district sites and key demographics.

Study Design and Data Collection

The current case study utilized qualitative data collected through one-hour long interviews with YPAR adult facilitators, district leaders and staff, and school administrators, as well as memos of YPAR projects to examine the use of YPAR evidence in the implementation of mental health policy and practices in school settings. The semi-structured interviews with adults solicited key adult actors' reflections on: school and district decision-makers' awareness of YPAR projects and evidence generated from them; perceptions of YPAR findings, recommendations, or actions; evidence of the use of findings to inform practices, policies, or decisions at the school or district levels; and the roles and relative power of young people in the research (see Appendix C for the interview protocol). In order to gain insight into the decision-making processes and for understanding variation in use of evidence, we asked directly about cases in which there was a negative response or no action taken by adult decision-maker after exposure to YPAR evidence relevant to decisions being made. We sought out contrasting and critical focal cases both in our sampling and in our approach to our interview protocol.

Before collecting data, each research district site received approval from both University and School District Institutional Review Boards. In order to gain an understanding of the story and impact of each YPAR case, we utilized a snowball sampling approach to identify a diverse network of actors involved in the potential brokering or determination of YPAR use of research evidence within the school or district. Interviews (n=19 interviews) were conducted by PhD and doctoral-student members of the research team with adult decision-makers (fourteen adult facilitators of YPAR projects, three district leaders and staff, and two school administrators). School districts varied in the number of interviews or roles captured and were appropriate to the distinctive size of each school district and the number of engaged diverse stakeholders at the school- and district-levels. Because the present paper focused on URE, we focused our analyses for this paper only on the cases where students generated some form of research data as part of their YPAR projects.

Data Analysis

Consistent with guidelines for qualitative analysis, a multi-stage analytic process was used that combined inductive, deductive, and verification techniques to strengthen the reliability

of the coding system and the validity of the findings (Miles & Huberman, 1994). Inductive analysis allowed for emerging themes to occur, while deductive coding analyzed the interviews based on a priori constructs of interest and conceptual frames (e.g. use of evidence; Creswell, 2007). Through this process, we generated a detailed codebook including: 1) code definition, 2) clear inclusion and exclusion criteria, and 3) illustrative examples (Creswell, 2007; refer to Table 2). The codebook included a priori codes based in the prior literature including use of research evidence (e.g. conceptual, instrumental, tactical and process use) and forms of brokering discussed in the prior literature (e.g. expert, moral/political, networking, supportive/receptive). Other codes include YPAR project topic and components, adult response, and COVID-19.

The audio-recorded interviews were transcribed and then analyzed by multiple research team members using an iterative process of code development, application, and refinement via regular meetings. Interviews were coded using Dedoose, a secure web-based qualitative software platform. We employed multiple consensus coding strategies to promote consistency and trustworthiness in application of codes across the team. Two team members from each local research team most familiar with the district coded the same interviews, identifying any coding discrepancies for the cross-site research teams to resolve and further refine the codebook for clarity as necessary. An external coder from the larger team also reviewed coded transcripts to identify consistency in code application across sites.

In a later stage of analysis, the research team engaged in an analytic process of each YPAR project focal case using cross-team discussion and the formal codes to create contextual charts and figures to characterize patterns of URE that enabled closer examination of the intersection of these factors. To promote validity, these charts and figures were reviewed by the research team, soliciting the feedback of additional site investigators and interviewers, in combination with the systematic coding in Dedoose, to triangulate on the characterization of each focal case with respect to URE.

The current study identified the focal cases based on inclusion criteria: 1) the YPAR topic being focused on an issue related to adolescent mental health and 2) the YPAR project occurred during the COVID-19 pandemic. The final phase of analysis of these focal cases involved the author adding thematic analysis of the codes for contextual conditions that facilitate and limit the use of research evidence in school settings.

Results

We examined two focal cases to describe how YPAR evidence is perceived and utilized by adult decision-makers in schools and districts to implement mental health policy and practices during COVID-19, including an examination of the contextual conditions that facilitate and limit the use of research evidence in school settings. Table 2 provides a list of major codes, definitions, and frequency of application across the focal cases. The frequency of application is presented by the total number of excerpts coded. The most frequently applied code was adult power brokering behaviors ($n=23$) with networking being the most common brokering behavior in the focal cases ($n=10$). Youth power brokering behaviors were also frequently coded ($n=18$) with the majority being networking ($n=11$) and supportive ($n=5$) brokering behaviors. The use of YPAR evidence was frequently coded ($n=15$) with conceptual use ($n=7$) and instrumental use ($n=5$) being the most common.

Code	Definition	Excerpt Count
Use of YPAR Evidence	Data that were generated or analyzed by students is used to inform school or district level decision-making regarding programs, policies, or practices.	15
Conceptual Use	Research evidence influences or enlightens how school policymakers and practitioners think about issues, problems, or potential solutions.	7
Instrumental Use	Research evidence is directly applied to decision-making in specific, direct ways (e.g. students call for a change in a rule, program, or policy, and this informs a policy or practice decision).	5
Adult Negative Response	There is a negative response or no action taken by adult decision-maker after exposure to YPAR evidence.	2
Adult Power Brokering Behavior	Adult ally brokering behavior (power-focused brokering)	23
Adult Power Brokering - Networking	Brokering behavior connects youth and YPAR findings with other youth and adults who hold power to promote exposure of youth-generated evidence.	10
Youth Power Brokering Behavior	Youth asserting expert claims for YPAR evidence and youth perspectives, as well as other brokering activities	18
Youth Power Brokering - Networking	Brokering behavior connects youth and YPAR findings with other youth and adults who hold power to promote exposure of youth-generated evidence.	11
Youth Power Brokering - Supportive	Brokering behavior creates more supportive conditions for exposure/access to youth-generated evidence.	5

Table 2. Code definitions and frequencies.

We first reviewed the YPAR project topics coded across the nineteen interviews and identified two case examples that focused on mental health issues during the COVID-19 pandemic. Figures 1 and 2 represent a diagram of the charting of each YPAR project focal case that was generated using a triangulation of cross-team discussion and the formal codes. For each focal case, we created a contextual chart that enabled closer examination of the YPAR research process and to determine patterns in the use or non-use of YPAR evidence. Both charts display how youth collected and analyzed data around topics of mental health, how findings were shared and disseminated, and our consensus regarding the use of this YPAR evidence.
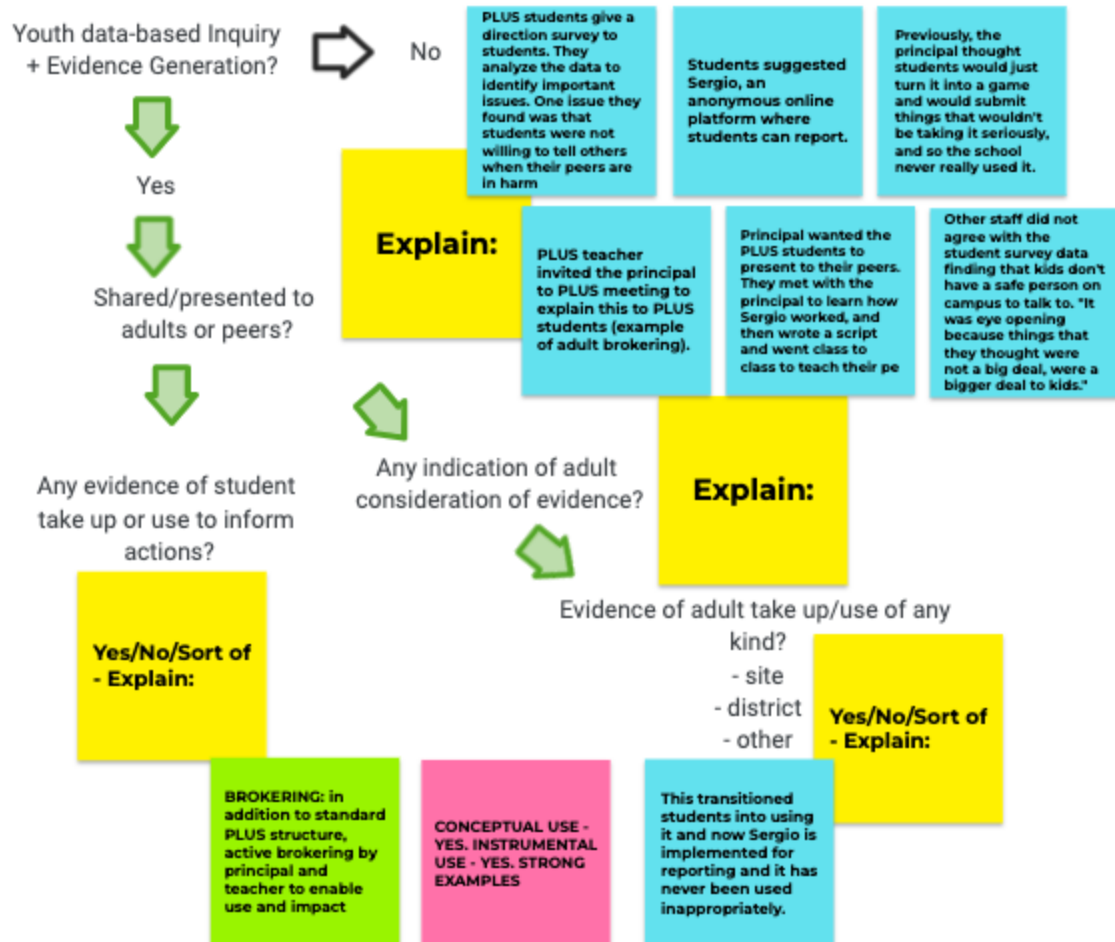
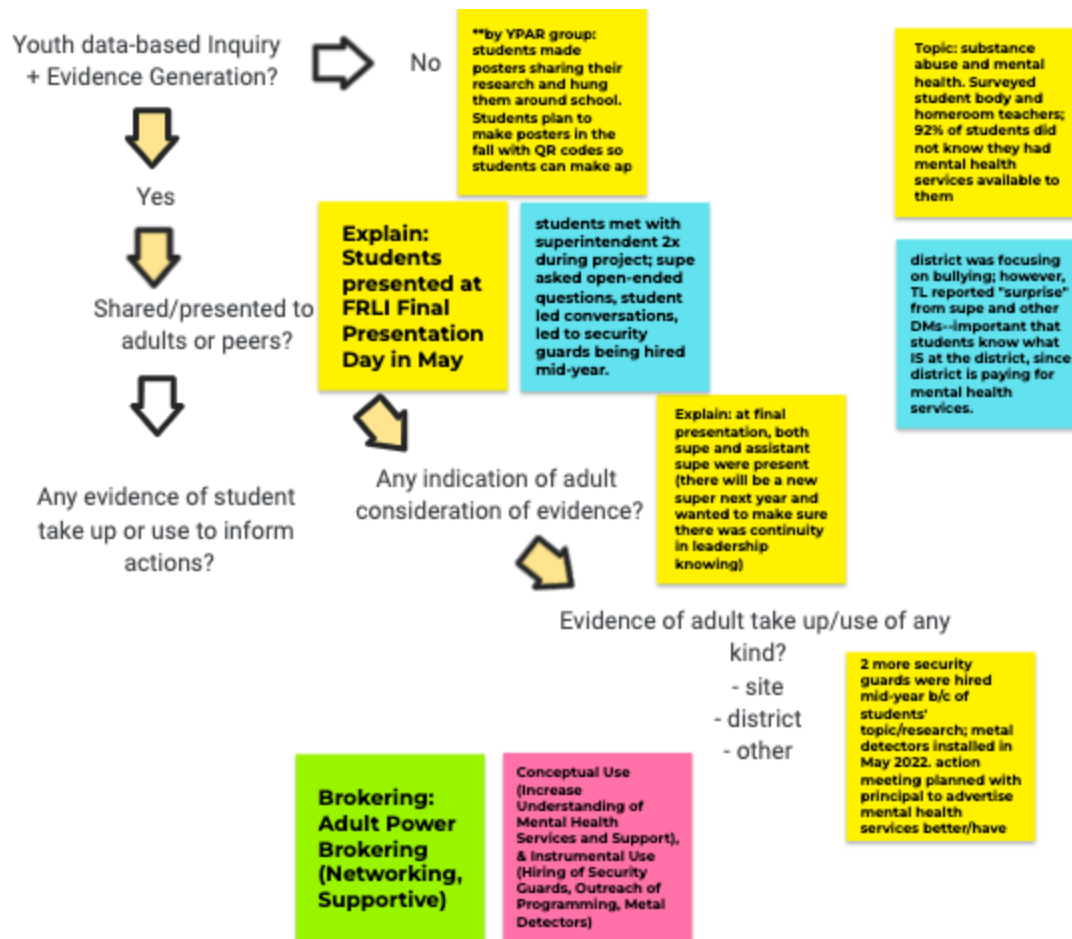Figure 1. Contextual chart to characterize patterns of URE in ASD focal case 1

Figure 2. Contextual chart to characterize patterns of URE in BSD focal case 2

Focal Case 1 - ASD

YPAR Project Topic & Components to Inform Use of Research Evidence

Focal case 1 addressed the topic of self-harm/cutting. In order to understand how the use of YPAR evidence has been used to inform the development and implementation of policy and practices to promote adolescent mental health, we reviewed the YPAR project components codes to get an understanding of the different YPAR phases such as methods, data analysis, and dissemination of findings. ASD middle school students in the PLUS program met once a week during the school day. The students utilized the PLUS Direction Survey tool, which is a survey item bank that is used to develop surveys and measure school climate multiple times throughout the academic year. After collecting the Direction Survey data from the student body, the PLUS students met in class and analyzed the data looking for patterns to identify the most relevant issues to the school community, and that was how they learned about the self-harm/cutting issue at their school. They then led a PLUS forum with the student body to take a deeper dive into this issue and created a space to talk about what was going on. Finally, the students strategized an action plan for dissemination of findings with their principal as a key adult stakeholder:

> Circle the two or three big "ahas" that we learned in each group. Um, and then we set
> about kind of creating an action plan. Um, what do we need to do now that we've learned

this? Like, what is next, which is why I like to invite the administrator, um, because if we want to go into an action mode, um, then they can be supportive of that journey.

Use of Research Evidence to Inform the Implementation of Mental Health Policy and Practices

We analyzed the use of research evidence codes to understand how YPAR evidence was being utilized to inform the development and implementation of mental health policy and practices in these focal cases, if at all; we observed instrumental use of YPAR evidence at ASD. After the PLUS students at ASD identified that self-harm/cutting was a big issue at their school through surveys, a suggested action plan was to use Sergio, a platform where students can make an anonymous report online through email or text through the phone about concerning behaviors at school. The PLUS adult facilitator invited the principal to the class to engage in a discussion with the students and explain why he was hesitant to use Sergio with the concern that students would not take it seriously and misuse it. Through this conversation, the students shared their concern for getting in trouble by their peers for reporting and that anonymity was important in order for students to report. The principal offered to teach the PLUS students how to use Sergio so that they could lead a presentation to roll it out to the student body. The implementation of Sergio as a practice is an example of instrumental use of YPAR evidence being directly applied to decision-making to address the school's issue around self-harm/cutting:

> I don't want this to become a joke at our school. I don't want it to be misused. And he said, so, you know, you'd have to take it seriously. You need to make an appointment with me, you know, then I'll teach you how it actually works. The mechanics of it, you guys are going to write the script. And so, uh, like a subgroup of all the PLUS kids who were interested raise their hand, he took about six of them. And then they learned about Sergio, how it worked, um, all of that and wrote a script with him. They went to the races.

Facilitator of Use of YPAR evidence - Adult Power Brokering (Networking)

In our analyses, we sought to identify facilitators that created interactions and exposure of YPAR groups and evidence to adult decision-makers to potentially enhance the impact of YPAR on policies and practices. There are meaningful examples of adult allies connecting youth researchers with adults who hold power in decision-making to promote exposure of youth-generated research evidence. In ASD, the school principal was invited by the YPAR adult facilitator to meet with the PLUS students to debrief the PLUS forum with the student body regarding the focal topics, survey findings, and key takeaways, as well as to discuss their proposed actions for change to implement Sergio. In these student meetings, the principal was present, engaged in discussion, and listened to the PLUS students share about the research findings and proposed solution. When the students suggested introducing Sergio to the student body, he made himself available to meet with them, taught them how it works, and prepared them to lead the initiative and present it to the student body. The adult facilitator suggested that without this adult power brokering by the principal as a decision-maker, the implementation of Sergio would not have been possible:

> When we invite him to come to the forums, but sometimes it works in his schedule and sometimes it doesn't, and at least this way he at least can get the information and hear

their voice. So it's not cause you know, he needs to be in the conversation or whatever reasons, you know, we want to make change. We can't do it without him.

Facilitator of Use of YPAR Evidence - Youth Power Brokering (Networking)

In this focal case, youth researchers are the ones who are networking with adult allies who hold power in decision-making to promote exposure of youth-generated research evidence. Through the PLUS forums in ASD, the PLUS students learned that students were not reporting self-harm behavior because of a peer-to-peer trust issue and not wanting everyone to know. The students met with the school principal to share the research findings and their proposed solution to introduce Sergio to the student body. There was youth power brokering between the PLUS students and the school principal when the youth disseminated their research findings. There was also youth power brokering when they met with the school principal to learn how to use Sergio, prepared a presentation and script, and then taught their peers how to use Sergio so that it could be implemented at their school.

> So, um, they went and made an appointment with the principal. They learned all about how it worked. They wrote their own script. And then they went classroom to classroom and, um, taught the kids about Sergio and how to use it. And it took off from there that just transitioned by them. They saw the problem, they came up with a solution…

Facilitator of Use of YPAR Evidence - Youth Power Brokering (Supportive)

In focal case 1 only, there are examples of youth researchers acting to create more supportive conditions for youth engagement in research that recognize power imbalances for youth. Through leading the PLUS forums, the PLUS students learned that their peers would not always share openly and honestly with adult staff and teachers present. Students were not confiding in teachers because they did not feel like their teachers took their experience and what they had to say seriously. In response to this, the PLUS forum format was changed to have small group discussions be students-only. This was important for creating a safe space for young people to discuss the mental health issues going on at their school:

> But when we go to small group breakouts and we're doing a deeper dive into the issues and brainstorming for solutions, we will dismiss the staff because they thought maybe at some level kids would not be as vulnerable and raw in their sharing.

Another component of the PLUS forum that created supportive conditions to discuss mental health issues is that it started with community-building activities so that the participating students could get to know each other and build connections. The initial community-building activities were necessary in order for students to feel vulnerable and safe to have conversations around self-harm/cutting.

Limitation of Use of YPAR evidence - Negative Adult Response

Although there are concrete examples of use of YPAR evidence in the implementation of mental health policy and practices, we also sought to identify negative adult responses that limited interactions and exposure of YPAR groups and evidence in order to gain insight into the decision-making processes and for understanding variation in use of evidence to adult decision-makers. In ASD, the PLUS forum where students were discussing mental health issues

in their school, the Direction Survey data showed that students felt they did not have a safe person on campus to talk to. When adult staff and teachers who attended the PLUS forum learned about this data, they did not agree with how the students felt and said that it was not true. This kind of negative response makes students feel their experience is invalidated and that teachers do not listen to what they have to say. Another example of a negative adult response to the mental health issues going on in ASD is, before the school principal met with the PLUS students to teach them how to use Sergio for implementation at their school, he initially responded to the cutting issue by suspending student because the school administration thought it was was disruptive to school:

> ...when we talked about what kinds of things do kids know and not tell, it was things like cutting, it was things about drugs. It was things about vaping, it was things about, you know a knife, or something, but the cutting one concerned them. Um, just because it, it just, it was one of the ones that concerned them. And then my principal, um, had a different tact about it. He started suspending kids who were cutting, which like I could not get on board with, but he said they were doing it to be disruptive to the school.

At that time, there was no student input into solutions to address the self-harm problem occurring. This adult response was negative because it was trying to dismiss the issue and it did not address the root problem contributing to the school's mental health issues. This likely contributed to students' feelings that adults do not listen to them or take their mental health experiences seriously. Additionally, the adult facilitator did not agree with the Superintendent suspending students for cutting but was unable to do anything to address it because she was "not in the place to go against the principal". This exemplifies unequal power dynamics between the students, adult staff, and Superintendent.

Focal Case 2 - BSD

YPAR Project Topic & Components to Inform Use of Research Evidence

Focal case 2 addressed the topic of mental health and substance use. BSD utilized Google surveys to all high school students and teachers during homeroom to gather data. They learned that students and teachers were reporting different responses around availability and accessibility of mental health resources and services in their school; many of the students felt that there were not enough mental health services. This allowed students to start talking about COVID-19 and mental health and substance use, and brainstorm actions for change:

> Um, so then they went into mental health, they started talking about how COVID really impacted mental health of a lot of students. Substance abuse had been an issue in their building that they were noticing, um, a lot of, um, just different people in the bathrooms, maybe smoking or just different things happening on the school campus that they wanted to bring attention to. Um, also they started to talk more about the need for, um, more resources in the building for mental health, um, differing security guards or just different counselors.

They started publicizing different mental health services that were on campus through posters and planning student-led assemblies to share the different mental health services available through the school and district. Lastly, they shared their process and findings by meeting with the Superintendent three times throughout the academic year and proposed hiring more school counselors, security guards, and staff to support student mental health. These examples describe

the YPAR project components to explain how the phases of youth-generated research such as, data collection, analysis, and dissemination of findings, inform use of YPAR evidence in schools.

Use of Research Evidence to Inform the Implementation of Mental Health Policy and Practices

We analyzed the use of research evidence codes and observed conceptual and instrumental use of YPAR evidence at BSD. The youth-led research at BSD produced survey data which showed that students were not aware of mental health services on campus, and that students wanted to feel like they could have trusted adults on campus whom they could talk to. After learning of these data, administrators wanted to promote the existing mental health services and make it more accessible to students. They wanted to ensure that the existing counseling services already in place in the district were being advertised and that students were aware of these services. They also wanted to consider the adult staff already on campus and intentionally use them in different roles to help support mental health services. Another example of conceptual use of the YPAR evidence by influencing how school decision-makers think about these mental health and substance use issues in school, as well as potential solutions with their current resources:

> I think it was 92% of students didn't feel that there were any services in place for mental health and in their [adult staff] eyes, they're [adult staff] putting in all these things into place from their end, but nobody knew that they were there. So I think that was the biggest piece that was like, okay, we're paying for services. We're, we're bringing in these outside agencies, but nobody's using them because they [youth] don't know about it. And so for that, I think that was the most impactful for them. Just figure out how do we advertise? How do we make sure that our students know that these services are there? How do we get teachers to kind of really push these services? How do you know? And just, how do we bring it all together?

Additionally, there were multiple examples of instrumental use of the YPAR evidence, in which it was directly applied to decision-making: in response to the substance use issue on campus, administrators responded by hiring two security guards and installing metal detectors on campus; QR codes were put around school to make scheduling an appointment with a school counselor more accessible; and the district applied the Teacher School Leader grant towards funding lead teachers to support classrooms with social and emotional learning implementation in elementary, middle, and high schools through classroom management.

Facilitator of Use of YPAR Evidence - Adult Power Brokering (Networking)

There are meaningful examples of adult allies connecting youth researchers with adults who hold power in decision-making to promote exposure of youth-generated research evidence. The BSD Superintendent, assistant Superintendent, and school principal all met with the students multiple times throughout the academic year and engaged in open conversations asking the students questions about what they were observing and experiencing related to the mental health services. Both the Superintendent and assistant Superintendent were in attendance because the Superintendent was stepping down at the end of the academic year and they wanted to make sure there was continuity in the district leadership around the research efforts. There was adult power brokering throughout the project between the adult facilitator and Superintendent to provide

updates of how it was going. In this example there is a positive adult response to youth-generated evidence because he was wanting to know more about what actions he could do before the end of the school year to make things better for students. There is also adult power brokering between the Superintendent and the school guidance counselors as important stakeholders in addressing the issues of mental health and substance use, in improving the ways mental health services are promoted and accessed by students.

Facilitator of Use of YPAR Evidence - Youth Power Brokering (Networking)

In BSD, the youth researchers were the ones networking with adult allies who hold power in decision-making to promote exposure of youth-generated research evidence. The youth were initially nervous to meet with the Superintendent to share their research findings, however, it ended up being a positive experience because the students were put in a position where they were leading the conversation and felt like their voices were being heard. The students shared about what their peers were feeling and navigating with their mental health, and they did not feel like the Superintendent was questioning them. There was youth power brokering of the YPAR evidence when they proposed actions that could be taken immediately to promote different school mental health services, and also their long-term goals to hire more staff to support mental health.

> I know that they were really nervous at first when I told them we were gonna have lunch with him and they seemed really nervous, but he really let them guide the conversation and he really listened. And so I think they felt more comfortable to talk. So it really was more student led.

Discussion

Summary of Key Findings

This study offers a unique contribution to the URE field by focusing on two focal cases in which youth-generated evidence and youth recommendations were utilized in the implementation of mental health policies and practices in school settings. The use of YPAR evidence was frequently coded (n=15) with conceptual use (n=7) and instrumental use (n=5) being the most common. Of note, there were no codes for expert, moral/political, or tactical use of research evidence in these focal cases. We observed instrumental use of YPAR evidence in the ASD focal case and, conceptual and instrumental use of YPAR evidence in the BSD focal case. It is significant that all of the uses of YPAR evidence outlined in this study were recommendations from the youth themselves, which underscores the importance of youth-generated evidence. This study offers examples of how YPAR findings addressed mental health issues (self-harm/cutting, and mental health and substance use) during the COVID-19 pandemic. The instrumental use of YPAR evidence in ASD was the implementation of Sergio, an anonymous reporting platform for youth to report concerning behavior related to self-harm and mental health. In BSD, there were many examples of instrumental use of YPAR evidence: administrators listened to the youth recommendations and hired two security guards and installed metal detectors on campus; and QR codes were put around school to make scheduling an appointment with a school counselor more accessible. These case studies support that youth are the best fit people to propose solutions and practices to address mental health issues because they are the ones with the lived experience. The youth-generated evidence suggested something

different than how adults were approaching and thinking about the issues and solutions. This is reflected in the conceptual use of YPAR evidence, in which the youth-generated evidence influenced how school administrators thought about mental health issues, potential solutions, and the accessibility of the existing counseling services and resources in the district.

Additionally, this study contributed novel findings to the URE literature by describing conditions that facilitate and limit use of YPAR evidence addressing mental health issues in school settings. In our analyses, we identified facilitators that created interactions and exposure of YPAR groups and evidence to adult decision-makers to potentially enhance the impact of YPAR on policies and practices including, adult power brokering - networking and youth power brokering - networking. The most frequently applied code was adult power brokering behaviors (n=23) with adult power brokering - networking being the most common type in the focal cases (n=10). Youth power brokering behaviors were frequently coded (n=18) with the majority being youth power brokering - networking (n=11) and youth power brokering - supportive (n=5). Across both districts there are examples of adult allies connecting youth researchers with adults who hold power in decision-making (e.g. school principal, Superintendent, assistant Superintendent). The YPAR adult facilitators' power broking behaviors connected key adult decision-makers with students for them to share their action proposal. In BSD, the Superintendent also brokered with the school guidance counselors as stakeholders after learning from the YPAR evidence that students were not aware of or accessing mental health services on campus.

Moreover, youth researchers acted as power brokers for their peers to disseminate findings and action for change. While the networking power brokering behaviors operated across both districts, ASD had an additional facilitator of URE of youth power brokering - supportive. Considering the two distinct contexts, ASD has a smaller number of schools in the district and is able to host PLUS forums for youth researchers to lead with their peers. These forums facilitate conditions for youth researchers to engage with their peers and support power sharing in the research process. Through leading the PLUS forums, the PLUS students learned that their peers would not always share openly and honestly with adult staff and teachers present, and so they changed the forum format to have small group discussions be students-only.

Lastly, we sought to identify negative adult responses that limited interactions and exposure of YPAR groups and evidence in order to understand variation in use of evidence to adult decision-makers. In ASD, when the Direction Survey data showed that students felt they did not have a safe person on campus to talk to, adult staff and teachers disagreed with how the students felt and said that it was not true. This is an example of a negative adult response because it made students feel invalidated and unheard by adults. Another negative response was when the Superintendent suspended students in response to the growing cutting issue because the school administration thought it was disruptive to school. The adult facilitator did not agree with the Superintendent suspending students for cutting but was unable to do anything to address it because of unequal power dynamics between the Superintendent. This is another example where youth generated evidence and proposed recommendations that were different from the approach adults were taking. A key difference between the focal cases was negative adult response as a limitation for use of YPAR evidence. Considering the two distinct contexts, ASD is a smaller district and community compared to the urban city setting of BSD. During the interview, the adult facilitator briefly discussed this dynamic, "I think at my school, because it's so small, I think that a huge barrier is that everything is so exposed. When you only have 60 kids in your entire middle school, there's no anonymity." This directly relates to what the PLUS students

were learning in the forums that students did not feel like talking or discussing the mental health issues going on and they did not want to report when they knew of incidents occurring.

Study Strengths & Limitations

The site selection was based on identifying sustained high-quality YPAR efforts in districts representing a diversity of policy contexts, geography (urban, suburban, rural), and student populations (diverse in terms of ethnicity and aggregate SES). A strength of this study is that the two cases enable us to explore the contextual variability in the use of YPAR evidence. We can observe how adult and youth power brokering behaviors can facilitate the use of YPAR evidence in two distinct settings. It also allows us to observe unique facilitators and limitations to URE. Specifically, we were able to see how the smaller context of ASD and their PLUS forums allowed for youth power brokering - supportive. The small context also has its limitations to YPAR projects focused on mental health in ensuring students feel comfortable sharing honestly in a small community where everyone is familiar with one another.

Although our research team is situated outside of participating districts, we are engaged in longstanding research practice partnerships and worked collaboratively with district partners to facilitate this research. Through the study methods, we are intentional in ensuring that our position as research collaborators does not undermine but rather strengthens the criticality and rigor of our research. We build the evidence base for YPAR and its impact through transparent and rigorous methods and a study design that uses deductive and inductive approaches to triangulate among multiple sources of data including interviews, memos, and contextual charts. The interviews involved a range of adult YPAR facilitators, district leaders and staff, school administrators with whom YPAR evidence is shared or who are in a position to potentially use YPAR evidence to inform decision-making. Snowball sampling was utilized as an effective approach to reach networks of groups that are not clearly defined and boundaried. This was important because policy decisions are not made by isolated individuals, but involve actors across districts and schools, and so we wanted to interview a diverse set of decision-makers. Beyond analyzing the perceptions, impact, and direct use of YPAR, we coded reports of the salient decisions and policies enacted at the school and district levels, to gain insight into the decision-making context and processes. We also explicitly considered negative responses to YPAR evidence relevant to the decisions at hand. The negative responses offered an opportunity for understanding variation in awareness, perception, and use for youth-generated research focusing on adolescent mental health.

Due to the timing that data collection began during the height of the COVID-19 pandemic, the YPAR teams and districts experienced enormous transitions and capacity challenges over the course of the study. One of the many impacts was the major disruption of in-person education in Spring 2020 through Spring 2021, as well as limited online YPAR instruction. This influenced the YPAR organizational structure and project components, such as YPAR research methods, data collection and analysis, dissemination of findings to adult decision-makers, and the use of research evidence. For example, one district as well as multiple schools slated for inclusion in our study did not have the capacity to engage in YPAR projects that conducted data-based inquiry. Further, while the larger study included multiple school and district sites, the present study focused on two YPAR focal cases that examined youth-generated evidence focused on mental health. Due to this relatively small number of focal cases, it is uncertain if the relationships we found here would also be found in a broader sample of cases,

and/or to current cases that differ from the remote/hybrid school contexts during the peak of the COVID-19 pandemic.

Future Directions

Future research on the use of YPAR evidence should consider mixed methods analyses that draw on the combined strengths of quantitative and qualitative data. Quantitative data can be used to help triangulate findings from and complement the qualitative analyses. For example, methods can include observation of YPAR activities assessed by the Measure of Youth Policy Arguments (MYPA) (Kirshner et al., 2020) assessment protocol and data collected using the Survey of Evidence in Education (SEE) (Farley-Ripple et al., 2022). The MYPA is an observation tool intended to assess the quality of students' presentations of research and policy advocacy, for both formative and summative use by teachers, and the SEE is a new instrument intended for school and district staff to assess what types of information staff use to make decisions, how they obtain this information, and how often they use research evidence to make a decision (Kirshner et al., 2020; Farley-Ripple et al., 2022). The MYPA and the SEE data could be helpful in advancing our research question around what facilitates and limits the use of YPAR evidence in school settings, and contribute to the URE theoretical insights specifically regarding youth-generated evidence.

Findings from this proposed research are likely to be of interest to adult YPAR facilitators, school administrators, and mental health professionals because of the potential contributions YPAR evidence can make towards the implementation of mental health policies and practices at the school- and district-level. Future YPAR research focused on addressing mental health issues in schools should prioritize the facilitators and power brokering behaviors described in this study to potentially enhance the impact of YPAR on policies and practices. Importantly, connecting youth researchers with adult allies who hold power in decision-making to promote exposure of youth-generated research evidence. In youth networking power brokering behaviors, youth researchers should lead the conversation and share their research process and data, and disseminate their findings and proposed solutions for change.

Adult allies play a key role in connecting youth researchers with adults who hold power in decision-making to promote exposure of youth-generated research evidence. School administrators and counselors are stakeholders for decision-making around mental health policies and practices in schools. We propose that adults in these roles should lead and act to create more supportive conditions for youth engagement in research that recognize power imbalances for youth. This is especially important when addressing vulnerable topics to create a safe space for young people to discuss the mental health issues going on at their school. Starting all YPAR programs with community-building activities is an initial way to have participating students get to know each other and build connections. A final way to create a safe environment to have open discussions about difficult topics like mental health would be to train adult facilitators and other adults engaging in the research process to listen to students and make them feel heard, validating their feelings and lived experiences regarding mental health.

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Appendix A

Codebook Data Items

Our coding sheet was primarily composed of open-ended, multiple-choice, or double-coding options, in which the coder could select all the applicable codes (exceptions are noted below). Every data item on our coding sheet had a "missing" option, reported in the tables. The selected articles were coded for the following data items.

YPAR Principles. The coders noted whether each article labeled the intervention as YPAR, CBPR (community-based participatory research), photovoice, and/or another variant of participatory research. They also captured the level to which each article demonstrated the three principles associated with YPAR: 1) inquiry based (youth investigated one or more topics by collecting information, data, and evidence), 2) participatory (youth shared power with adults by making choices/decisions about the topic, methods or actions, project planning, results dissemination, or social action), and 3) transformative (the program resulted in a project, product, or policy to change knowledge and practices to improve the lives of youth). Whereas the "inquiry based" criterion was required for review inclusion, the other two principles were assessed at three levels: 1) not present, 2) alluded to, or 3) described with examples in the methods, results, or discussion section. The codes for YPAR principles were mutually exclusive.

Study Characteristics. Study authors' discipline and funding source(s) were recorded for each study. In addition, study methods were coded as qualitative, quantitative, or mixed research methods (these codes were mutually exclusive). Further, we coded each study design as explicitly stated by the study's author(s), including ethnography, grounded theory, phenomenology, randomized controlled trial, quasi-experimental, case study, cross-sectional, pre/post, and/or longitudinal. Data type was coded to include administrative, archival, interview, focus group, survey, observations, photos/video, and/or other. Data sources included youth in the PAR project, youth not directly involved in the PAR project, community members, representatives from a partner agency, parents and caregivers, and/or other. Sample sizes were recorded, and demographics were coded, including age, gender, race, sexuality, and socioeconomic status.

YPAR Project Characteristics. The setting in which the YPAR program was delivered was coded as school, church, youth/community center, university, and/or clinic. The frequency of YPAR program meetings was captured as number of sessions, the total program duration, and the YPAR topic investigated by the youth was recorded. The youths' method of social action was coded as education/awareness building (i.e., talking with or disseminating a product to a community/ stakeholder group), advocacy (i.e., meeting with a decision maker to ask for changes to a specific policy or practice), and/ or organizing (i.e., mobilizing community members to ask decision makers for changes to a law or policy). The audience of the youths' social action was coded as governmental agencies and other elected or appointed decision-making bodies, schools and organizations, social networks, the academy, and/or the general public.

Youth Empowerment Outcomes Associated With YPAR. Youth outcomes were defined as any change in participants' learning, growth, or development as reported by the study author(s). Aligned with the theoretical conceptualization, the coding approach distinguished among intrapersonal, interactional, or behavioral components of psychological empowerment. The intrapersonal component considers how people think about their capacity to influence social and political systems. Youth empowerment outcomes coded are related to domain-specific perceived

control and self-efficacy, motivation to control, perceived competence, and mastery. The interactional component is between the individual and their environments, and refers to the understanding people have about their community and related sociopolitical issues. Youth empowerment outcomes coded are related to critical awareness of their environment, resource mobilization, understanding of causal agents in order to effectively interact in their setting, and skill development. The behavioral component refers to an individual's actions taken to directly influence outcomes**.** These behaviors influence the social and political environment through participation in community organizations and activities. Youth empowerment outcomes coded are related to community involvement and organizational participation.

Appendix B

Codebook Data Items

      Our coding sheet was primarily composed of open-ended, multiple-choice, or double-coding options, in which the coder could select all the applicable codes (exceptions are noted below). Every data item on our coding sheet had a "missing" option, reported in the tables. The selected articles were coded for the following data items.

      YPAR Principles. The coders noted whether each article labeled the intervention as YPAR, CBPR (community-based participatory research), photovoice, and/or another variant of participatory research. They also captured the level to which each article demonstrated the three principles associated with YPAR: 1) inquiry based (youth investigated one or more topics by collecting information, data, and evidence), 2) participatory (youth shared power with adults by making choices/decisions about the topic, methods or actions, project planning, results dissemination, or social action), and 3) transformative (the program resulted in a project, product, or policy to change knowledge and practices to improve the lives of youth). Whereas the "inquiry based" criterion was required for review inclusion, the other two principles were assessed at three levels: 1) not present, 2) alluded to, or 3) described with examples in the methods, results, or discussion section. The codes for YPAR principles were mutually exclusive.

      Study Characteristics. Study authors' discipline and funding source(s) were recorded for each study. In addition, study methods were coded as qualitative, quantitative, or mixed research methods (these codes were mutually exclusive). Further, we coded each study design as explicitly stated by the study's author(s), including ethnography, grounded theory, phenomenology, randomized controlled trial, quasi-experimental, case study, cross-sectional, pre/post, and/or longitudinal. Data type was coded to include administrative, archival, interview, focus group, survey, observations, photos/video, and/or other. Data sources included youth in the PAR project, youth not directly involved in the PAR project, community members, representatives from a partner agency, parents and caregivers, and/or other. Sample sizes were recorded, and demographics were coded, including age, gender, race, sexuality, and socioeconomic status.

      YPAR Project Characteristics. The setting in which the YPAR program was delivered was coded as school, church, youth/community center, university, and/or clinic. The frequency of YPAR program meetings was captured as number of sessions, the total program duration, and the YPAR topic investigated by the youth was recorded. The youths' method of social action was coded as education/awareness building (i.e., talking with or disseminating a product to a community/ stakeholder group), advocacy (i.e., meeting with a decision maker to ask for changes to a specific policy or practice), and/ or organizing (i.e., mobilizing community members to ask decision makers for changes to a law or policy). The audience of the youths' social action was coded as governmental agencies and other elected or appointed decision-making bodies, schools and organizations, social networks, the academy, and/or the general public.

      Transformative Social and Emotional Well-being Outcomes Associated With YPAR. Youth outcomes were defined as any change in participants' learning, growth, or development as reported by the study author(s). Aligned with the theoretical conceptualization, the coding approach distinguished among identity, agency, belonging, collaborative problem solving, and curiosity focal constructs of tSEL. Identity outcomes coded are related to how youth viewed themselves as individuals and as part of the world around them, agency outcomes coded are

related to feeling empowered to make choices and take actions that produce a positive difference, belonging outcomes coded are related experiencing acceptance, respect, and inclusion within a group or community, and collaborative problem solving outcomes coded are related to building shared understanding and working together to come to solutions by pooling knowledge, skills, and efforts. Lastly, curiosity outcomes coded are related to pursuing different perspectives and new experiences to generate knowledge about oneself in relation to others and the world. It contributes to attention, engagement, learning, and informed decision making based on open-minded investigation that sparks critical self and social analysis.

INTERVIEW PROTOCOL
SITE-LEVEL **ADMIN, COUNSELOR, OR STAFF**

<u>*Script*</u>*: Thank you for giving your time to participate today. We're interested in learning about how your school and the district make decisions and also the ways in which students give their input. All of your interview answers are confidential—we will use a pseudonym (instead of your real name). Is it ok if I audio record? It will help me make sure I capture everything that you say.*

Are you ready to start?

1) Could you briefly tell me about your position and your main responsibilities? *[if they haven't said this already: How long have you been in the role & at this district?].*

2) What do you see as the major challenges facing the district and its students? What are your highest priorities in your role?

3) Are there any specific "problems of practice" or equity that you and/or the district have identified for your site to work on (probe to understand what those are?)

4) I'm curious about the kinds of major decisions that you have had to make recently *(e.g. dealing with budget cuts, school policies, curriculum – probe to identify 1-2 issues or decisions relevant to this person's role or dept.).*

    a. For [Issue 1]:
        i. How do decisions about this particular issue happen here? Are there particular meetings where "action occurs?" What works happens outside of those meetings?
        ii. What if anything have you consulted to inform [line of work]? How does data enter in? How if at all does research enter in? How if at all do other forms of knowledge enter in?
        iii. Did students provide input on these issues or decisions – In what ways? – If there was input, probe: how was this input useful? Not useful? If no input, any ways in which input would have been helpful? *(Probe for any overlap or distinctions between youth input versus youth research projects and findings, if any)*
        iv. (if not already answered): In your opinion, what factors led to your school considering the input of students on this decision? What role did you play in this decision-making process? Who else was involved? How did the school decide whether or not to implement student input? How typical was the process of using student input? In particular, deciding whether to use it compared to other input (i.e. parents, teachers, other administrators) that your school has considered?
        v. Are there any upcoming challenging policy decisions on the horizon? What role might students play in contributing their input to these decisions

b. For [Issue 2]:
   i. How do decisions about this particular issue happen here? Are there particular meetings where "action occurs?" What works happens outside of those meetings?
   ii. What if anything have you consulted to inform [line of work]? How does data enter in? How if at all does research enter in? How if at all do other forms of knowledge enter in?
   iii. Did students provide input on these issues or decisions – In what ways? – If there was input, probe: how was this input useful? Not useful? If no input, any ways in which input would have been helpful? *(Probe for any overlap or distinctions between youth input versus youth research projects and findings, if any)*

5) So in general, what are the kinds of issues or areas in which students **do** have a role in providing input or evidence, and what are the areas in which they do not? How do you get students' perspectives or support on school issues?
   a. Is there a student government here? What types of decisions does the student government make?
   b. Are there students on the school site council (get a sense of roughly how many, how do they participate?)
   c. Are there other school committees or other decision-making bodies where students have a role or give input? Do you use any informal ways to acquire student input?

6) Do the opportunities for student input here feel about the same or different from other districts or departments you have been in or worked in? Do you feel that the opportunities for student input here have changed at all over time?

7) What would you like to see in terms of students' involvement in policies or decision-making in different areas of the school (for example, student clubs and student government, promoting students' mental and physical health, student conduct and dress, teacher-student relations, student achievement)? *What barriers or challenges make it difficult to achieve this vision?*

Section on YPAR projects specifically:
8) What kind of contact did you have with youth research teams at school sites this year? *[terminology will be adapted to be appropriate for specific districts terms]. Probe as relevant to get narratives about: [if none, skip to #11 - if yes, move on to probes]*

   a. *types of contact and communications*
   b. *perceived quality of research evidence and recommendations (probing for criteria for quality)*
   c. *how relevant to problems and decisions faced at the school*
   d. *how much they trusted the students' research findings*
   e. *how effectively the students communicated their research.*
   f. *if there was direct contact:* suggestions for improvement?

g. How do you feel that the research of the YPAR teams has changed or benefited your school (if at all)?

Make sure to probe to really understand the story, and the role of the YPAR evidence and/or advocacy efforts in any change - push here to understand how this played out]

9) What are the outcomes that you would like to see resulting from these kinds of youth research projects at the school level? At the student level? District level?

10) Are there particular challenging areas that you feel are ripe for student input and research? (Probe to understand why/how)

11) (If relevant): How do you feel about the role of (our university) in this project? What has been helpful or not helpful? Are there other ways that you feel that we could be helpful to the district and students?

INTERVIEW PROTOCOL
DISTRICT **ADMIN OR STAFF**

<u>**Script**</u>*: Thank you for giving your time to participate today. We're interested in learning about how your district makes decisions and also the ways in which students give their input. All of your interview answers are confidential—we will use a pseudonym (instead of your real name). Is it ok if I audio record? It will help me make sure I capture everything that you say.*

Are you ready to start?

1. Could you briefly tell me about your position and your main responsibilities? *[if they haven't said this already: How long have you been in the role & at this district?].*

2. What do you see as the major challenges facing the district and its students? What are your highest priorities in your role?

3. I'm curious about the kinds of major decisions that you have had to make recently *(e.g. dealing with budget cuts, school policies, curriculum – probe to identify 1-2 issues or decisions relevant to this person's role or dept.).*

   a. For [Issue 1]:
      i. How do decisions about this particular issue happen here? Are there particular meetings where "action occurs?" What works happens outside of those meetings?
      ii. What if anything have you consulted to inform [line of work]? How does data enter in? How if at all does research enter in? How if at all do other forms of knowledge enter in?
      iii. Did students provide input on these issues or decisions – In what ways? – If there was input, probe: how was this input useful? Not useful? If no input, any ways in which input would have been helpful? *(Probe for any overlap or distinctions between youth input versus youth research projects and findings, if any)*
      iv. Are there any upcoming policy decisions you will have to make? What role might students play in contributing their input to these decisions?
   b. For [Issue 2]:
      i. How do decisions about this particular issue happen here? Are there particular meetings where "action occurs?" What works happens outside of those meetings?
      ii. What if anything have you consulted to inform [line of work]? How does data enter in? How if at all does research enter in? How if at all do other forms of knowledge enter in?
      iii. Did students provide input on these issues or decisions – In what ways? – If there was input, probe: how was this input useful? Not useful? If no input, any ways in which input would have been helpful? *(Probe for any overlap or distinctions between youth input versus youth research projects and findings, if any)*

iv. Are there any upcoming policy decisions you will have to make? What role might students play in contributing their input to these decisions

4. In general, from what you see in the district, what are the kinds of issues in which students **do** have a role in providing input or evidence, and what are the areas in which they do not? How do you get students' perspectives or support on school issues?
    a. Are there youth councils or other decision-making bodies where students have a role or give input? Do you use any informal ways to acquire student input?

5. Has the information that you have received from students helped in making district decisions? In what ways? Can you tell me about a time when you felt like you (or the district) were able to get students' input? *(note: if this has already been fully answered above, skip it)*

6. Do the opportunities for student input here feel about the same or different from other districts or departments you have been in or worked in? Do you feel that the opportunities for student input here have changed at all over time?

7. What would you like to see in terms of students' involvement in policies or decision-making in different areas of the district? *What barriers or challenges make it difficult to achieve this vision?*

Section on YPAR projects specifically:
8. What kind of contact did you have with youth research teams at school sites this year? *[terminology will be adapted to be appropriate for specific districts terms]. Probe as relevant to get narratives about: [if none, skip - if yes, move on to probes]*

    a. *types of contact and communications*
    b. *perceived quality of research evidence and recommendations (probing for criteria for quality)*
    c. *how relevant to problems and decisions faced at the school*
    d. *how much they trusted the students' research findings*
    e. *how effectively the students communicated their research.*
    f. *if there was direct contact:* suggestions for improvement?

If there is no contact or awareness of YPAR in the district, only ask #11 and #13 or whatever is relevant.

9. How do you feel that the research of the YPAR teams has changed or benefited the district or specific schools (if at all)? *[make sure to probe to really understand the story, and the role of the YPAR evidence and/or advocacy efforts - really push here to understand how this played out]*

10. What are the outcomes that you would like to see resulting from these kinds of youth research projects at the school level? At the student level? District level?

11. Are there particular challenging areas that you feel are ripe for student input and research? (Probe to understand why/how)

12. (If relevant): How do you feel about the role of (our university) in this project? What has been helpful or not helpful? Are there other ways that you feel that we could be helpful to the district and students?