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American Journal of Health Promotion
1-9
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Addressing Health and Well-Being Through State Policy: Understanding Barriers and Opportunities for Policy-Making to Prevent Adverse Childhood Experiences (ACEs) in South Carolina

Aditi Srivastav, PhD[1,2], Mindi Spencer, PhD[1], James F. Thrasher, PhD[1], Melissa Strompolis, PhD[2], Elizabeth Crouch, PhD[3], and Rachel E. Davis, PhD[1]

Abstract

Purpose: As adverse childhood experiences (ACEs) become increasingly recognized as a root cause of unhealthy behaviors, researchers, practitioners, and legislators seek to understand policy strategies to prevent and mitigate its effects. Given the high prevalence of ACEs, policies that address ACEs can meaningfully prevent disease in adulthood and improve population health. We sought to understand barriers and opportunities for policies to prevent and mitigate ACEs by exploring state legislator perspectives.

Setting and Participants: Twenty-four current state legislators in South Carolina.

Design: In 2018, we conducted semistructured interviews with 24 state legislators. Participants were recruited using maximum variation sampling. The researchers individually analyzed each interview transcript using focused coding qualitative techniques. A high inter-rater agreement was demonstrated ($\kappa = .76$ to .87), and discrepancies were resolved through discussion.

Method: The data collection and analysis were guided by Multiple Streams Theory, which identifies 3 key components (attention to the problem, decisions about policy options, and the impact of political landscape) that can lead windows of opportunity for passing policies.

Results: Legislators identified several factors that can influence the passage of legislation on ACEs: awareness of ACEs; gaps in understanding about what can be done about ACEs; the use of data and stories that contextualize the problem of ACEs; capitalizing on the bipartisanship of children's issues; and linking to current ACEs-related issues on the policy agenda, such as school safety and violence prevention and the opioid epidemic.

Conclusion: Public health researchers and practitioners should focus on the factors identified to advocate for policies that prevent ACEs and/or address their health consequences.

Keywords

health policy, opportunity, strategies, qualitative research, research methods, adverse childhood experiences, young children, age specific, specific populations, population health, interventions, advocacy

Introduction

First studied by the Centers for Disease Control and Kaiser Permanente in 1997, adverse childhood experiences (ACEs) serve underscore the importance of social determinants of health (SDH)—highlighting that adult health outcomes are the product of the complex interplay of experiences in early childhood resulting from social, biological, and environmental factors.[1-4] Adverse childhood experiences include traumatic exposures ranging from experiencing abuse and neglect to dysfunction in the household (eg, witnessing domestic violence, mental illness in the home, substance abuse in the home,

[1] Department of Health Promotion, Education and Behavior, University of South Carolina, Columbia, SC, USA
[2] Children's Trust of South Carolina, Columbia, SC, USA
[3] Department of Health Services Policy and Management, University of South Carolina, Columbia, SC, USA

Corresponding Author:
Aditi Srivastav, Children's Trust of South Carolina, 1330 Lady Street, Suite 310, Columbia, SC 29201, USA.
Email: asrivastav@scchildren.org

incarceration of a parent).[1-3] Adverse childhood experiences are common—an estimated 46% of children have experienced ACEs in the United States.[5] Fortunately, studies suggest that the long-term impact of ACEs can be mitigated through the presence of protective factors such as safe, stable, nurturing relationships and environments, which help build resilience.[6,7] The known associations between ACEs and health outcomes offer a unique lens for understanding opportunities for health promotion, specifically through primary prevention as ACEs shift focus from attempting to reduce engagement in risk behaviors *after* they occur to addressing the underlying reasons for engagement in risk behaviors *before* they occur. This framing aligns with the push for more upstream approaches to prevent disease and improve population health.[8]

As ACEs become an increasing concern on a national and state level,[9] researchers, practitioners, and legislators seek to understand strategies to reduce exposure to and mitigate the effects of ACEs. As aforementioned, safe, stable, nurturing relationships, and environments are considered a solution to address ACEs to prevent poor health outcomes in adulthood. Research overwhelmingly supports that these relationships and practices can be influenced by the socioeconomic contexts in which a child lives, which are largely influenced and altered by public policies.[10,11] For example, many significant public health achievements in the 20th and 21st centuries were influenced by major policy and program efforts, such as seat belt laws, increased drinking age, vaccine mandates, or smoking bans.[10,12,13] Thus, implementing public policies to help children build resilience against the effects of ACEs is an important upstream approach to promote health and well-being.[8,11]

State-level legislators have the ability to support public health efforts through the formation and adoption of policy.[12,14] Although there are some promising state-level policy legislation to address ACEs, many have fallen short of being passed.[12] Additionally, when public policies related to ACEs have been adopted or implemented, the majority have been unfunded mandates or resolutions focused primarily on increasing awareness of the issue.[12] Furthermore, current policies have not made comprehensive changes on a systems level—specifically in programs and practices.[14] Consequently, current policy efforts have been limited in making substantial changes to the rates of ACEs. The need to understand barriers and opportunities to passing these laws is crucial to the success of policy efforts, specifically policy-makers' ability to make a substantial impact on preventing and mitigating the effects of ACEs as a root cause of many public health outcomes.

The policy process is complex, and there continue to be challenges in communication between researchers and legislators.[12,15,16] This study used Multiple Streams Theory (MST) to understand the perspectives of state legislators who can provide valuable insight on the agenda setting and policy-making process with respect to ACEs. The MST streams include "problems," "policies," and "politics."[17] Multiple Streams Theory asserts that these 3 streams intermingle and, at critical points in time, create "policy windows," or opportunities to push through a policy.[17,18] The problem stream focuses on the current awareness and urgency of an issue that may require governmental action.[17] The policy stream refers to the processes in which policy solutions and alternatives are identified and developed.[17,18] The political stream refers to the political landscape that affects agenda setting.[13,17,18] These 3 streams can be influenced by "policy entrepreneurs" or advocates can link policy problems with policy options within the current political context, potentially opening policy windows.[18,19] Evidence suggests that MST can help public health researchers and advocates better understand, communicate, and collaborate with legislators.[14,19-22] Additionally, MST has been empirically tested to assess policy change in many different disciplines, demonstrating that the theory's 3 "streams" are key considerations for the policy-making process.[19-22] Thus, through qualitative inquiry, this study sought to understand the various factors that may influence policy-making on ACEs to inform future advocacy efforts and policy development using MST.

Methods

Participants

A sample of state legislators in South Carolina was recruited to participate in semistructured, in-depth interviews (n = 24). Legislators were defined as current members of the South Carolina General Assembly who had served at least 1 term. They did not have to have previous experience with child health policy issues. Legislators were recruited by leveraging existing relationships with the primary author's agency, a nonprofit focused on prevention of child abuse and neglect, until data saturation was achieved.[21] Due to ethical concerns, legislators were not offered an incentive for their participation. However, the researchers shared the results of the study in the form of a research brief upon its conclusion. The University of South Carolina's Institutional Review Board approved this study and participants gave oral consent prior to their interviews.

Data Collection, Measurement, and Analysis

Table 1 provides examples of how each component of MST was integrated into the interview guide. Prior to data collection, the interview guide was pilot tested through 3 focus groups of policy advocates to ensure consistency, clarity, and fidelity to the elements of MST. The interviews were conducted face-to-face and lasted an average of 55 minutes. All interview sessions were recorded, and the interviews were professionally transcribed and reviewed by the research team for accuracy.

Dedoose Version 8.0.35 (Socio-cultural Consultants, Los Angeles, California) was used to organize and code the data. A preliminary codebook was developed prior to data collection based on a literature review and guided by MST. Two researchers (A.S. and E.P.M.) individually analyzed each interview transcript using focused coding qualitative techniques,[24] which entailed mapping excerpts from the transcripts onto components of MST using both a priori and emerging themes . To ensure coding accuracy, a subsample of 5 interviews was

Table 1. Application of the Multiple Streams Theory to the Interview Guide.

Theory Component	Definition[a]	Sample Interview Guide Questions
Problem stream	How conditions are turned into policy problems, how problems are defined, and how problems garner attention	How would you define ACEs? How did you hear about ACEs? What term resonates when talking about this issue, childhood trauma or ACEs? Why? How can we engage more of your colleagues on the issue of ACEs?
Policy stream	The process by which policy options are identified and developed	What kind of information (eg, stories, data, research) do you use to make a decision about an issue? Who do you go to for trustworthy and credible decision-making information? Have you learned about or know of any current ACE policy options?
Politics stream	The policy landscape including partisan politics, political mood, election impacts, and political structure	To what extent do you believe children's issues like ACEs considered bipartisan in the state legislators? What are opportunities or obstacles to passing policies that affect children? To what extent do you believe that South Carolina is affected by the national political climate?
Policy windows	Windows of opportunity for policy-making	In your opinion, what are top issues affecting children today? What are some issues related to children that are being discussed in the legislature currently?
Policy	entrepreneurs	Advocates or interest groups that couple policy problems with policy options within political landscapes
Based on the	perspectives of legislators' who participated in this study, recommendations for policy entrepreneurs were developed	

Abbreviation: ACEs, adverse childhood experiences.
[a]Kingdon (2002)[23] and Mosier (2013).[18]

double-coded by both researchers using the same codebook at the beginning of the analysis process. A high interrater agreement[25] was demonstrated ($\kappa = .76\text{-}.87$), and discrepancies were resolved through discussion. Throughout the data collection process, the primary author engaged in memoing, in which details about the interview such as nonverbal cues were captured. These notes were discussed in depth as with the larger research team to finalize themes resulting from the study.

Results

The participant sample was reflective of the current state legislature (Table 2).[26] Participants were mostly white (75%) and male (70.8%). There was a nearly even between between role (House vs Senate) and a 40/60 split for political affiliation (Democrat vs Republican), which is representative of the legislature's current makeup. Legislators were included from all 4 regions of the state. The results are presented based on the 3 streams of MST, followed by legislator perspectives on potential windows of opportunity for ACEs-related policy-making.

Salience of the Issue (Problem Stream)

Legislators who had heard of ACEs learned about the issue through community programs in their district, the state's legislative children's committee, or a child-serving interest group, while those who were not familiar with ACEs were able to deduce the definition. Legislators' knowledge who had been involved with child health issues did not significantly differ in issue salience compared to those who did not work with child health issues. In addition to abuse, neglect, and household dysfunction, legislators frequently classified experiences such as bullying, homelessness, and food insecurity as ACEs. Many legislators commented on the impact of ACEs on a child's development, behavior, and ability to succeed in school. They mentioned the link between ACEs and mental health outcomes (eg, suicide) but were less familiar with the link between ACEs and adult health conditions:

> I don't think I'm going to go with the obesity part, but (ACEs) might still go with suicide?

Several legislators noted that ACEs were intergenerational and that it was difficult to break the cycle of traumatic experiences.[25] As one legislator shared,

> The reason we have ACEs in my opinion is because we've had ACEs in the past. The reason we don't eat healthy or we don't focus on education, that we're okay with giving drugs and abusing and sexually abusing our children is because we're the product of our parents.

Table 2. Participant Characteristics.[a]

Years of experience	
>5	6 (25.0%)
5-10	6 (25.0%)
11-19	7 (29.2%)
20+	5 (20.8%)
Role	
House of representatives	14 (58.3%)
Senate	10 (41.7%)
Political affiliation	
Democrat	10 (41.7%)
Republican	14 (58.3%)
Gender	
Male	17 (70.8%)
Female	7 (29.2%)
Race	
White	18 (75.0%)
Black	6 (25.0%)
Region served	
Upstate (north)	11 (45.8%)
Midlands (central)	6 (25.0%)
Low country (south)	5 (20.8%)
Pee Dee (east)	2 (8.3%)

[a]n = 24.

However, legislators across the political spectrum also shared examples of constituents who grew up with ACEs that were able to raise healthy, happy, and successful children, despite their hardships in childhood. They all commented that parents must ultimately make the deliberate choice not to continue the "cycle of trauma" with their children.

All participants expressed that "ACEs" and "childhood trauma" are related terms. They recognized, however, that terms could have different connotations to be considered. The term ACEs was frequently referred to as "jargon" that would be difficult for legislators who were not engaged in children's issues to understand by many participants. Some also thought the term ACEs was too politically correct and downplayed the issue:

> I believe that you need to call things what they are. I think that adverse childhood experiences somewhat cheapens what the real issue and what has happened . . . a lot of times we don't feel comfortable with calling things what they are, but I think it lessens the impact when you don't.

Some legislators stated that term childhood trauma sounded more urgent, serious, and impactful on a child's life and, as a result, was more likely to catch the attention of legislators. Generally, the term ACEs described as encompassing a broader range of experiences than childhood trauma by all legislators. On one hand, some legislators mentioned that this term made the issue sound too complex. On the other hand, many legislators stated that the term ACEs frames the issue as something that affects many children instead of a certain population or group, possibly increasing its significance:

> Because it's broader . . . I mean it's horrible when a child is physically or sexually abused, but, percentage-wise, the population it happens to much fewer children than, say, being stuck in a bad home environment . . . .

In order to convey a need for addressing ACEs, several legislators across the state and with varying political ideologies emphasized the importance of framing ACEs as an issue that can be solved. As one legislator noted,

> When people ask me, 'How do you fix education?' I don't know. 'How do you fix domestic violence?' That's a lot. You've got to break it down into something that is manageable in the pursuit of this broader aim, but what is something that can be achieved?

To do this, they recommended several options that advocates should consider: (1) talking about ACEs and a health outcome that has a pressing need to be addressed, (2) focusing on the link between ACEs and cost, or (3) highlighting how ACEs relate to a core function of government (eg, child protective services).

Awareness of Policy Options (Policy Stream)

The framing of ACEs within specific outcomes or functions of government also proved to be important for assessing policy options among legislators. However, the use of stories and data played a significant role as well. Both Democrats and Republicans expressed a mistrust of data, voicing concerns about how data can be manipulated to paint a picture that may not be accurate, which can be problematic when legislators must know "a little about a lot of different things." Several legislators mentioned concerns about state agency data specifically, suggesting that these data are likely to be flawed due to poor quality and consistency. These legislators also shared concerns about data use in advocacy work, pointing to examples where they perceived that advocates had manipulated data to push for more funding for an issue.

Several legislators representing diverse constituencies shared that they were more likely to listen to stories that came from within their district about the effects of ACEs than to attend to traditional policy advocacy strategies, such as policy briefs or one-pagers, although some suggested presenting data and research in the form of policy briefs about ACEs was equally important. Most participants reported that a combination of stories, data, and research from within the state would be more effective in presenting policy options to legislators, because it helped in "humanizing" the issue. As one participant explained,

> Stories and data, you know. But stories get to my heart. So if I know someone that has suffered, it makes me spend more time handling it than I would if you just gave me statistics by itself. I have to see a face with it.

To help make policy decisions, most of the legislators shared that they are most likely to trust data analysis and

research from their office staff, legislative committee staff, and experts in the field with whom they have preexisting relationship. In fact, several legislators expressed the importance of having a trusting relationship with the advocate above all:

> I can have the same numbers tell a number of different stories, so you have to have faith in the data. But you also have to have faith in the researchers, as well . . . .

Perspectives varied on credibility of advocates. Some legislators stated that community-based advocates were the most credible, as they were directly involved in the work, while others shared that professional lobbyists would be more likely to sway legislators in favor of a policy action. Some legislators revealed relying on coalitions for guidance in decision-making. Several cited relying on the expertise of colleagues in the state legislature, especially those who championed children's issues. Few mentioned looking for information on their own from nonprofits and think tanks, although they were likely to review reports from these entities if presented by a constituent or advocate.

Political Climate (Politics Stream)

Legislators generally expressed that the national political climate did not greatly affect the state legislature, pointing to continued and successful efforts to work "across the aisle." However, they varied on the extent to which they believed that children's issues were bipartisan. Republican legislators pointed to several successful bipartisan policy efforts (eg, safe sleep,[26] car seat safety,[27] creating the Office of the Child Advocate[28]), expressing the sentiment that all legislators are committed to ensuring children have basic needs met, such as food, shelter, and education:

> A starving child, a growling stomach doesn't care whether the food comes from—a Republican or a Democrat. They're just hungry.

In contrast, all Democrats voiced that many children's issues are partisan, pointing to examples of failed policy efforts (eg, Medicaid expansion, education reform) that had the potential to positively impact a substantial number of children. As one Democrat commented,

> That's why prison rates are so high. That's why our school systems are not funded properly. That's why we don't have health care for more people, because it's split down political lines and it impacts us.

The lack of partisanship was acknowledged by few policy makers across both parties, who stated that partisanship within children's issues largely results from ideological disagreement about the appropriate extent of government involvement and funding for public health programs.

Obstacles associated with the state legislature's infrastructure frequently emerged in discussions about the political context. Several legislators shared that South Carolina's legislators are part time, with the general session lasting only 5 months. Legislators pointed to these factors as making it difficult to discuss policy options that are not considered urgent and in need of immediate attention. As a result, legislators talked about how the state legislature is more reactive than proactive, making it difficult to develop a case for prevention-related policy-making:

> The system is built on us being part-time legislators, and it's basically an unpaid position and you're getting just people who love their community, which is great. But it's not necessarily the best system to do the best work.

Several participants also suggested that these factors make it especially important to focus on short-term policy wins that allow legislators to demonstrate their efforts to their constituents. Finally, legislators touched on the fact that the limited state budget that must be shared across 170 legislator interests, which may decrease opportunities to pass policies that can benefit children.

Possible Policy Windows

Most legislators pointed to 2 issues of growing significance that can help open a window of opportunity to pass comprehensive policies on ACEs: (1) safety from violence in schools and (2) the opioid epidemic.

To address school safety and violence prevention, most legislators shared their support for policies providing more mental health services, hiring and retaining school support staff such as school safety officers, and funding better training for teachers. All Democrat legislators expressed a need to address gun safety to prevent school shootings, while many Republicans recommended arming school safety officers. Several legislators shared examples of efforts to help push policies forward on this issue, including a recent school safety summit by the governor's office. Democrat legislators noted that increasing access to mental health services is a more politically feasible approach to preventing violence in schools and that, given the number of school shootings across the country, this policy approach was an ideal opportunity to integrate ACEs into the current policy agenda.

Three legislators from both parties pointed to a possible policy link that could be made between school-based mental health services to prevent school violence and services to help students cope with ACEs. As one legislator commented,

> We are leaders, I think in the country, of trying to bring counselors, mental health counselors, into the school. There may be an opportunity in there.

The majority of the legislators across both political parties expressed an interest and commitment to supporting policies that reduce opioid abuse, provide services for those with opioid dependence, and tighten the distribution and prescription of opioids. These Legislators mentioned that a study committee was developed to examine the effects of opioids in the state and

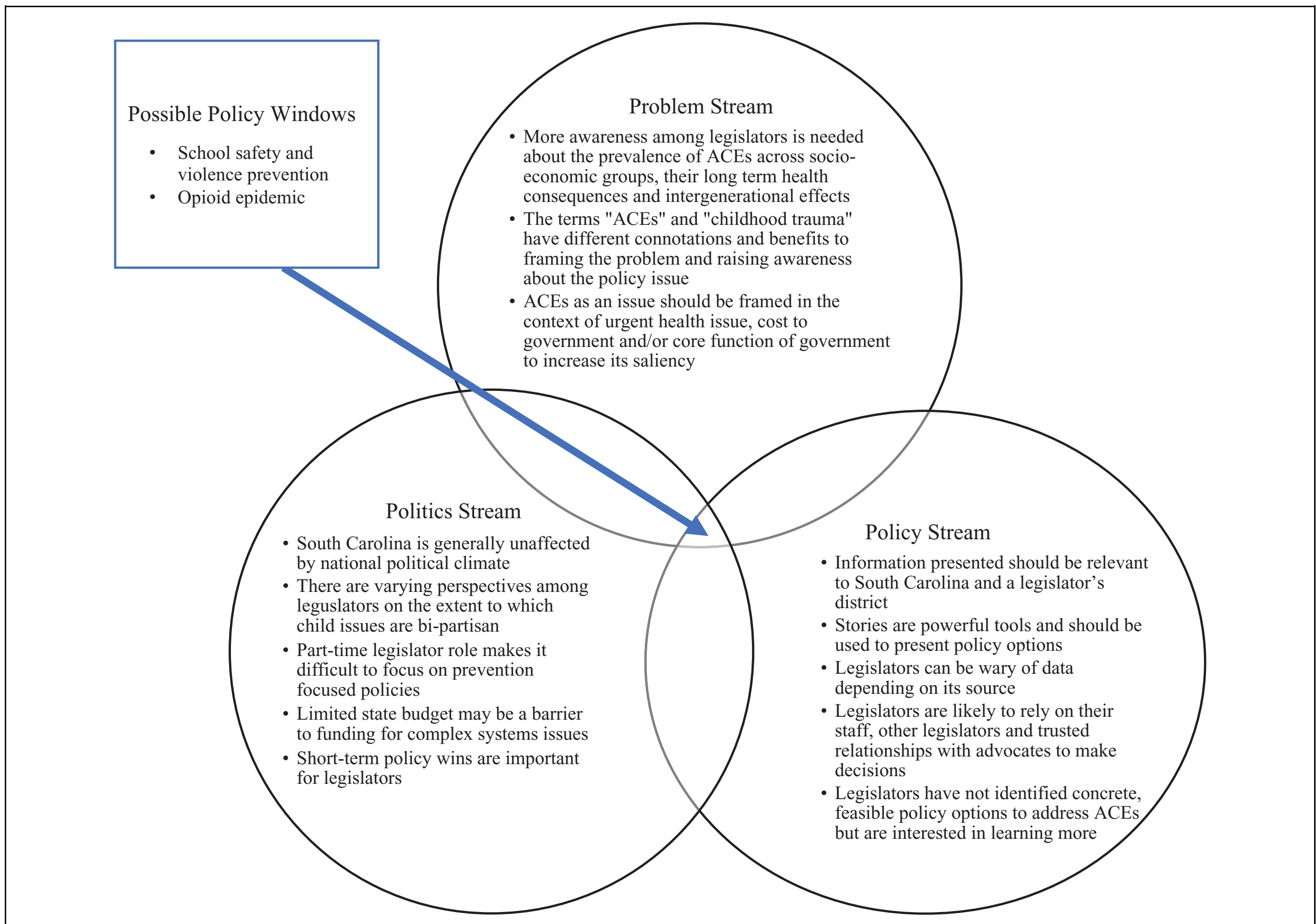

Figure 1. Summary of findings from application of the multiple streams theory to understand barriers and opportunities to policy-making on adverse childhood experiences in South Carolina.

that many informational events had occurred around the issue. Two legislators talked about ACEs and epidemic being possibly related, pointing to the potential trauma experienced by children whose parents who are addicted to opioids:

> Why not jump on this train under the umbrella of opioid abuse, talk about what it does to children and why it's so important that we not just look at the person who has the problem, but also look at how that is trickling down to the kids.

These 2 participants also noted that this relationship had not yet been highlighted in current discussions about opioids but could provide an opportunity to increase awareness about ACEs, especially because the opioid epidemic was a bipartisan issue of concern in the state and was currently being studied on various legislative committees.

Discussion

As the prevention and mitigation of ACEs continue to grow as a state policy issue, this study examined the opportunity to address ACEs through state-level policy efforts by applying MST to understand legislator perspectives the urgency to address ACEs, their decision-making process, the political context, and potential policy windows of opportunity to pass policies. Our findings illustrated several factors, some of which that are specific to ACEs and some that can be applied to legislative efforts on a variety of public health issues.

Although research on evidence-based policy-making suggests that research plays a crucial role on the salience of an issue,[14,12] our study suggests that terminology and framing may play a more important role for raising awareness among legislators. Participants presented several strengths and weaknesses in terms of connotations for the terms ACEs and childhood trauma while expressing the importance of framing ACEs as a measurable and solvable issue in public health. This is an especially important finding, not only because researchers have identified a need for effective language for ACEs,[8] but because current evidence is limited on ways to frame SDH for policy efforts.[27] These discussions demonstrated that the existing terminology and framing of ACEs reflects a proclivity to focus on interpersonal causes of ACEs, while simultaneously suggesting a lack of awareness of the social, environmental, and political

factors that can influence early childhood experiences. As research begins to recognize expanded definitions for ACEs, including additional experiences like community violence,[28] and broadening the ACE acronym to mean adverse community environments,[29] these evolving definitions can also be used to better describe the role of policy and other macro-level influences in addressing ACEs.

This study also reinforces existing research that both anecdotal and tailored scientific evidence are important to policy makers in their decision-making process.[30-32] However, this study brings to light a new potential challenge to evidence-based policy-making—the mistrust of data. The large number of legislators who commented on their concerns of data being manipulated or of poor quality highlights the opportunity researchers to educate legislators and their staff on not only identifying credible data and research, but recognizing misinformation, a growing issue in public health.[33,34] This, in turn, can also help develop a trusting relationship for public health advocates, which, consistent to existing literature,[30-32] was identified by participants as a key influence deciding on policy options. Notable structural factors (that is, legislative session length, part-time legislators) in addition to known political factors[13,17] (eg, varying ideologies, national mood) were identified as influencing political feasibility for policy-making around ACEs and other issues related to SDH. Considering the legislative structures in many other states, these factors are not necessarily limited to South Carolina.[26] Thus, these findings suggest that evidence-based policy-making may be most feasible not only when contextualized within a policy window,[16,13] but have short-term benefits and the potential of helping a large percentage of the population within the state. Many of the approaches to evidence-based policy-making suggested in this study were shared across both Democrats and Republicans, which is promising for advocacy around ACEs. For example, despite political barriers around gun control, both parties' concern for recent school shootings (eg, Parkland High School, Santa Fe High School) presents an opportunity to engage in discussions about ACEs, which can lead to substantial policy reforms to improve other SDH for all children and families. Finally, this study builds on existing evidence that application of the MST provides important insights on barriers and opportunities for public health advocates (see Figure 1).[9,13,16-19]

This study is not without limitations. First, several legislators who participated in the interviews had some prior knowledge about child health; therefore, this research may not fully reflect the perspectives of legislators who do not work on child issues but could influence such policies. Democratic legislators could have influenced some of the findings, although many themes were consistent across political ideologies. Next, while recommendations from this study can serve as a foundation for understanding state policy-making opportunities around ACEs, this study included legislators from one state only. It should be noted, however, that qualitative research is not intended to be generalizable[21] and this study provides rich insight that can help strengthen communication and collaboration with researchers and state policy makers on addressing ACEs.

Conclusion

To our knowledge, this study is the first to explore state legislators' perspectives on policy-making processes related to ACEs, which have received growing attention in public health research and policy.[35,36] Our study provides important new insight of research translation and advocacy to encourage evidence-based policy-making specifically for ACEs while building on existing evidence about general knowledge gaps between public health researchers and legislators.[12,15,30-32] Advocates should consider the varying connotations of "ACEs" and "childhood trauma" when framing the issue's urgency. Advocacy messages dedicated to explaining the long-term health and social consequences of adversity, in addition to the implications in early childhood. These efforts could also touch on the intergenerational implications of ACEs to

So What?

What is already known on this topic?

Adverse childhood experiences (ACEs) are linked to many poor health and social outcomes in adulthood, including an increased risk and incidence of chronic disease. Research suggests that providing children, family, and communities with protective factors (eg, safe, stable, nurturing relationships and environments) can help prevent and mitigate the effects of ACEs. To date, few state policy actions have been successful in preventing and/or addressing ACEs.

What does this article add?

By exploring legislators' perspectives on ACEs, this study provides critical insight on the barriers and opportunities to address ACEs through state policy-making, ways in which to advocate about ACEs, the important features of the current political context that can influence policies affecting children, and potential ways to try to promote and take advantage of windows of opportunities to pass policies that address ACEs.

What are the implications for health promotion practice or research?

Results highlight important considerations for advocating about ACEs policy, including framing of the issue, mode of communication, and the use of data or research. They also suggest that policy approaches could be more successful if the issues of ACEs are embedded within current public health issues of concern, such as the opioid epidemic and school safety and violence prevention. Advocates can use the lessons from this study to more effectively communicate and collaborate with legislators to translate ACEs research into public health policies and practice.

highlight potential benefit ACEs polices have for both children and their families, potentially increasing interest in the issue. Finally, advocates should spend time cultivating trust with legislators and legislative staff to promote evidence-based decision-making, especially using data. Future studies should consider the empirical testing of advocacy messages around ACEs to further examine the most effective ways of working with legislators on this important issue. Future research could also explore the barriers and opportunities to policy implementation, specifically a key aspect of the policy process, especially for public health.[37,38] By leveraging existing evidence on ACEs with strategically framed messages about ACEs within current and emerging policy windows, public health professionals are more likely to be successful in translating research into policy action.

Authors' Note

This study was approved by the University of South Carolina's institutional review board (Pro00057096).

Acknowledgments

The authors acknowledge Dr Eylin Palamaro-Munsell for her assistance with data analysis. The authors also thank Mr Neil Mellen and Mrs Megan Branham for their assistance in the recruitment process.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: Dr Aditi Srivastav received funding from the Doris Duke Charitable Foundation's Fellowship for the Promotion of Child Well-Being to support some of her time to conduct this study.

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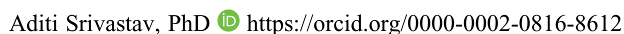
Aditi Srivastav, PhD https://orcid.org/0000-0002-0816-8612

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