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Using Youth Participatory Action Research as a Health Intervention in Community Settings

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Abstract

Youth participatory action research (YPAR) emphasizes positive youth development by engaging young people as co-researchers and change agents on complex issues to produce solutions that are relevant to youth. YPAR has primarily been used in classroom and youth organization settings, which means there are very few examples of its usage in other community-based settings or as a health intervention approach. Additionally, there is a need for further study of YPAR implementation processes and the effect on youth development and well-being outcomes. In this article, we highlight the innovative use of YPAR as a community-based health intervention through two case studies in which the adolescent health issues of physical activity and suicide were addressed. We describe the design of each YPAR health intervention and the studies that were conducted to link participatory research processes to youth development and health outcomes. Using the lessons learned from these YPAR interventions, we propose best practices for the design, implementation, and evaluation of YPAR as a health intervention strategy in a community setting.

Keywords

youth participatory action research; positive youth development; adolescent; health intervention; outcomes; community-based; physical activity; suicide prevention

Introduction

Youth participatory action research (YPAR) engages young people in research on issues that matter to them and builds their capacity to take action within their own schools and communities (Cammarota & Fine, 2008). During the research process, youth identify targets for action by critically analyzing their social contexts and injustices that negatively affect their development (Rodriguez & Brown, 2009). Due to its emphasis on positive youth development (PYD), in which youth strengths and agency are promoted (Lerner, 2004), YPAR is considered a powerful method for countering the common adult-generated, problem-based narrative associated with young people (Langhout & Thomas, 2010).

Youth and adults collaborate and learn from each other in YPAR; therefore, it is an intervention on youth development and the socio-ecological systems that impact it (Ozer, 2017). YPAR has been shown to impact youth-reported empowerment (Ozer & Douglas, 2013) and has been used to transform systems and issues closely connected to youth, such as educational injustice and health care access (Fine, Torre, Burns, & Payne, 2007; Ozer, 2016). Although YPAR is utilized to positively impact youth and their social environments, the field is lacking in rigorous research on YPAR's implementation processes (Berg, Coman, & Schensul, 2009; Flicker, 2008; Ozer, 2017; Ozer & Douglas, 2013) and outcomes, including those linked to PYD (Ozer & Schotland, 2011; Ozer & Douglas, 2013), which leaves its processes and effects mostly unknown. Furthermore, YPAR has primarily been used in classrooms and youth organizations (Ozer, 2016), and has rarely been implemented in health interventions and community-based settings.

There is great potential to expand YPAR beyond classrooms and social action programs in order to have a broader impact, especially on disadvantaged populations that may benefit most. Overall, there are two main areas for growth in the literature: 1) expanding the variety of settings in which YPAR is implemented and 2) systematically assessing the implementation of YPAR processes and how they link to youth outcomes. Consistently conducting process and outcome evaluations of YPAR is crucial to determining the components that lead to benefits for youth, and building the evidence base for YPAR as a PYD intervention.

To address the gaps in the literature, we position YPAR in this article as an innovative public health approach for issues that affect adolescents and argue that YPAR can be a powerful health intervention strategy while producing research that is relevant to youth. To illustrate the use of YPAR as an intervention, we describe the implementation of YPAR in two different community-based settings to address two urgent adolescent public health issues—decreased physical activity and suicide. We briefly describe the youth development impacts to add to existing literature that highlights the diverse ways in which PYD is implemented (Catalano et al., 2002; Eccles & Gootman, 2002) and use findings from both YPAR intervention process evaluations and field notes to propose a set of best practices that contribute to the literature on YPAR implementation, its impact on youth development, and its applicability for health interventions in community-based settings.

YPAR Intervention Applications

Case Study #1: Increased Physical Activity

Adolescent obesity rates have more than tripled in the past five decades (Ogden et al., 2016) and obesity prevalence is highest for African American and Hispanic youth (Ogden, Carroll, Kit, & Flegal, 2014). The early adolescent period is characterized by major declines in positive health behaviors (Kelly et al., 2010; Wright, 2011), like physical activity (PA). The greatest declines occur from early to late adolescence (3rd to 10th grade) and among girls and minorities (Bradley, McMurray, Harrell, & Deng, 2000; Kelly et al., 2010). Intervention before or during this critical developmental period is crucial. Despite decades of research, interventions to decrease obesity with adolescents have only produced small effects when implemented in community and school settings (Dobbins, Husson, DeCorby, & LaRocca,

2013; Kropski, Keckley, & Jensen, 2008). Small intervention effects are likely due, at least in part, to previous interventions failing to align with adolescents' developmental needs, values, and interests.

To address these gaps, YPAR was used as an intervention to increase youth voice in decisions surrounding physical activity (PA) options and to align activities with youth interests in school-based aftercare programs for middle school youth. Two aftercare programs from widely accessible national and state-based youth programming organizations were chosen by the principal investigator (PI: Nicole Zarrett, PhD) for the larger PA intervention in which the YPAR project was nested. Both aftercare programs were located in urban areas and were considered low-resourced sites. The programs had a relatively consistent daily schedule and served the purpose of general after school care.

All students who attended the aftercare programs were given the opportunity to participate in the activities, but only those with consent completed measurement. Consent was obtained from a total of 64 sixth – eighth grade youth across both programs. Most youth identified as non-Hispanic Black/African American (93.8%) and reported that they qualified for free/reduced lunch (75%).

A health-focused YPAR curriculum was collaboratively designed with aftercare program staff and implemented standalone in one program (YPAR only) by trained adult partners, and paired with a PA intervention (YPAR + PA) in a different program. PYD theory (Lerner, Almerigi, Theokas, & Lerner, 2005) and the Typology of Youth Participation and Empowerment (Wong, Zimmerman, & Parker, 2010) were used as conceptual frameworks in the YPAR curriculum to increase individual youth empowerment through 1) gains in leadership, public speaking, research and social skills, and advocacy competencies; 2) deepened connections with peers, staff, and the broader school community; and 3) autonomy promotion in a power-sharing youth-adult partnership. The purpose of pairing the health-focused YPAR curriculum with a PA intervention (Connect through PLAY, PI: Nicole Zarrett, PhD) in a separate program was to assess the feasibility of integrating YPAR into a theoretically similar (i.e., Self-Determination Theory; Deci & Ryan, 2008) health-focused intervention as a means to increase students' healthy behavior long term.

To develop the curriculum, online YPAR modules (<http://yparhub.berkeley.edu/>) were adapted for middle school youth after consulting with the developers. The primary modification shortened the length of activities and the amount of time students were engaged in seated discussion. Additional modifications were made to integrate PA topics into each session and fit the available program time frame, such as only teaching the selected photovoice method instead of exposing youth to other methods. Photovoice was selected because it is interactive, works well in a group format, and involves art and movement, which was thought to appeal to youth who have competing activity choices in the aftercare program. Additionally, photovoice aligns with YPAR values to enable participants to (a) identify and capture their community's strengths and areas for improvement, (b) engage in critical dialogue through discussion of photographs, and (3) reach policy makers (Wang, 2006).

Within the health focused YPAR curriculum, groups of five to ten youth were paired with one to two consistent adult partners who collaborated with youth in critical and collective inquiry through the photovoice research process over five to seven weeks. Youth discussed in groups the systemic influences on their health and the barriers and promoters of PA in their life, including the influence of youth and adult power differentials in health decision-making. Adult partners modeled equity and power-sharing throughout the intervention by fostering youth capacity to conduct research. The youth took pictures of barriers and promoters of PA in their programs and schools, then they analyzed the photo data to determine what changes were feasible based on their knowledge of existing power structures. Youth and adult partners brainstormed together to identify relevant stakeholders in their schools and ways to disseminate their findings to produce actionable change. Youth created a poster board presentation that included their photo data, a catchy slogan, their proposed change idea, and quotes. Then they advocated for their change idea by presenting it to school and program stakeholders during a parent/community night.

A mixed method concurrent triangulation design was used to evaluate the feasibility of implementing the essential elements of health focused YPAR in the two aftercare programs and to assess changes in youth empowerment. The research design drew from multiple perspectives (i.e., adult partners, youth, trained observers) and utilized qualitative journals, a modified observational tool (Ozer & Douglas, 2015), and modified quantitative empowerment surveys (Ozer & Schotland, 2011) conducted with youth participants. Findings from systematic observations of program implementation conducted by trained raters showcased differences in feasibility of YPAR essential elements depending on the site. For example, adult partners at both sites were able to focus on youths' strengths and involve them in the reporting and dissemination of results with acceptable dose and fidelity. However, adult partners in the YPAR only program were better able to focus on local relevance and ecological perspectives, while those in the YPAR + PA program promoted youths' advocacy for social action with higher fidelity.

Linking YPAR to the PYD outcome of general youth empowerment, youth in the YPAR + PA program reported significant increases in the subdomains of empowerment: participatory behavior, sociopolitical skills, and perceived control from baseline to post-intervention, while the youth in the YPAR only program did not report these gains. The differences in findings may be related to contextual factors, such as buy-in from program staff/school administrators and access to parents, or implementation factors, such as differences in program structures. Youth in the YPAR + PA program continue to be involved in decision-making in their aftercare program post implementation, as the assistant principal and program staff created a regular feedback mechanism to make this possible.

The study provided preliminary evidence that it is feasible to implement YPAR essential elements (a) in a shorter time frame than typically is recommended in the participatory literature, (b) with middle school youth, (c) within pre-existing aftercare programs, and (d) alongside a PA intervention. Programs may benefit from implementing YPAR in aftercare because it offers support for youth voice, and youth, feeling heard and self-efficacious, may become more engaged in school, the program, and future social change efforts (Cammarota

& Fine, 2008; Ozer & Douglas, 2013). More research is needed to determine how YPAR participation impacts long-term health behaviors related to PA.

Case Study #2: Adolescent Suicide Prevention

Youth have largely been excluded from mental health and suicide prevention research and program development (White, Morris, & Hinbest, 2012). As the adolescent suicide rate increases and places suicide as the second leading cause of death for 10–24 year olds (CDC, 2015, 2016), youth involvement in solving this issue is imperative. There is especially a need for strategies that (a) address suicide risk factors and increase protective factors (Stone & Crosby, 2014); (b) develop adolescent problem-solving and help-seeking behaviors to promote treatment utilization (Robinson et al., 2013); and (c) employ innovative methods that strengthen research quality and engage youth as agents of change (Kral et al., 2009; Wexler, Gubrium, Griffin, & DiFulvio, 2013). Consequently, YPAR was implemented with the Youth Council for Suicide Prevention (YCSP) as a preventive intervention model to positively impact individual youth and their capacity to contribute to regional suicide prevention efforts.

Cincinnati Children's Hospital Medical Center initiated the YCSP in 2013 to engage youth in improving emergency department screening protocols and regional prevention efforts. High school students are recruited through local schools and approximately 25 youth voluntarily participate during an average cohort year (August–May), with many continuing their involvement year after year. Most of the council's meetings occur in a hospital meeting room on bi-weekly weekends; however, youth may also work on projects at home and in the community. Most notably, the youth commit to engaging in council activities outside of their other school-related activities, but they often incorporate YCSP activities into their schools, which helps to connect the suicide prevention efforts of a large healthcare provider with educational settings.

This case study focuses on the use of YPAR during the 2015–2016 cohort year when YCSP youth worked with the academic partner to fully design and conduct their own qualitative interview study of peer perceptions of conversations about the topic of suicide. The academic partner engaged YCSP youth in activities throughout the year to help them develop shared (a) research questions, (b) study design and methods, (c) study sample and recruitment activities, (d) data collection protocols, (e) data analysis and interpretation, and (f) strategies for dissemination and action. During this year, the YCSP YPAR model was strengthened and examined through the integration of PYD (Lerner, 2004) and social ecological (Bronfenbrenner, 1979) theoretical frameworks to emphasize individual youth as active agents of change and as having the capacity to affect their own competencies while contributing their communities (Brandtstädter, 1998, 1999). The integrated model facilitated an in-depth examination of the interactions between individuals, youth development in YPAR, and potential impacts on socio-ecological systems, such as families, schools, and healthcare.

A concurrent mixed methods research design was used in the study of this YPAR intervention, with priority on an end-of-year focus group and individual paintings combined with narratives, each of which were conducted with YCSP members. Quantitative pre/

posttest measures of self-esteem (DuBois, Felner, Brand, & Phillips, 1996), psychological empowerment (Ozer & Schotland, 2011), and youth agency and self-efficacy (Ozer & Schotland, 2011) were also triangulated with the qualitative and arts-based data. The study examined (1) the usability of YPAR as an innovative approach for youth development, (2) youth experiences with YPAR for suicide prevention, and (3) youth capacity for conducting suicide prevention research.

Study findings provided detailed insights about skills acquired by youth and the dialogic and reflexive processes that were foundational to youth development in YPAR. In addition to the acquisition of hard skills related to research, decision-making, and leadership that youth believed benefitted their academic and career goals, findings showed that confidence was gained through a fluid and iterative cycle of opinion formation, sharing, and validation that occurred first within the YCSP membership, then among the youth researchers and their peers through the research interview process. Data from participating youth indicated the confidence gained through this first- and second-cycle opinion process contributed to important changes in individual youth development, promoted group cohesion, and fostered a positive perception of their collective capacity to address adolescent suicide. It also prompted the peer research participants from whom YCSP members collected data to express interest in becoming involved with suicide prevention efforts. YCSP members are currently using the results of their study to develop school-based prevention programming that democratically engages the entire student body and faculty in developing strategies for addressing mental health and suicide within their own school buildings. They hope to implement their program in high schools across the region.

Findings from this study emphasized YPAR as an intervention strategy with the potential to produce a *developmental cascade* where changes in one domain or system influence another domain or system and there is a cumulative effect over time (Masten & Cicchetti, 2010). The study highlighted opinion formation-sharing-validation as a key YPAR process to help youth navigate multiple socio-ecological environments and use their newly obtained skills and knowledge to continuously influence, and be influenced by, those environments. Thus, the developmental cascade in this case is the result of cumulative and iterative building of individual and group protective factors throughout the youths' work together. The study has implications for the use of YPAR as an adolescent suicide preventive intervention to influence individual PYD and environmental outcomes in order to protect against suicidality. The identified opinion process facilitated by the YPAR approach may also be applicable to other YPAR health interventions that aim to develop youth confidence and capacity to improve their community and address issues that affect them.

Case Study Implications for Practice

Though youth are often included in research about complex health and social issues, their full involvement as co-researchers throughout the process is underrepresented (Jacquez, Vaughn, & Wagner, 2013), as is measurement of implementation and outcomes. We have furthered the work of others in this domain (Ozer & Douglas, 2013; Ozer, Newlan, Douglas, & Hubbard, 2013; Ozer & Schotland, 2011) by contributing to the assessment of key YPAR and youth development constructs and outcomes via the two presented case studies. We have

also expanded the potential usage and impact of YPAR by conceptualizing it as an intervention strategy that can be implemented in a variety of community-based settings in order to impact youth health behaviors through PYD mechanisms. However, a proffered conceptualization and details about specific projects may not be enough to help other researchers and practitioners use YPAR for a diverse range of health topics in highly contextualized local settings. To advance the applicability and efficacy of YPAR as a health intervention across a variety of domains and settings, it is important to not just discuss outcomes, but also document and analyze the implementation and evaluation process to understand potential pitfalls and benefits.

Methods

Data Collection

Both of the authors were the primary facilitators of YPAR in their respective settings and completed comprehensive studies of YPAR implementation via structured process evaluations in addition to the effects on youth development outcomes. Process evaluation methods overlapped with the methods described in each respective case study, such as observations by trained raters and focus groups. Each study also incorporated field notes recorded by the academic partners throughout the YPAR implementation and included a comprehensive review of the YPAR literature.

Analysis

Process evaluation data were used to identify the strengths and limitations of YPAR implementation in the two case study settings and were combined with the authors' previous reviews of the YPAR literature to further identify pathways from YPAR implementation to PYD outcomes. The authors (a) discussed the findings from each process evaluation, (b) reviewed the limitations sections of their respective studies, and (c) compared field notes and previous YPAR literature reviews. These data were then systematically categorized to identify recommendations that align with key stages of the research process and were transformed into a list of best practice findings to assist others in implementing YPAR health interventions in community-based settings.

Findings and Discussion

The YPAR for health interventions best practices are categorized across three main phases—design, implementation, and evaluation. They are categorized in this manner to assist others with linking YPAR processes to outcomes when using YPAR as a health intervention. We propose the following best practices for each phase separately; however, the phases are interdependent and overlap at multiple points.

YPAR intervention design.

1. Discuss academic and community stakeholder YPAR intervention expectations.—The implementation of YPAR in a community setting balances academic and community stakeholder values and goals. Both parties benefit from early and open discussion about the aims of YPAR, expectations for YPAR health intervention

implementation and outcomes, and potential benefits and risks in order to determine the readiness of both parties to engage in the endeavor. A crucial first step is communication about the extent of stakeholder involvement throughout the intervention to determine their readiness to host it.

2. Include stakeholder groups in the YPAR intervention design.—Equitable community engagement is the crux of participatory research. Involving host site staff from the beginning can assist with developing an intervention that is more rigorous, relevant, and better able to reach the priority youth population. Discussion of shared goals and staff involvement can align academic and stakeholder expectations, and foster a deeper connection to the work. Furthermore, adult stakeholder involvement provides integrated support for youth and shows youth that adults are interested in their ideas, which may be contrary to some of their beliefs (Cammarota & Fine, 2008). Staff can be especially helpful in identifying the appropriate priority population and developing strategies for maintaining engagement, including cultural and logistical considerations related to transportation needs; incentives; food; access to caregivers in emergency situations; and, physical, behavioral, or other supports.

3. Incorporate the essential elements of YPAR.—Existing literature outlines the essential elements of YPAR based on the aims of the approach (Ozer, 2017; Ozer & Douglas, 2015). Although YPAR is not a scripted research approach and may be implemented in a variety of ways, the development of a YPAR intervention should include a review of these existing elements and clear articulation of how they will be integrated into intervention activities, including how they may be expanded upon in the intervention design.

4. Align YPAR with a health behavior change model.—Using YPAR to improve health outcomes necessitates a purposeful health behavior change framework that helps to identify expected outcomes. Carefully consider the potential benefits of YPAR and the selected health model separately and when paired together. The development of a theory of change and logic model can assist with operationalizing the combined components within the YPAR intervention and articulate how those will affect youth development and health outcomes.

5. Determine which intervention components can be flexible.—YPAR responds to local community needs; therefore, it must be implemented in a flexible, modular fashion to meet the changing needs of the community and sudden changes in the setting. Explicitly identify the areas in which the implementation team may be flexible in the delivery of the intervention while adhering to the essential YPAR intervention elements to make sure youth still receive the expected activities and dosage.

YPAR intervention implementation.

1. Include stakeholder groups in YPAR intervention implementation.—Implementation details may affect how youth experience the intervention and can ultimately impact the expected intervention outcomes. When relying on a community-based host site, discuss in detail how the YPAR intervention will be operationalized within the setting,

including factors that affect the structure of the program. Some examples include: building access during non-business hours, times when a program is not in operation (e.g. holiday closures) which may affect the time available for intervention implementation, the type of equipment needed for youth to carry out their research projects, and whether refreshments may be served within the space. Potential budget implications for existing programs and how structural costs may be offset by available funding should also be discussed.

2. Focus YPAR participatory components on the selected health topic.—The youths' change efforts should align with the topic that the implementation team expects to be impacted. For example, if youth are to become more physically active, their research and change efforts should focus on ways to make their program more conducive to physical activity. Congruency between the health topic and social change can build the youths' value system and self-efficacy in that topic area to contribute to improvements in those specific health behaviors.

3. Balance being youth-driven with impact on expected outcomes.—YPAR interventions require letting the youth take the lead on identifying health-related values and development of research-based actions while also making sure that they are benefitting in a healthful way from the work. YPAR facilitators may experience a tension between trying to impact health outcomes and not directly telling youth what health values to hold and activities to conduct, which fosters youth development outcomes. Therefore, it is important for facilitators to continuously reflect on the balance between being a researcher, promoter of youth development, and health educator. Clinical skills in Socratic questioning and motivational interviewing during intervention activities also provide a strengths-based approach to focusing group discussion, prompting youth to identify their own health-related beliefs, and helping youth identify how they will use their research findings to effect change.

YPAR intervention evaluation.

1. Process evaluation.—YPAR health interventions in community-based settings rely on three primary levels of partnership: (1) the community stakeholder and academic researcher, (2) the community stakeholder and youth participants, and (3) academic researcher and youth participants. The combination of participatory group processes and intervention implementation necessitate a thorough process evaluation to assess power sharing processes, decision-making processes, and contextual factors and implementation modifications that may have influenced youth development mechanisms and health outcomes.

2. Outcomes should span multiple levels of impact.—YPAR health interventions are a hybrid approach to improving youth well-being; therefore, outcomes should include individual youth development outcomes as a result of YPAR and individual health outcomes related to the selected topic. Additionally, the principles of social change embedded within YPAR should inform the development of long-term community-level outcomes that are expected to result from the youth taking action, although they may not be specifically addressed within a single iteration of intervention delivery. YPAR health intervention outcomes and rigorous methods for examining them should be identified during the

intervention design stage and are ideally developed in partnership with key community stakeholders. Future research should also compare YPAR health interventions to other types of youth development programs and health interventions to determine added benefit of their use.

3. Obtain participant and stakeholder perspectives.—Process and outcome evaluation activities should include quantitative instruments that measure youth development and health behavior change constructs, as well as in-depth qualitative and/or arts-based methods that obtain youth and adult stakeholder perspectives on the benefits of the YPAR intervention and areas for improvement in that specific setting and population. The utilization of mixed methods within participatory research approaches can be particularly powerful for assessing the complexities inherent in these approaches and the issues they address (Plano Clark & Ivankova, 2016). Researchers using mixed methods should clearly articulate their rationale for using YPAR as a health intervention strategy and how mixed methods benefitted the evaluation and continued program activities (DeJonckheere, Lindquist-Grantz, Toraman, Haddad, & Vaughn, 2018).

4. Plan for sustainability of participatory processes.—Participatory research involves iterative cycles of research and action to build community members' capacity to address issues they deem important (Israel et al., 2013). In YPAR health interventions this may occur within single or multiple cohorts of youth depending on the program and intervention design. Furthermore, in community-based implementations this may be based on a specific issue already being addressed by stakeholders. Regardless, sustainability of participatory processes should be planned from the outset and examined within the evaluation, especially the continued capacity of youth to engage in cycles of research and action as a means to impact long-term outcomes, and the capacity of stakeholders to continuing supporting youth in these endeavors.

Conclusion

In this article we conceptualized YPAR as a health intervention and provided a brief description of two community-based implementation models and the effect on youth development outcomes through PYD mechanisms. These models addressed gaps in the YPAR literature regarding implementation measurement and diverse settings. The findings from our process evaluations, implementation reflections, and existing literature helped to initiate a set of best practices for using YPAR in the health sciences, but we certainly do not claim that these cover all aspects of using YPAR as a health intervention in community-based settings. We hope that our discussion of best practices advances the work of YPAR and assists researchers and practitioners to consider novel ways to engage youth in health promotion in community-based settings in order to reach a broader population of young people and document measureable youth development and health impacts.

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References

- Berg M, Coman E, & Schensul JJ (2009). Youth action research for prevention: A multi-level intervention designed to increase efficacy and empowerment among urban youth. *American Journal of Community Psychology*, 43, 345–359. doi:10.1007/s10464-009-9231-2 [PubMed: 19387823]
- Bradley C, McMurray R, Harrell J, & Deng S (2000). Changes in common activities of 3rd through 10th graders: The CHIC study. *Medicine and Science in Sports and Exercise*, 32, 2071–2078. [PubMed: 11128854]
- Brandtstädter J (1998). Action perspectives on human development. In Damon W (Editor-in-Chief) & Lerner RM (Vol. Ed.), *Handbook of child psychology: Theoretical models of human development* (5th ed., Vol. 1, pp. 807–863). New York: Wiley.
- Brandtstädter J (1999). The self in action and development: cultural, biosocial, and ontogenetic, bases of intentional self-development. In Brandtstädter J, & Lerner RM (Eds.), *Action and self-development: Theory and research though the life span* (pp. 37–65). Thousand Oaks, CA: Sage.
- Bronfenbrenner U (1979). *The ecology of human development: Experiments by nature and design*. Cambridge, MA: Harvard University Press.
- Camarota J, & Fine M (2008). Youth participatory action research: A pedagogy for transformational resistance. In Camarota J, & Fine M (Eds.), *Revolutionizing education: Youth participatory action research in motion* (pp. 1–11). New York, NY: Routledge.
- Catalano RF, Berglund ML, Ryan JAM, Lonczak HS, & Hawkins JD (2002). Positive youth development in the United States: Research findings on evaluations of positive youth development programs. *Prevention and Treatment*, 5(15). doi:10.1037/1522-3736.5.1.515a
- Centers for Disease Control and Prevention (2016). Youth risk behavior surveillance: United States, 2015. *Morbidity and Mortality Weekly Report*, 65(6), 1–174. [PubMed: 26766396]
- Centers for Disease Control, N. C. f. I. P. a. C., National Vital Statistics System, National Center for Health Statistics (2015). Leading causes of death reports, 1981–2015 Retrieved June 26, 2017, from <https://webappa.cdc.gov/sasweb/ncipc/leadcause.html>
- Deci EL, & Ryan RM (2008). Facilitating optimal motivation and psychological well-being across life's domains. *Canadian Psychology*, 49, 14–23. doi:10.1037/0708-5591.49.1.14
- DeJonckheere M, Lindquist-Grantz R, Toraman S, Haddad K, & Vaughn LM (2018). Intersection of mixed methods and community-based participatory research: A methodological review. *Journal of Mixed Methods Research Advance* online publication. doi: 10.1177/1558689818778469
- Dobbins M, Husson H, DeCorby K, & LaRocca RL (2013). School-based physical activity programs for promoting physical activity and fitness in children and adolescents aged 6 to 18. *Cochrane Database Syst Rev*, 2(2).
- DuBois DL, Felner RD, Brand S, & Phillips RS (1996). Early adolescent self-esteem: A developmental–ecological framework and assessment strategy. *Journal of Research on Adolescence*, 6(4), 543–579.
- Eccles J, & Gootman JA (Eds.). (2002). *Community programs to promote youth development*. National Academies Press.
- Fine M, Torre ME, Burns A, & Payne YA (2007). Youth research/participatory methods for reform. In Thiessen D & Cook-Sather A (Eds.), *International Handbook of Student Experience in Elementary and Secondary School*, 805–828. New York, NY: Springer.
- Flicker S (2008). Who benefits from community-based participatory research?: A case study of the Positive Youth Project. *Health Education and Behavior*, 35(1), 70–86. doi:10.1177/1090198105285927 [PubMed: 16740514]
- Israel BA, Eng E, Schulz AJ, & Parker EA (2013). Introduction to methods for CBPR for health. In Israel BA, Eng E, Schulz AJ, & Parker EA (Eds.), *Methods for community-based participatory research for health* (pp. 3–37). San Francisco, CA: Jossey-Bass.

- Jacquez F Vaughn LM, & Wagner E (2013). Youth as partners, participants or passive recipients: A review of children and adolescents in community-based participatory research (CBPR). *American Journal of Community Psychology*, 51, 176–189. doi:10.1007/s10464-012-9533-7 [PubMed: 22718087]
- Kelly EB, Parra-Medina D, Pfeiffer KA, Dowda M, Conway TL, Webber LS, Jobe JB, Going S, & Pate RR (2010). Correlates of physical activity in Black, Hispanic, and White middle school girls. *Journal of Physical Activity and Health*, 7, 184–193. [PubMed: 20484757]
- Kral MJ, Wiebe PK, Nisbet K, Dallas C, Okalik L, Enuaraq N, & Cinotta J (2009). Canadian Inuit community engagement in suicide prevention. *International Journal of Circumpolar Health*, 68(3), 292–308. doi:10.3402/ijch.v68i3.18330 [PubMed: 19705660]
- Kropski JA, Keckley PH, & Jensen GL (2008). School-based obesity prevention programs: an evidence-based review. *Obesity*, 16(5), 1009–1018. doi:10.1038/oby.2008.29 [PubMed: 18356849]
- Langhout RD, & Thomas E (2010). Imagining participatory action research in collaboration with children: An introduction. *American Journal of Community Psychology*, 46(1–2), 60–66. doi:10.1007/s10464-010-9321-1 [PubMed: 20571860]
- Lerner RM (2004). *Liberty: Thriving and civic engagement among America's youth* Thousand Oaks, CA: Sage.
- Lerner RM, Almerigi JB, Theokas C, & Lerner JV (2005). Positive youth development: A view of the issues. *The Journal of Early Adolescence*, 25(1), 10–16. doi:10.1177/0272431604273211
- Masten AS, & Cicchetti D (2010). Developmental cascades. *Development and Psychopathology*, 22(3), 491–495. doi:10.1017/S0954579410000222 [PubMed: 20576173]
- Ogden CL, Carroll MD, Lawman HG, Fryar CD, Kruszon-Moran D, Kit BK, & Flegal KM (2016). Trends in obesity prevalence among children and adolescents in the United States, 1988–1994 through 2013–2014. *The Journal of the American Medical Association*, 315, 2292–2299. doi:10.1001/jama.2016.6361 [PubMed: 27272581]
- Ogden CL, Carroll MD, Kit BK, & Flegal KM (2014). Prevalence of child and adult obesity in the United States, 2011–2012. *The Journal of the American Medical Association*, 311, 806–814. doi:10.1001/jama.2014.732 [PubMed: 24570244]
- Ozer EJ (2016). Youth-led participatory action research. In Jason LA & Glenwick DS (Eds.), *Handbook of methodological approaches to community-based research: Qualitative, quantitative, and mixed methods* (pp. 263–272). New York, NY: Oxford.
- Ozer EJ (2017). Youth-led participatory action research: Overview and potential for enhancing adolescent development. *Child Development Perspectives*, 11(3), 173–177.
- Ozer EJ, & Douglas L (2013). The impact of participatory research on urban teens: An experimental evaluation. *American Journal of Community Psychology*, 51(1–2), 66–75. doi:10.1007/s10464-012-9546-2 [PubMed: 22875686]
- Ozer EJ, & Douglas L (2015). Assessing the key processes of youth-led research : Psychometric analysis of an observational rating scale. *Youth and Society*, 47(1), 29–50. doi:10.1177/0044118X12468011
- Ozer EJ, Newlan S, Douglas L, & Hubbard E (2013). “Bounded” empowerment: Analyzing tensions in the practice of youth-led participatory research in urban public schools. *American Journal of Community Psychology*, 52(1–2), 13–26. doi:10.1007/s10464-013-9573-7 [PubMed: 23444005]
- Ozer EJ, & Schotland M (2011). Psychological empowerment among urban youth measure development and relationship to psychosocial functioning. *Health Education and Behavior*, 38(4), 348–356. doi:10.1177/1090198110373734 [PubMed: 21606379]
- Plano Clark VL, & Ivankova NV (2016). *Mixed methods research: A guide to the field* Thousand Oaks, CA: Sage.
- Robinson J, Cox G, Malone A, Williamson M, Baldwin G, Fletcher K, & O'Brien M (2013). A systematic review of school-based interventions aimed at preventing, treating, and responding to suicide-related behavior in young people. *Crisis*, 34(3), 164–182. doi:10.1027/0227-5910/a000168 [PubMed: 23195455]
- Rodríguez LF, & Brown TM (2009). From voice to agency: Guiding principles for participatory action research with youth. In Brown TM & Rodríguez LF (Eds.), *New directions for youth development*, (pp. 19–34). San Francisco, CA: Jossey-Bass.

- Stone DM, & Crosby AE (2014). Suicide prevention. *American Journal of Lifestyle Medicine*, 8(8), 404–420. doi:10.1177/1559827614551130 [PubMed: 30166972]
- Wang CC (2006). Youth participation in photovoice as a strategy for community change. *Journal of Community Practice*, 14(1–2), 147–161. doi:10.1300/J125v14n01_09
- Wexler LM, Gubrium A, Griffin M, & DiFulvio G (2013). Promoting positive youth development and highlighting reasons for living in Northwest Alaska through digital storytelling. *Health Promotion Practice*, 14(4), 617–623. doi:10.1177/1524839912462390 [PubMed: 23099660]
- White J, Morris J, & Hinbest J (2012). Collaborative knowledge-making in the everyday practice of youth suicide prevention education. *International Journal of Qualitative Studies in Education*, 25(3), 339–355. doi:10.1080/09518398.2010.529852
- Wong NT, Zimmerman MA, & Parker EA (2010). A typology of youth participation and empowerment for child and adolescent health promotion. *American Journal of Community Psychology*, 46(1–2), 100–114. doi:10.1007/s10464-010-9330-0 [PubMed: 20549334]
- Wright KN (2011). Influence of body mass index, gender, and Hispanic ethnicity on physical activity in urban children. *Journal for Specialists in Pediatric Nursing*, 16, 90–104. doi:10.1111/j.1744-6155.2010.00263.x [PubMed: 21438999]