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Commentary on Participation in Preventive Interventions

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Abstract

In this commentary on the special issue, *Preventive Parenting Interventions: Advancing Conceptualizations and Enhancing Reach*, operationalization of participation, who engages in prevention interventions, and common themes from the studies are discussed. The papers in the special issue illustrate the importance of studying factors that increase participation in prevention and point out the need for additional research to understand these factors. These papers highlight the diverse conceptualizations of participation as well as a need to move toward standardization of methods to assess related constructs. Research is needed to elucidate the potential of enhanced participation and engagement in interventions to meaningfully impact intervention outcomes and ultimately improve the population-level benefit attributable to prevention efforts. Prevention scientists should attend to factors influencing participation in prevention as early in the intervention research process as possible in order to increase the likelihood that the target population will utilize evidence-based prevention interventions in real-world settings, under real-world conditions.

Keywords

Participation; Prevention; Engagement; Attendance

Understanding Participation in Prevention Interventions

The growth of prevention science-based approaches to reducing risks for mental health and substance use problems and disorders, and related behavioral health problems, offers great promise for the health and well-being of populations (National Research Council and Institute of Medicine, 2009). However, persistent challenges remain in the implementation of evidence-based prevention (EBP), including expanding the reach of EBPs to the target populations (Spath et al. 2013). While participation is essential for population-level benefits, research shows that getting individuals to participate in an intervention is a complicated endeavor and often only a small proportion of the target participants actually attend the

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Compliance with Ethical Standards

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Ethical Approval This article does not contain any studies with human participants performed by any of the authors.

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program (Spoth et al. 2007). A major challenge for the field is to understand who will accept an invitation to take part in an intervention and what are the challenges or barriers that keep people who will benefit from participation from joining and participating fully. Further, it is useful to challenge our assumptions about the meaning of participation, as authors of the papers in this special issue have led us to do.

What Is Participation?

The articles in this special issue illustrate that participation is not unidimensional (i.e., “showing up”) and requires thoughtful conceptualization. Participation is defined in various ways such as total sessions or activities attended, initial engagement (i.e., attendance at the first or initial few sessions), change in participation over time, and completion of specific assignments independently from instructional time. These distinctions are meaningful in part because although absolute dosage measured by hours of exposure is important to capture, it does not fully reflect the dynamic nature of acquiring knowledge and skills.

Initial engagement and/or initiation of an intervention emerged as a key variable in the papers of Smith et al. (2016), Coatsworth et al. (2017), Perrino et al. (2016), Winslow et al. (2017), and Mauricio et al. (2017). Initial engagement represents a “foot in the door” (Cialdini 2007), allowing the facilitator to present some content and ideally make an impression that leads to an increased interest in full participation. The Mauricio et al. (2017) paper, which involved an intervention for families affected by divorce, took the unique approach of examining trajectories of attendance (non-attenders, early dropouts, declining attenders, and sustained attenders) and baseline characteristics (e.g., parenting, child and family characteristics) that predicted trajectories, including those specific to the context of divorce (e.g., inter-parental conflict, level of contact with the child). Such work is critical for developing a stronger understanding of how to assess the programmatic needs of individuals who can benefit from services but do not engage.

Participation also was defined by engagement with specific program components or skills-based activities. For example, Perrino et al. (2016) assessed participation for both the parent self-directed sessions and facilitator-led sessions in the *eHealth Familias Unidas*. Berkel et al. (2016) assessed parents’ attendance at sessions during instruction on specific parenting domains and gathered information on parents’ practice of parenting skills at home. This is important because the intervention content contains the theoretically or empirically determined “active ingredients.” Participation should increase the likelihood that individuals are exposed to the “active ingredients” but often information on participation in specific content or dosage is not described. The findings by Berkel et al. (2016) showing that home practice of specific skills predicted improvements in parenting outcomes demonstrate the utility of fine-grained assessments of participation.

Who Participates in Prevention?

At the core of discussions around who participates are questions of whether the opportunity is adequately presented to participants, whether those who do not participate are individuals from families that would benefit from participation, and whether interventions are

appropriate for individuals who are at various levels of readiness for participation. Another important issue is whether individual or family characteristics (e.g., actual and perceived barriers to participation) or program characteristics (e.g., perceived benefits, alignment with parenting goals or challenges) influence the decision to participate (Miller et al. 2012; Spoth et al. 2000). Each of these issues should be central to the thinking of designers of prevention interventions and providers of prevention intervention services.

It is relatively unusual for preventionists reporting on intervention findings in peer-reviewed journals to provide much detail on the process of participant recruitment and engagement. The Winslow et al. paper is unique because of the explicit focus on elements of effective participant recruitment. While one particular approach (“Core Principles Video”) produced strong interest in the prevention program, even without additional enhancements, the authors note that there was a dramatic drop-off between interest and enrollment across all conditions. These investigators identify the importance of the recruitment process as well as understanding factors driving program completion.

Another important consideration in discussing who participates in prevention is that of who is most likely to benefit. While it may be customary to assume that 100% participation of individuals offered services would be optimal, perhaps a different target would be more prudent. Research suggests that some families benefit more from preventive interventions than others (see for example, Brown & Liao 1999; Kellam et al. 2011; Moore et al. 2012). In the interest of efficiency in providing prevention services and respect for the time and other commitments of all members of the target population, it may be that the optimal targets for participation should be driven by maximizing the participation of individuals who (by some indicator) have the greatest need and will experience the greatest benefit. Smith et al. (2016) determined that in their sample where all families enrolled in the trial were considered to be at risk, those caregivers reporting high levels of caregiving stress participated at a higher rate in two critical components of the Family Check Up over the 8-year period of brief intervention delivery. In addition, caregivers who reported having a non-compliant child coupled with high caregiver distress was associated with higher participation. However, Coatsworth et al. (2017) indicated that avoidance of conflict with youth was related to less engagement in the Mindfulness Enhanced Strengthening Families Program. Similarly, Perrino et al. (2016) reported that for the eHealth Familias Unidas intervention, high levels of baseline family stress were associated with lower engagement. As Perrino et al. (2016) point out, it would be useful to understand what factors, such as the requirement for family interaction, might impact upon participation in interventions for families who may theoretically experience significant benefits. In addition, it would be useful to consider whether participation can be optimized by ensuring that all who participate receive an intervention that fits their goals and needs.

Even individuals who would benefit from preventive interventions may be less likely to achieve desired outcomes if the intervention is not suitable for their level of readiness for intervention. In fact, the issue raised above regarding family conflict as an impediment to participation could be an example of how often unmeasured social, emotional, or cognitive variables could influence a person’s preparedness to absorb the content and appropriately execute the tasks and skills introduced as a part of an intervention. Coatsworth et al. (2017)

study of dynamic engagement suggests that parental education and involvement with youth was related to engagement in the first session and that changes in engagement during the course of an intervention could cluster in meaningful ways. Understanding how groups of individuals who participate and/or engage in an intervention differ from those who do not may provide important insight into ensuring readiness for intervention among participants.

Authors also highlighted the importance of understanding barriers to participation and decisions to enroll or not enroll in a prevention program. Mauricio et al. (2017) discovered differential attendance patterns in the fathers as compared to mothers in the New Beginnings Program. Both Mauricio and Perrino make note of impacts of ethnicity; while Mauricio finds that Latina mothers are more likely to be early dropouts or declining attenders than to be sustained attenders, Perrino finds that greater parental Hispanicism was associated with more participation in eHealth Familias Unidas. These observations highlight the need to better explore underlying factors and processes that explain these associations. In addition, findings that partnered status, caregiver and family stress, parenting efficacy, and aspects of the parent-child relationship influence participation and engagement also suggest a need to ensure that interventions are accessible, relevant, and inviting to all types of families who participate (Coatsworth et al. 2017).

Continuing Progress on Understanding Participation in Prevention

Authors in this special issue set out to conceptualize, operationalize, and examine participation in prevention interventions. The studies of participation in these family-based prevention interventions represent an important additional step in furthering understanding of participation in prevention. Multiple overarching themes emerged from the findings that support the utility of examining participation factors in prevention: participation is multidimensional, including engagement, enrollment, initiation, and participation over time; individual, family, and contextual factors can influence participation in prevention; and participation is a process that could be improved through specific engagement strategies. The findings from the studies identify ways to address participant drop off between enrollment and initiation of a program and participant dropout once enrolled and attending a prevention program, such as using information on predictors of participation to address barriers to participation or developing specific recruitment/engagement messaging to help motivate participants and help them understand the goals and potential benefits of prevention programs.

The diverse approaches to defining and measuring participation are instructive for refining measurement of key dimensions of participation in prevention in a consistent manner. Additional work that would build from the studies included in this special issue is needed to bring consistency to the operationalization and measurement of participation. For example, it would be helpful to establish measurement frameworks that could be replicated across studies. In addition, more work is needed to understand the extent to which various indicators of participation influence short-term and long-term outcomes. Only one of the studies examined impact of participation on parenting outcomes (Berkel et al. 2016).

The majority of the studies in the special issue were at the effectiveness stage of research, a good time to focus on questions related to factors that impact implementation of a prevention intervention. However, understanding and addressing participation in the prevention process should occur as early as possible in the intervention development and testing process, to increase engagement, enrollment, initiation, and participation, and to ensure that the intervention engages the full range of the target population, or that potential barriers are identified. The Prevention Research Branch of the National Institute on Drug Abuse (NIDA) encourages the inclusion of services research questions that inform the adoption and implementation of an intervention as early as possible in the research process, including questions related to participation. This is depicted in our schematic conceptualization of the full spectrum of prevention science (Robertson et al. 2012) in Fig. 1, where services research questions are seen as integral throughout the process, most commonly occurring at the effectiveness, systems, and practice phases of the research process, but with the potential to be integrated earlier in the intervention development and testing phases. For example, addressing measurement of readiness for intervention could be included in the intervention development phase, and documenting information on barriers to participation as well as collecting information on the likelihood of participants engaging in the intervention outside of a research context could be included in the efficacy phase. Also, examining attendance patterns to understand issues related to engagement, participation, and dropout (similar to what authors in this special issue did) could be included in the intervention development and efficacy phases. Other questions that address potential intervention fit with service settings could begin earlier than the effectiveness or implementation phases of research and may facilitate participation when implemented in real-world settings and systems. The conceptualization used by NIDA is consistent with other frameworks, such as the Translation Science to Population Impact (TSci Impact) Framework (Spoth et al. 2013). If the goal is to have evidence-based prevention interventions that can be implemented at scale in real-world settings under real-world conditions to produce population-level impact, then understanding and addressing participation-related factors that affect exposure to intervention “active ingredients” is essential.

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Fig. 1. Schematic conceptualization of prevention science at NIDA (Robertson et al. 2012). The prevention research cycle, interactions between the different phases of research, and connections with services research throughout the research cycle. Dashed lines connecting to services research represent early opportunities for services research questions such as those related to participation, and thick solid lines represent periods when services research questions often are integrated into prevention research