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Positive Youth Development for Health: Extension's Readiness for Multilevel Public Health Approaches

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Abstract

Positive youth development for health is one of six priority areas identified in Cooperative Extension's National Framework for Health and Wellness. The objectives for this priority area target both individual- and community-level change. An assessment of Extension professionals' readiness to integrate community-level policy, systems, and environment change approaches into youth development efforts indicated various levels of familiarity with and willingness to implement multilevel strategies. Using these findings and the transtheoretical model as the organizing framework, we make recommendations for advancing Extension professionals' readiness to implement changes that make healthful options more available and accessible and help create a culture of youth health.

Keywords: policy system environment (PSE) change, adolescent health, youth development, transtheoretical model, stages of change

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Incorporating Public Health Strategies into Positive Youth Development

Health is essential to well-being and productivity, particularly for youth. Health-related behaviors established during childhood and adolescence help determine one's overall health status and chronic disease risk in adulthood. Influences such as family, friends, school, neighborhood, community opportunities, and policies affect health behavior and can positively or negatively affect health outcomes. Risky behaviors, such as sexual activity,

alcohol and drug use, unhealthful dietary intake, and inadequate physical activity may lead to negative health consequences, including illness and unintentional injuries (Banspach et al., 2016). Despite the clear natural link between positive youth development and public health, little work has focused on connecting the two disciplines or bridging gaps between approaches to improving health.

Integration of positive youth development principles with health care, risk prevention, and public health strategies is important but often overlooked (Birkhead, Riser, Mesler, Tallon, & Klein, 2006; Taliaferro & Borowsky, 2012). Youth development experts have suggested considering such principles when visioning, planning, forming partnerships and coalitions, designing policy, and delivering health programs and services (Pittman, Martin, & Yohalem, 2006; Tepper & Roebuck, 2006). The process of combining positive youth development and traditional health care approaches must be intentional if it is to provide all youths with the support, relationships, resources, and opportunities needed to become successful, competent, and healthy adults (Bernat & Resnick, 2006).

The importance of integrating aspects of public health into Extension programming and other youth development efforts to reduce risky behaviors is well recognized (Besenyi et al., 2014; Brownell, Schwartz, Puhl, Henderson, & Harris, 2009; Fitzgerald & Spaccarotella, 2009). However, within the Extension system, promoting healthful alternatives using policy, systems, and environment (PSE) change strategies, together with youth development, is a fairly new approach. Multilevel PSE change approaches are rooted in the social-ecological model, which suggests that behavior is influenced by complex, interacting factors across multiple levels (Sallis & Owen, 2015). These approaches can promote a culture of youth health by addressing direct and indirect behavioral influences at the individual, interpersonal, community, policy, and system levels (Franck, Donaldson, Toman, & Moody, 2014; World Health Organization, 2017). Establishing practices, policies, and systems that encourage healthful behaviors would allow Extension to promote health in ways that go beyond education and make healthful choices more accessible, appealing, and acceptable to youths.

Extension's focus on health-related programming targeting youths has evolved over time. It traces back to the 1994 Extension Service 4-H Unit Plan of Work (as cited by National 4-H Council, 2009), which called for increasing healthful habits, specifically nutrition and fitness, and healthful decision making through education. In 2008, the 4-H Healthy Living Mission Mandate Task Force (later known as the National 4-H Healthy Living Management Team) issued the 4-H Healthy Living Strategic Framework for Program Planning and Evaluation (National 4-H Council, 2009). Although the 4-H Healthy Living Mission Mandate itself called for efforts to "engage youth and families through access and opportunities" (National 4-H Council, 2009, p. 6), the associated strategic framework's focus remained mainly on creating change at the individual level alone.

In setting forth relevant programming recommendations, the task force espoused an ecological framework, stating, "Effective attempts to define and promote healthy living must consider not only youth and children, but also the contexts in which they live and grow" (Hill, McGuire, Parker, & Sage, 2009, p. 4). Aligning with this recommendation, some Extension professionals and volunteers now use tools such as the 4th H Health Challenge and the Healthy Living Event/Club Assessment (Tufts University, n.d.; U.S. Department of Agriculture, National Institute of Food and Agriculture, National 4-H Healthy Living Management Team, n.d.) to assess and improve the healthfulness of a variety of 4-H events.

The national-level Extension Committee on Organization and Policy (ECOP) acknowledged the unique role and capacity of Cooperative Extension to implement multilevel health promotion and disease prevention efforts. In 2012, ECOP established a health task force to study national trends and identify related system-wide priorities.

This task force issued Cooperative Extension's National Framework for Health and Wellness (Braun et al., 2014), which aligns with the U.S. Surgeon General's National Prevention Strategy toward the goal of increasing the number of Americans healthy at every stage of life.

Positive youth development for health (PYDH) is one of six strategic program priorities outlined in the national framework. In the framework's logic model, Braun et al. (2014) defined the first outcome connected to the PYDH priority area as "knowledge, ability, and confidence to make healthy choices" (p. 14), which involves effecting individual-level change. They defined the other PYDH outcome as "individuals empowered to lead community change" (Braun et al., 2014, p. 14), which involves encouraging advocacy for community-level changes. According to the framework's logic model, achieving the first outcome supports progress toward individuals' demonstrating healthful behaviors, and achieving the second supports progress toward communities' supporting healthful lifestyles.

Extension Professionals' Readiness for Multilevel Approaches

There is mounting evidence demonstrating the effectiveness and influence of Extension's health-related educational programs and opportunities. Meanwhile, many Extension professionals may not be adequately equipped to implement the multilevel strategies called for in Extension's national health framework. One study showed that many Extension professionals lack a basic understanding of PSE change and, therefore, could benefit from more training in this area (Smathers & Lobb, 2015).

In 2014, Donaldson, Franck, and Toman (n.d.) used the National 4-H Professional and Volunteer Development Needs Assessment to survey 150 Extension professionals about barriers to integrating health into all aspects of programming. The survey results highlighted a need for professional development in social-emotional health competencies, funding and time resources, and staff and volunteer development (Donaldson et al., n.d.). In that survey, as in previous surveys conducted by that team, respondents voiced the need for and barriers to holistic healthful living activities within 4-H experiences, such as the need for regular healthful food options at meetings and events (Donaldson et al., n.d.; Donaldson, Franck, Toman, & Moody, 2013).

The National 4-H Healthy Living Management Team addressed some healthful living programming barriers by providing national curricula; a state-liaison communication network; and recommendations for best practices, program sustainability, and evaluation measures. In their 2016 4-H Healthy Living Program National Report, Leatherman et al. (2016) recommended preparing Extension staff, volunteers, and teen leaders to offer healthful living learning opportunities through various delivery methods to an array of audiences. They suggested that Extension disseminate training templates and resources for integrating healthful living principles and activities into 4-H programs and events (Leatherman et al., 2016).

As members of ECOP's PYDH Action Team, we surveyed Extension professionals about engaging in PSE change work to inform PYDH-related professional development efforts surrounding building a culture of health for youths. We then compiled information about trainings, tools, curricula, and partnerships that can equip professionals and volunteers to address Extension's strategic program priorities and achieve associated outcomes identified in the national health framework.

Theoretical Framework

The transtheoretical model, also referred to as stages of change, suggests that people move through five levels as they progress through the change process (Prochaska & DiClemente, 1984). Versions of this model and

Rogers's diffusion of innovations model (Rogers, 2003) have been applied to community readiness to change (Edwards, Jumper-Thurman, Plested, Oetting, & Swanson, 2000). Within the Extension context, readiness to change can be examined variously as employees function as members of units at university, county, and regional levels.

As Extension moves forward with integrating public health and youth development approaches, it is important to consider readiness to change among individuals, local stakeholders, and the broader organization. Weiner (2009) contended that organizational readiness to change is a shared psychological state of individual organization members. This shared state is affected by collective commitment and is influenced by the value organization members place on the change (Weiner, 2009). Confidence in the ability to implement change is influenced by perceptions about resources, task demands, and contextual factors, such as the presence or absence of policies supporting change implementation and broader organizational culture (Weiner, 2009).

Methods

To assess Extension professionals' readiness to engage in PSE change approaches, we developed questions regarding knowledge of, willingness to use, and perceptions of the value of PSE change strategies and questions regarding working with youths and community partners. We defined PSE change as a programming approach aligned with the social-ecological model, which recognizes that behaviors are influenced by social and physical environments, organizational practices, systematic procedures, and laws and regulations. We refined the survey questions on the basis of a review of literature and responses we gathered from experts serving on all five ECOP health action teams through an iterative and participatory process related to PSE change readiness.

The University of Delaware Institutional Review Board approved the study. We pilot tested the survey to ensure usability. A group of Extension specialists reviewed the survey and established its face and content validity. In October 2016, we disseminated a survey link through existing Extension electronic mailing lists and newsletters and asked state-level leaders to distribute the link to Extension professionals in their program areas. We compiled descriptive statistics for each survey item.

Results

A total of 379 Extension professionals and staff from 38 states representing the four Extension regions responded to the survey. Respondents were direct providers (coordinator, associate, agent, educator, or specialist) (74%), administrators and managers (22%), and support personnel (3%). They supported multiple program areas: 4-H (69%), family and consumer sciences (37%), nutrition education (37%), community development (16%), food systems (11%), and master gardener (9%). Nearly all (92%) indicated that they would be likely to work with youths in the subsequent year through 4-H youth development and family and consumer sciences and/or nutrition education. Those not working with youths directly (8%) were in decision-making positions that could influence youth programming. Key survey findings are summarized in the lists that follow and are presented in more detail in Table 1 (following the summaries).

Level of understanding of PSE change:

- One quarter (25%) of survey respondents reported having a strong understanding of PSE change, as evidenced by a rating of 8–10 on a 1–10 scale (10 = *very strong*, 1 = *very weak*).

- Just over half (52%) somewhat agreed or strongly agreed that they would be comfortable if their supervisor

were to ask them to develop a PSE change plan.

Willingness to incorporate PSE change:

- Over half (55%) somewhat agreed or strongly agreed that PSE change work would represent a "big shift" in their work.

- Most (82%) somewhat agreed or strongly agreed that educating the community is the most important part of their job.

- Most (80%) somewhat disagreed or strongly disagreed that it would not make sense to start doing PSE work.

Perceived value of PSE change:

- Over two thirds (69%) somewhat agreed or strongly agreed that "the way to make change in the world is to change policy."

- About three quarters (74%) somewhat agreed or strongly agreed that programs that do PSE change work are probably more effective than those that do not.

- Nearly two thirds (62%) did not consider PSE change work a fad.

Community partnership engagement:

- Two thirds (67%) believed they had a strong professional relationship with someone working in public health.

Table 1.

Extension Professionals' Responses Regarding Engaging in Policy, Systems, and Environment (PSE) Change Strategies and Working with Youths and Community Partners

Survey item and response option categories	Responses # (%)
I would rate my current understanding of health-related policy, systems, and environmental (PSE) change as: (10 = *very strong* to 1 = *very weak*)	
8–10	95 (25)
5–7	135 (36)
1–4	149 (39)
I have a strong professional relationship with someone who does work in public health.	
Yes	255 (67)
No	123 (33)
If my supervisor asked me to develop a health promotion PSE component for my current work, I would be comfortable in doing so, given my current level of training.	
Strongly agree	44 (12)
Somewhat agree	153 (40)

Somewhat disagree	103 (27)
Strongly disagree	79 (21)
Doing PSE work would represent a big shift for me in my work.	
Strongly agree	63 (17)
Somewhat agree	143 (38)
Somewhat disagree	131 (35)
Strongly disagree	40 (11)
Providing education to community members is the most important part of my job.	
Strongly agree	187 (49)
Somewhat agree	124 (33)
Somewhat disagree	45 (12)
Strongly disagree	21 (6)
For the program(s) I work in, it doesn't make a lot of sense to start doing PSE work.	
Strongly agree	12 (3)
Somewhat agree	63 (17)
Somewhat disagree	168 (45)
Strongly disagree	131 (35)
The way to make change in the world is to change policy.	
Strongly agree	59 (16)
Somewhat agree	202 (53)
Somewhat disagree	97 (26)
Strongly disagree	18 (5)
Programs that do PSE are probably more effective than those that do not.	
Strongly agree	66 (18)
Somewhat agree	208 (56)
Somewhat disagree	84 (23)
Strongly disagree	11 (3)
I'm worried PSE is a fad that I will have to adopt but in the end won't really amount to much.	
Strongly agree	15 (4)
Somewhat agree	124 (34)
Somewhat disagree	154 (42)
Strongly disagree	75 (20)
How likely are you to work with youths in the coming year as part of your current position?	
Extremely likely	290 (77)
Somewhat likely	58 (15)
Not likely	19 (5)
Not working with youths	11 (3)

Discussion

Extension's National Framework for Health and Wellness pertains to all Extension program areas; therefore, our readiness survey was open to Extension professionals across program areas. The survey responses are considered relevant to Extension efforts in general and to youth development work specifically because 92% of respondents indicated that they were likely to work with youths in the subsequent year.

Our survey findings suggest that although Extension professionals range in their levels of readiness to implement public health approaches (specifically PSE change), most are willing to implement multilevel strategies. These findings reinforce those from a prior study by Donaldson et al. (n.d.) indicating that Extension professionals are interested in integrating healthful living into all aspects of 4-H but often lack the supports needed to do so. Support needs identified by the study respondents included sufficient resources (e.g., funding and volunteer support), availability of engaging learning activities, training on health issues, and healthful program options (e.g., camp menus, fair concessions, and fund-raising items) (Donaldson et al., n.d.). Despite research-based frameworks and recommendations from expert panels prescribing the use of ecological models, there are few organizational policies and practices in place across Extension to substantially and sustainably support and encourage relevant activities. Additional training and other support can help Extension professionals move to more advanced uses of multilevel strategies.

Respondents in our study rated their understanding of PSE change approaches fairly high on average. However, 39% rated their understanding as 4 or less on the scale of 1–10 where 10 represented the highest level of understanding. Simultaneously, a similar proportion considered PSE change work to be a fad. These findings indicate not only a significant need for training and support, but also a need for actions intended to help move Extension professionals beyond the initial stages of change.

The majority of Extension employees already have strong professional relationships and regular interactions with public health professionals. Many have frequent interactions with public health administrators and/or policy makers. These relationships suggest opportunities for collaborative efforts with reciprocal benefits. Extension professionals may be able to influence adoption of effective policies through the provision of research-based information. At the same time, they can provide guidance to public health professionals and clinicians related to the implementation of positive youth development.

Limitations of our study include the convenience sample obtained through a variety of Extension communication channels. Cooperative Extension is a large, decentralized system with many organizational structures across states. The dissemination of a voluntary survey is likely to reach and be completed by only a relatively small percentage of Extension employees. Another limitation is the use of self-reported responses; those open to the survey topic may have been more likely to respond (Quick & Davis, 1979), and reports of individual intent or areas of strength were subjective (Heck, Subramaniam, & Carlos, 2009).

Recommendations

From an organizational point of view, state Extension leaders, both programmatic and administrative, are encouraged to examine early stages in the change process, particularly if public health approaches are new to their youth development efforts, to ensure that action is taken to support success. Because Extension functions as a decentralized organization, administrative decision makers must intentionally coordinate and clearly communicate support for the proposed system-wide adoption of new approaches.

Extension professionals in some early-adopting states have progressed beyond the precontemplation and contemplation stages in the change process, and PYDH action is currently underway, as described by Smathers et al. (2018). Others can look to such states as models for contextualizing public health approaches within the traditional Extension framework. Early-adoption states can help "Extension-ize" concepts that may be perceived by educators as incompatible with traditional educational approaches. Extension can offer training and other support to move professionals to more advanced stages of implementation of these strategies. Specialized materials focused on Extension's role in the community may be needed.

In Table 2 we outline recommended actions at the organizational level for promoting readiness to engage in change strategies. We base the recommendations on the alignment of both our results and previous findings with stages of change theory, which characterizes the change process as nonlinear. Individuals and organizations will move through stages at varying rates and in a stepwise fashion. Skipping stages reduces likelihood of success. Likewise, individuals and organizations must spend sufficient time at each stage to ensure readiness to progress as it is possible to move backward or regress to earlier stages.

Table 2.

Recommended Actions for Promoting Readiness to Engage in Policy, Systems, and Environmental Change Strategies Based on Study Findings and the Transtheoretical Model

Stage of change	Characteristic(s)	Impediment(s) to action	Action(s) to move forward
Precontemplation	Having no intent to change within next 6 months Being unaware change is needed	Denial of need for change Fear that change will result in loss Lack of confidence in ability to change	Raise awareness of need for and benefits of integrating public health approaches. Increase understanding among Extension employees of public health approaches framed within an Extension context. Share examples of successful programs in similar settings (rural, urban, etc.). Encourage faculty and staff to support adoption and implementation efforts.
Contemplation	Having intent to change within next 6 months Being aware of pros and cons of change Stalling at this stage if costs and benefits balance	Lack of motivation Lack of information to plan for or take next step Lack of reward system or presence of disincentives to change Perception that there are fewer pros than cons or equal pros and cons Perception that public health	Promote work (process and outcomes) of early adopters, who can provide social support to peers. Identify likely external and internal motivators for educators. Identify and address institutional barriers (workload, inadequate reward structure, lack of administrative support). Clarify how public health approaches

		approaches conflict with Extension approaches	align with current reward systems (i.e., performance evaluation, promotion); correct misalignments by adjusting performance criteria.
		Lack of facilitation skills	
			Provide resources and support for adopters; promote resource availability for nonadopters, and suggest small ways to try out components of public health approaches.
Preparation	Having intent to act within next month	Lack of support at organizational level (top down)	Provide support for setting incremental goals to integrate public health in program plans.
		Perceived lack of local support	
	Having a plan of action		Communicate support from upper administration throughout the organization.
	Having already taken initial steps		Provide hands-on training and mentoring for new hires to integrate PYDH and public health approaches.
Action	Having engaged in new behavior within past 6 months	Perceived lack of support	Provide recognition to adopters.
		Difficulties overcoming barriers, recovering from relapse	Secure organizational commitment to use of public health approaches as core component of PYDH efforts.
Maintenance	Continuing new behavior and preventing relapse (6 months–5 years)	Unanticipated changes in organizational structure or support that reduce capacity to support and sustain integration of PYDH and public health approaches	Integrate PYDH and public health approaches as a delivery model.
	Having confidence to continue changes		
	Promoting changes		

Note. PYDH = positive youth development for health.

Next Steps

Extension's mission has been to disseminate research-based knowledge and new innovations to improve lives. Historically, Extension's delivery approach across program areas, and particularly with regard to positive youth development, has focused on direct education. Cooperative Extension's National Framework for Health and Wellness asserts that land-grant universities have knowledge and expertise that can be leveraged to address the current health crisis facing the United States, noting that today's Extension system can do for the nation's health what it did for U.S. agriculture in the past century (Braun et al., 2014). Incorporating concepts from the social-ecological model, the framework reiterates the importance of creating and providing healthful and safe choices and environments.

According to our survey results, most Extension professionals perceive value in and are willing to work toward implementing PSE changes and have strong community partnerships in place to do this work; however, many perceive that they lack a strong understanding of PSE change. Therefore, we encourage the compilation and dissemination of resources Extension leaders can use in implementing multilevel strategies. Initially, these resources should focus on actions at early stages of change: precontemplation, contemplation, and preparation. Resources supporting recommended actions at the precontemplation stage include publications, webinars, and professional development offerings that describe the need for and benefits of integrating public health approaches as well as case studies of successful PSE changes in a variety of communities (rural, urban, etc.). Potential actions at the contemplation stage include recognition and promotion of successful Extension-involved PSE changes. Recommended actions at the preparation stage are training and mentoring for new hires to integrate multilevel health promotion strategies into positive youth development programming.

Some actions for advancing the readiness of Extension professionals to integrate multilevel strategies depend on support from upper-level leadership. For example, administrators must direct resources to the implementation of strategies at multiple levels. Extension leaders at high levels can encourage efforts to integrate multilevel strategies by clearly communicating support through verbal encouragement, public recognition, and provision of financial support and other resources. Further research is needed to determine effective approaches for advancing readiness levels and to identify realistic ways Extension leaders can support such approaches.

Acknowledgments

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