Barriers and Facilitators to the Implementation of Interventions to Prevent Youth Violence in Latin America: A Systematic Review and Qualitative Evidence Synthesis

TRAUMA, VIOLENCE, & ABUSE I-II

© The Author(s) 2016
Reprints and permission:
sagepub.com/journalsPermissions.nav

DOI: 10.1177/1524838016664044

tva.sagepub.com

Erika E. Atienzo¹, Eva Kaltenthaler¹, and Susan K. Baxter¹

Abstract

Youth violence in Latin America is an important public health problem. However, the evidence from preventive programs within the region to address this problem is limited. Identifying context-specific factors that facilitate or hinder the success of interventions is necessary to guarantee the successful implementation of new preventive strategies. We present a systematic review and synthesis of qualitative studies to identify factors affecting the implementation of programs to prevent youth violence in Latin America. We searched 10 electronic databases and websites of international institutions. The quality of the studies was assessed using the critical appraisal skills program checklist, while the certainty of the findings of the synthesis was assessed using the certainty of the qualitative evidence approach. We included eight papers describing five programs in Argentina, Venezuela, Peru, El Salvador, and Mexico. Most of the factors affecting the implementation of programs were aspects related to features of the programs and social/political constraints. The synthesis suggests that future programs can benefit from having a multidisciplinary and/or multisectoral approach involving different key players. At the same time, potential strategies for avoiding problems related to such active engagement should be planned via promoting effective channels for communication and supervision. The review also suggests the importance of increasing awareness and motivation toward the problem of youth violence among relevant agencies and stakeholders. While the limited volume and quality of the literature impact on the ability to draw conclusions, the results could be useful for new programs being designed and the ones seeking to be adapted from other contexts.

Keywords

youth violence, bullying, community violence

During the last two decades, there has been a growing recognition in relation to the problem of youth violence as a public health concern throughout the world (Matjasko et al., 2012; Office of the Surgeon General [United States], National Center for Injury Prevention and Control [United States], National Institute of Mental Health [United States], & Center for Mental Health Services [United States], 2001). Youth violence is a form of community interpersonal violence; it can be defined as intentional behaviors inflicted by people aged 10–24 years that threaten to cause or cause harm to other people who are not relatives (Dahlberg & Krug, 2002; Guerra, 2005).

While violence is a problem faced by many countries, Latin America has been traditionally recognized as one of the most violent regions in the world (Moser & McIlwaine, 2006; Peetz, 2011). Higher numbers of intentional homicides are found in Central and South America, with rates above 20 homicides per every 100,000 population in comparison to the global rate of 6.2. Murders among young men aged 15–29 in these two regions are up to 4 times higher than the global rate for this age-group (United Nations Office on Drugs and Crime, 2014). Effective prevention strategies are urgently needed.

The origins of juvenile violence in Latin American are believed to be closely related to a complex social environment, as high levels of inequality are present in the region (Perel, Casas, Ortiz, & Miranda, 2006). In addition, accelerated urban growth, high levels of poverty, the persistence of traditional role models promoting the involvement of men in risky practices, the low quality of education, and the context of drugtrafficking and crime contribute to the proliferation of youth violence, aggression, and/or crime (Briceño-León, Villaveces, & Concha-Eastman, 2008; Heinemann & Verner, 2006; Moser & van Bronkhorst, 1999; Willman & Makisaka, 2010).

In face of the significant levels of youth violence and bullying, many prevention efforts have been implemented globally;

Corresponding Author:

Erika E. Atienzo, School of Health and Related Research (ScHARR), The University of Sheffield, 30 Regent Street, Sheffield S1 4DA, United Kingdom. Email: e.atienzo@sheffield.ac.uk

School of Health and Related Research, University of Sheffield, Sheffield, United Kingdom

progress has been made in identifying programs with the best evidence of impact in the prevention of youth violence (Matjasko et al., 2012). Internationally, existing systematic reviews have been conducted to identify best practices to prevent violence, crime, and antisocial behaviors among children and young people. To date, there is a growing body of evidence assessing the effectiveness of community programs (Tolan, Henry, Schoeny, & Bass, 2008; Wilson & Lipsey, 2000), family-based programs (Bilukha et al., 2005; Maughan, Christiansen, Jenson, Olympia, & Clark, 2005; Piquero, Farrington, Welsh, Tremblay, & Jennings, 2008), school-based interventions (R. Hahn et al., 2007; Mytton, DiGuiseppi, Gough, Taylor, & Logan, 2002, 2006; Oliver, Wehby, & Daniel, 2011; Wilson & Lipsey, 2007), and other interventions such as recreational or after-school programs (R. A. Hahn et al., 2005; Kremer, Maynard, Polanin, Vaughn, & Sarteschi, 2015; Limbos et al., 2007; Matjasko et al., 2012; Petrosino, Turpin-Petrosino, Hollis-Peel, & Lavenberg, 2013; Weinstein, Fuller, Mulrooney, & Koch, 2014).

However, most of the syntheses published so far regarding the prevention of youth violence describe experiences of interventions implemented in high-income regions. The evaluation of preventive programs particularly in Latin America is limited. Thus, for many countries, the policy recommendations for youth violence prevention are based predominantly on the experiences from countries with different societies and environments. This is relevant since preventive interventions are embedded within a social context; their implementation can be affected by individual, organizational, and systems factors (Forman, Olin, Hoagwood, Crowe, & Saka, 2009). For example, Forman, Olin, Hoagwood, Crowe, and Saka (2009) found within a sample of developers of school-based mental health interventions that 7 in 10 had modified the intervention when trying to implement the programs in other schools. Another study about evidence-based programs to prevent substance abuse and school crime in the United States showed that less than half of the schools that implemented evidencebased programs achieved a high-quality implementation (Crosse et al., 2011).

How an intervention is delivered, the infrastructure of the system, and the beneficiary population, are factors that can affect an "outcome" as the intervention itself (Kelly et al., 2010). To promote efficient planning, there is a need to understand how interventions operate in the real world (Galbraith, 2004). Identifying context-specific factors that hinder or facilitate the success of programs is required, so that promising interventions are implemented successfully. A full understanding of such factors could also help in deciding which interventions warrant investment.

The aim of this study was to identify and synthesize qualitative research reporting factors affecting the implementation of interventions to prevent youth violence, crime, and bullying in Latin America. We looked for studies reporting factors affecting either (a) the participation of the population in the interventions or (b) the functioning and operation of the interventions.

Material and Method

We carried out a systematic review of qualitative studies describing experiences surrounding the implementation of a primary or secondary prevention program. Primary prevention focuses on reducing risk factors or in promoting protective factors among the general population, while secondary prevention aims to target groups with a high risk of exhibiting violent or criminal behaviors; tertiary prevention interventions are designed to avoid repeated offenses among young people already involved in violence or crime (Imbusch, Misse, & Carrion, 2011) and will not be included here as they might demand the involvement of rehabilitation strategies.

This review was conducted according to standards from the preferred reporting items for systematic reviews and meta-analyses (PRISMA) statement (Moher, Liberati, Tetzlaff, Altman, & PRISMA Group, 2009; Moher et al., 2015) and the enhance transparency in reporting qualitative evidence synthesis statement (Tong, Flemming, McInnes, Oliver, & Craig, 2012). A protocol was initially prepared and is available from the authors. Searching and data extraction were conducted by the lead researcher, with decisions regarding the selection of studies for inclusion made by the full team. In this manuscript, the terms "program" and "intervention" are considered interchangeable.

Inclusion and Exclusion Criteria

Inclusion and exclusion criteria were based on the elements in the sample, phenomenon of interest, design, evaluation, research type (SPIDER) framework (Cooke, Smith, & Booth, 2012). Studies were considered for inclusion if the sample (S) included individuals that coordinated, implemented, or attended to an intervention; the phenomenon of interest (PI) was the implementation of an intervention to reduce or prevent violence, aggression, bullying, or crime among youths; the study design (D) was any type of qualitative design such as structured or in-depth interviews, focus groups, observations, or case studies; the manuscript presented an evaluation (E) regarding experiences or views on the implementation of a program; the research type (R) was any type of study presenting qualitative data, including mixed methods. Lastly, studies were included if the program was implemented in countries from Central or South America, excluding Surinam, French Guiana, Guyana, and the Caribbean. We included both published and unpublished reports.

Manuscripts were excluded if they were not in English or Spanish; described a pharmacological or punitive intervention (i.e., not focused on prevention) or a structural intervention involving the modification of the physical context only; described the design of an intervention only; were focused on dating, sexual, or domestic violence.

Search Strategy

The search of the literature was conducted between April and May 2015. We searched the following academic databases:

Applied Social Sciences Index and Abstracts, Cumulative index to nursing and allied health literature, ProQuest Dissertations & Theses A&I, International Bibliography of the Social Sciences, LILACS, PsycINFO, SCIELO, SCOPUS, Social Services Abstracts, and Sociological Abstracts. The search strategy built on a large list of key words based on five groups of concepts according to the SPIDER criteria: Intervention OR Program OR Curriculum, and so on; "Youth violence" OR "Juvenile Violence" OR Bullying, and so on; Views OR Experiences OR Barriers OR Facilitators, and so on; "Qualitative Methods" OR Qualitative OR "Qualitative Research" OR "Mixed Methods," and so on; Interviews OR "Focus Groups" OR "Case Study," and so on; "Latin America" OR Argentina OR Belize, and so on. The search was adapted to Spanish for two databases and was conducted without restrictions. The complete search strategy is available from the authors.

We also searched for new manuscripts listed in the reference lists of the papers included and other relevant manuscripts and also conducted a citation search in Google Scholar to identify recent manuscripts citing those papers selected for inclusion. In addition, we searched for papers on the websites of international institutions (e.g., the International Centre for the Prevention of Crime, the Inter-American Development Bank, the World Bank, among others). This last step in the search was done in parallel to another ongoing systematic review focused on the impact of interventions. Thus, from the websites, both quantitative and qualitative papers were retrieved for assessment, but only those presenting evidence about factors affecting the implementation were included in this synthesis.

Study Selection and Data Extraction

Records from the searches were exported into EndNote, Version X7. After eliminating duplicates, a first screening of titles and abstracts was conducted. The full text of documents potentially meeting inclusion criteria were retrieved for a second screening. A predesigned data extraction sheet was used for retrieving information from the selected studies including (a) publication details, (b) design of the study, and (c) intervention description. Segments of text describing factors affecting the implementation of the interventions were also extracted.

Quality Assessment

The quality of the included studies was assessed using the critical appraisal skills program (CASP) checklist for qualitative research (CASP, 2014), consisting of 10 questions that can be answered with "Yes," "No," and "Can't tell" in relation to the methodological and reporting issues. Quality was not used as an exclusion criterion.

Data Synthesis and Analysis

We conducted a thematic synthesis guided by the supporting the use of research evidence for policy in African health systems (SURE) framework (The SURE Collaboration, 2011). This framework provides a list of barriers to the implementation of policies, organized according to different levels or dimensions such as recipients of the programs, providers, stakeholders, program or system constraints, and social/political constraints. The use of this framework enabled comparison across the studies using a systematic and structured approach (Glenton et al., 2013).

The synthesis followed an iterative process of developing and refining the initial framework via the following steps: (1) adaptation of the SURE framework to the question of this review, (2) review of studies, (3) identification and extraction of segments of text describing outcomes of interest, (4) coding of text according to themes in the adapted framework, (5) identification of new themes, (6) re-review of findings from the original studies (link to Step 3), and (7) coding of barriers and facilitators within the main themes and across the different levels of the framework. At the conclusion of this process, inferences regarding findings and relations among factors were made. Summary tables and figures were developed.

Assessing the Confidence in the Findings

The strength of the overall evidence was assessed using the certainty of the qualitative evidence method which is based on the assessment of two factors: firstly, the assessment of the quality of each of the individual studies by using a tool such as CASP. Secondly, the plausibility or coherence of a finding, that is, the degree to which it is possible to detect a pattern across studies. A pattern could include a finding that is present consistently across multiple studies or contexts (Glenton et al., 2013). Each barrier or facilitator was rated according to these two criteria. The certainty of each finding could then be classified as: *high*, if supported by rigorous studies and a pattern across studies exists; *moderate*, when there are concerns on methodological limitations or the coherence of the finding; or *low*, when there are important methodological limitations and concerns over the coherence of the finding.

Results

Only 25 records were identified from the searches in academic databases. After searching in websites, reference lists, and conducting citation searches, eight papers representing five programs were included in total (Berk-Seligson, Orcés, Pizzolito, Seligson, & Wilson, 2014; Bustos & Aldaz, 2006; Castro & Escribens, 2012; Medan, 2011, 2012, 2013; Schnell, 2012; Uy, 2012). Figure 1 outlines the studies selection process.

Description of the Studies

A summary of the studies is provided in Table 1. The interventions were community based (Berk-Seligson et al., 2014; Medan, 2011, 2012, 2013; Schnell, 2012; Uy, 2012), school based (Bustos & Aldaz, 2006), or family based (Castro & Escribens, 2012) and involved a number of different

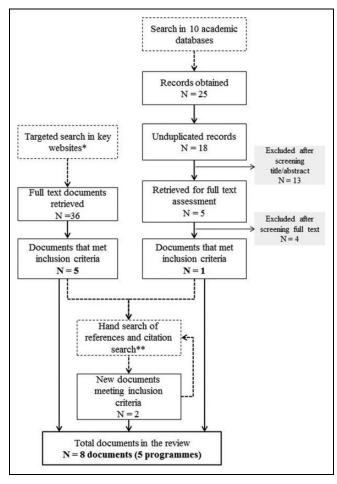


Figure 1. Preferred reporting items for systematic reviews and metaanalyses flow diagram illustrating the study identification process. *Only full-text documents retrieved. This step was done in parallel to another systematic review focused on quantitative studies. Thus, the number of papers selected for assessment included both qualitative and quantitative methodologies. *The hand searching of references and the citation search was done for all the papers retrieved for fulltext assessment.

components such as training to students, parents, or key players in the community. Most of the studies lacked a clear description of data collection, selection of participants, ethical matters, or data analysis procedures, leading to concerns regarding their methodological rigor (Table 1).

Barriers and Facilitators to the Implementation of Programs

Data were identified which related to four dimensions according to the SURE framework: recipients of the programs, providers of the programs and other key players/stakeholders, programs constraints, and social or political constraints. Within these dimensions, 26 themes relating to barriers and 16 relating to facilitators were identified. Given the limited quality and number of studies detected, we did not rank any theme as evidence with high certainty. However, we considered a

finding to be of moderate certainty if three or more studies provided evidence relating to it. If a theme was supported only by one or two studies, then the certainty was considered to be low. The complete list of themes relating to barriers and facilitators across the four dimensions is presented in Figure 2. As a supplementary material, we have prepared a table with the complete description of barriers and facilitators and the studies contributing to each of them (see Supplementary Material).

Program recipients. Themes within this dimension relate to young people participating in programs or their parents. Two barriers were identified: Firstly, a belief that the program is designed for people having nothing important to do discouraged some parents from participation (Bustos & Aldaz, 2006), and secondly, complex situations in participants' lives such as family dynamics, maternity, or the need for income sometimes limited the achievement of goals or attendance at programs (Bustos & Aldaz, 2006; Medan, 2011, 2013). The only facilitator found in this theme relates to the motivation of participants, which was described as enhancing access to and continuation in the programs (Bustos & Aldaz, 2006; Medan, 2011, 2013).

Program providers and other stakeholders and key players. In this dimension, we included themes relating to individuals implementing the interventions as well as other stakeholders or key players such as program managers, community leaders, educational or health authorities, and policy makers or donors. In total, four barriers were identified. Firstly, there was moderate certainty regarding the evidence that the implementation of an intervention could be adversely affected by providers or key stakeholders that have a low commitment to a program (Berk-Seligson et al., 2014; Bustos & Aldaz, 2006; Castro & Escribens, 2012). Secondly, authors reported that teachers could lack confidence in coping with emotional situations arising from prevention activities, for example, emotional reactions from parents when talking about life experiences (Bustos & Aldaz, 2006). The third barrier identified was that in some contexts, teachers or school personnel were reluctant to get involved in conflict mediation due to fear of students involved in gangs (Berk-Seligson et al., 2014). Lastly, another barrier indicated that negative beliefs from the teachers or other stakeholders about a program approach or effectiveness could limit their involvement on the activities of an intervention (Bustos & Aldaz, 2006; Castro & Escribens, 2012).

On the other hand, three facilitators were identified. Studies consistently documented the importance of skills/knowledge of providers in facilitating the implementation. For example, Castro and Escribens (2012) and Berk-Seligson, Orcés, Pizzolito, Seligson, and Wilson (2014) highlighted that teachers were a key element in programs since they already know how to approach and work with parents and students. Uy (2012) described how a parents' union had an important role in motivating other families to participate or to perform tasks. Another consistent facilitator reported that providers or stakeholders who understood the relevance of a program, that is, that were

Table I. Characteristics of the Studies. Factors Affecting the Implementation of Interventions to Prevent Youth Violence in Latin America.

	Medan (2011, 2012, and 2013)	Uy (2012)	Castro & Escribens (2012)	Berk-Seligson, Orcés, Pizzolito, Seligson, and Wilson (2014); Schnell (2012)	Bustos and Aldaz (2006)
Study ID	1	2	3	4	5
Characteristics of the studies Country Program name	Argentina Comunidades Vulnerables	Venezuela Sistema Nacional de Orquestas Inveniles e Infantiles	Peru Familias Fuertes Amor v I ímires	El Salvador Central America Regional Security Initiativa	Mexico Contra la violencia,
Program type	Community based; workshops	Community based; musical training	Family based; groups of parents and/or adolescents	Community based; multiple strategies	School based; family based
Study design Study setting Study nomilation	Qualitative At-risk neighborhoods Youths program	Qualitative, ethnography Schools; community Program administrators purled	Qualitative Schools Program coordinators	Mixed methods At-risk neighborhoods Community leaders school staff	Mixed methods Schools Authorities from the
	implementers	coordinator, students, parents, teachers	and implementers	religious leaders, police officers, implementing partners, youths	educational system, actors from the funding and implementing agencies, teachers, students, parents
Data collection method	Participant observation, interviews and reviews of documents	Interviews	Interviews	Semi-structured interviews and focus groups	Semi-structured interviews and focus groups
Quality assessment ^a of the studies	;	;	;	;	
Clear research aim	Yes	Yes	Yes	Yes	Yes
Qualitative methodology appropriate	Yes	Yes	Yes	Yes	Yes
Research design appropriate	Yes	Yes	Yes	Yes	Yes
Recruitment strategy	Can't tell	Can't tell	Can't tell	Can't tell	Can't tell
appropriate Data collection strategy	Can't tell	Can't tell	Can't tell	Yes	Can't tell
appropriate	=======================================	=			11 11 11 11
Relationship between researcher and participants adequately considered	Can't tell	Can t tell	Can t tell	Can t tell	Can't tell
Ethical issues taken into	Can't tell	Can't tell	Can't tell	Can't tell	Can't tell
Data analysis sufficiently rigorous	Can't tell	Can't tell	Can't tell	Yes	Can't tell
Clear statement of findings	Can't tell	Can't tell	Can't tell	Yes	Can't tell

^aUsing the qualitative research checklist from the Critical Appraisal Skills Program, 2014.

2. Providers, stakeholders or key players 1. Recipients of the programme **FACILITATORS** BARRIERS **FACILITATORS** BARRIERS Individual motivation to access and Less motivation that leads to less Teachers and key players, such as A belief that the programme was commitment (*moderate*) community leaders or parents continue in the programme (low) designed for people having nothing Teachers' limited skills to manage unions, can contribute with specific important to do (low) emotional situations arising from the tasks they are already good at Complex individual socioeconomic activities with the participants (low) (moderate) circumstances such as maternity or need School personnel or teachers' fear of Sensitisation towards the goal or for incomes (low) getting involved into conflicts in unsafe relevance of the program or violent contexts (low) (moderate) Beliefs about the programme Desires for contributing to the approach, appropriateness or community (low) effectiveness (low) 4. Social and political constraints 3. Programme constraints **FACILITATORS** BARRIERS BARRIERS **FACILITATORS** · Lack of facilities: materials, documents Involvement of different sectors Violent or insecure contexts (moderate) • The involvement of religious leaders or physical space (moderate) institutions, stakeholders or key players · Frequent staff turnover both in can help to reach very at-risk-youths Programme's rules not consistent or (moderate) education and health systems (low) (low) Frequent strikes among teachers (<u>low</u>) clear (moderate) Links between the programme and A need to choose between quantity or previous prevention efforts (moderate) Absence of regulations for addressing quality regarding fidelity of problems of gangs or violence in the Supervision from the implementing school (<u>low</u>) implementation (moderate) agencies (low) Effective internal and external The police can be perceived as being Limited number of trained providers (moderate) communication (low) corrupted (low) Training for providers is short, long or · Coordination between key players (low) Most-at-risk women are not reached costly (moderate) Alignment to the approach of the since crime is less legitimised in females School personnel do not have time for educational system (low) (low) training or implementation (Iow) A structure that facilitates referencing Communication problems among the participants to other services (*low*) Social codes in the community different to those proposed by a programme different key players (low) Including social workers and Supervision can be perceived as an psychologists in tasks that teachers (low) administrative task (low) could not perform (low) Governmental authorities place an Funding from public and private emphasis on numbers of individuals Numerous reports to submit (*low*) attended instead of quality of · Lack of a system for referencing institutions and local governments (low) participants to other services (low) Economic incentives to avoid after Problems to align a programme within school jobs (low) · Strict methodological standards (low the educational/health system (low) *Based on a thematic analysis guided by the SURE Framework; certainty of the evidence assessed according to the CerQual approach

Figure 2. Barriers and facilitators affecting the implementation of programs. Certainty of the evidence is presented in parentheses. *Based on the thematic analysis guided by the supporting the use of research evidence framework, certainty of the evidence assessed according to the certainty of the qualitative evidence approach.

sensitised in relation to the program, were more involved in the activities and operation of the interventions (Berk-Seligson et al., 2014; Bustos & Aldaz, 2006; Castro & Escribens, 2012; Uy, 2012). Also, a desire for contributing to the community facilitated the involvement of key players (Berk-Seligson et al., 2014; Uy, 2012).

Programs' constraints. We identified 11 barriers within this component, and among these, the majority of studies provided evidence relating to five barriers. Firstly, one of the most frequently reported barriers was lack of materials or facilities (Berk-Seligson et al., 2014; Bustos & Aldaz, 2006; Castro & Escribens, 2012; Uy, 2012). A second barrier was lack of clarity or inconsistency in programs' rules (Berk-Seligson et al., 2014; Bustos & Aldaz, 2006; Medan, 2013). The need to choose between adherence to high standards of implementation and a more flexible scheme was also frequently outlined, especially when resources and time constraints were present (Bustos & Aldaz, 2006; Castro & Escribens, 2012; Uy, 2012); for example, training may be shortened due to cost or time constraints (Castro & Escribens, 2012). Also, moderate strength was found in evidence showing problems arising due to a limited number of trained providers in the community, since this shortage affected the ability to reaching greater numbers of participants or carrying out more activities (BerkSeligson et al., 2014; Bustos & Aldaz, 2006; Castro & Escribens, 2012; Uy, 2012). Relating to this, the training of providers was commonly reported to be short, long, or expensive (Berk-Seligson et al., 2014; Bustos & Aldaz, 2006; Castro & Escribens, 2012).

Other barriers were the limited time that school personnel (who often acted as providers of the interventions) has for training or for delivery of the interventions (Bustos & Aldaz, 2006; Castro & Escribens, 2012), problems relating to an inefficient communication between the different key players involved (Berk-Seligson et al., 2014; Bustos & Aldaz, 2006), an inadequate supervision of the interventions that could be perceived as an overload of work (Bustos & Aldaz, 2006), the need to submit frequent reports regarding implementation of the interventions (bureaucracy; Bustos & Aldaz, 2006), lack of a defined scheme for referring violent students or those affiliated with gangs to other specialized services (Berk-Seligson et al., 2014; Bustos & Aldaz, 2006), and lastly, problems initiating new interventions within the well-defined structure of the educational or health systems (Berk-Seligson et al., 2014; Castro & Escribens, 2012).

Among the facilitators, 11 themes were identified. Most of the authors reported that the involvement of different sectors, institutions, organizations, or stakeholders (i.e., a multidisciplinary and/or multisectoral collaboration) was important.

Participation of community leaders and educational or health authorities had an important role in achieving wide program coverage and successful performing of activities due to the diverse experience of those involved. For example, community-based organizations were described as key to reaching youths (Berk-Seligson et al., 2014), whereas schools were key in reaching parents (Berk-Seligson et al., 2014; Bustos & Aldaz, 2006; Castro & Escribens, 2012). Authors also mentioned that creating links between new programs and previous efforts conducted by schools or communities facilitated the implementation of new preventive activities (Berk-Seligson et al., 2014; Bustos & Aldaz, 2006; Castro & Escribens, 2012).

Supervision was essential to enable implementation of the interventions as planned by the coordinators (Bustos & Aldaz, 2006). In addition, good communication facilitated the coordination of activities among the key players (Berk-Seligson et al., 2014; Bustos & Aldaz, 2006), and in turn, a good coordination allowed efficient distribution of roles and responsibilities and multidisciplinary work (Bustos & Aldaz, 2006; Castro & Escribens, 2012). Another factor that contributed to the operation of interventions centered in schools was using skill-based approaches similar to the one used by the national educational system (Bustos & Aldaz, 2006), while the health system was described as facilitating referring of participants to other specialized areas when needed (Castro & Escribens, 2012). The involvement of psychologists and social workers was beneficial to lead activities that traditional providers could not perform (such as emotional support; Berk-Seligson et al., 2014; Bustos & Aldaz, 2006). Another facilitator was obtaining funding from both private and public institutions including local governments since it guaranteed that materials and facilities were available (Castro & Escribens, 2012; Uy, 2012). Related to this, economic incentives to participants were described as being helpful to prevent youths abandoning the program to start a job (Medan, 2013; Uy, 2012). Lastly, strict methodological standards facilitated the implementation of programs (Castro & Escribens, 2012; Uy, 2012).

Social or political constraints. In this dimension, nine barriers were found. There was moderate evidence that insecure or violent contexts can act as an important barrier impacting on program provision; for example, areas with a presence of gangs (Berk-Seligson et al., 2014) or communities known for being violent (Bustos & Aldaz, 2006). Other barriers with a lesser degree of consistency were the loss of trained providers due to frequent staff turnover at the educational or health system (Bustos & Aldaz, 2006; Castro & Escribens, 2012) and strikes among teachers (Castro & Escribens, 2012). Other constraints were the lack of clear regulations on what to do regarding gangs or juvenile violence in schools and involving the police since it can adversely affect the credibility of a program when the police is perceived to be corrupt (Berk-Seligson et al., 2014).

Other barriers were difficulties reaching women, since juvenile violence is less legitimized in females (Medan, 2013), implementing a standard program within heterogeneous populations (Bustos & Aldaz, 2006; Castro & Escribens, 2012), and

differences between social codes promoted by a program and codes present in a community (Medan, 2011, 2012). Lastly, it was described that local authorities can put pressure in order to achieve a large coverage of participants even if this compromises the quality of interventions (Castro & Escribens, 2012; Uy, 2012). Only one facilitator was present, showing the benefits of involving religious leaders in the programs since they can contribute to reaching at-risk youths (Berk-Seligson et al., 2014).

Discussion

This qualitative evidence synthesis explored factors affecting the implementation of programs to prevent youth violence in Latin America. To our knowledge, this is the first systematic review and qualitative synthesis reported on this topic focused in this region. According to the included studies, the majority of factors affecting the implementation of programs were aspects related to features of the programs and social or political constraints. The review suggests that program implementers can concentrate on addressing these issues before implementation. Some of the main findings are discussed below.

One of the findings which is consistent across the majority of the studies is that the involvement of different sectors, institutions, or levels helped in reaching out to more participants or in implementing diverse preventive activities. It is possible then that future programs benefit from having a multidisciplinary, multisectoral, and/or multilevel approach involving different stakeholders and key players. This is consistent with previous international research, showing that the most effective programs to prevent interpersonal violence tend to involve both local governments and regional frameworks or initiatives (Willman & Makisaka, 2010). By engaging different levels of stakeholders, it will be possible to reach a more diverse population or to efficiently distribute roles and responsibilities. A multidisciplinary approach could also facilitate making links between new initiatives and previous efforts or programs implemented in the community (Forman et al., 2009), which is another facilitator identified in our sample of studies. In addition, the involvement of both public and private institutions could contribute to obtaining sufficient funding for expenses related to the implementation, since the lack of materials and facilities was a barrier reported by majority of the authors. Private institutions can be encouraged to see programs as an investment opportunity (Uy, 2012).

Many of the programs identified in this review reported experiencing difficulties related to the training of providers. There is a need to guarantee a sufficient number of providers prior to implementation, and training schemes should be designed with the consideration of time constraints and availability of traditional providers such as teachers or school personnel (Forman et al., 2009). Again, a multidisciplinary collaboration with different organizations would provide access to a wider range of potential providers.

While there might be clear advantages of engaging multidisciplinary and multilevel groups, a focus should be placed on achieving effective coordination between the stakeholders involved. Such coordination could be achieved by establishing well-structured channels for communication. Effective communication could also enable closer and more effective supervision, improving the fidelity of the intervention. As documented in the included studies, when communication fails, program management can be perceived as overly bureaucratic, especially if there is a need to submit numerous reports. Implementers should carefully decide on the types of information they need from the providers and coordinators of the interventions. One way of promoting communication and coordination might be by increasing the levels of awareness among providers and other stakeholders regarding the problem of youth violence and the goals of a program. Awareness raising should aim to achieve the support of authorities and stakeholders and to promote collaborative work, which could in turn translate into more motivation and more active participation in the planning and delivery of interventions.

Effective communication and increased awareness among stakeholders might also contribute to reducing methodological constraints. Many providers and intervention implementers face the need to make decisions regarding maintaining the methodological quality of the intervention, meaning a more expensive and numerically limited approach or opting for a more flexible and resource-saving one. Pressure may particularly come from local authorities (from municipalities, the government, or the educational system) to place an emphasis on quantity rather than quality. Promoting rigorous methodological standards for the implementation could contribute to minimizing such pressure, but to achieve this, there is a need to increase knowledge and awareness among stakeholders and authorities, regarding the importance and goals of the programs and conditions required to implement them.

Other aspects that planners of programs can consider are related to the social context in which a program is intended to be implemented. The interventions focused on schools need to recognize that frequent strikes called by teachers unions are a reality for many countries in Latin America (Kingdon et al., 2014). As a result of this, the provision of school-based programs could be adversely affected. The violent context that prevails in many cities from the region is another reality that program designers need to consider. This is linked to the fact that many schools do not know what to do with the more violent students or those affiliated with gangs. Since an intersectoral collaboration between the educational and health system is not already established, referring of students to specialized services may be a less formal and straightforward process.

Lastly, Latin America is a heterogeneous region; program implementers need to reflect on the possibility of adapting the interventions to different types of populations, taking into account diverse socioeconomic and demographic profiles while designing the interventions. Poverty, early parenthood/motherhood, and gendered relationships are factors affecting

the daily lives of youths and should be carefully contemplated in preventive programs.

Limitations of the Study

We should note some limitations of this review. The most important concern relates to the number of included studies and their quality. While we searched in a large number of academic databases, we only found five studies; most of them in the form of reports not published in peer-reviewed journals. The reports lacked detailed information to assess their quality, raising methodological concerns. Considering this, none of the findings presented here can be said to be supported by a high degree of certainty, which limits the overall strength of the review findings. Thus, our claims should be interpreted with caution.

Also important is that many of the documents included were not exclusively focused on exploring barriers or facilitators for implementation. This synthesis is based on an interpretation of the findings originally reported by the authors, since the evidence available at times was unclear. For example, it was often difficult to differentiate between data describing factors related to the design of a program and factors related to the implementation.

Another potential limitation is related to the framework used to guide the synthesis. We identified more barriers than facilitators for all of the different dimensions explored. However, this fact may reflect the focus of the SURE framework, which is aimed particularly at identifying barriers (The SURE Collaboration, 2011) and not general themes relating to barriers and facilitators.

Although there are concerns regarding the strength of the evidence, we found some consistent results among studies, some of which echo elements identified in previous research. Forman et al. (2009) reported issues affecting implementation related to support of the school principal, teachers, or administrators; financial resources; training and consultation strategies; alignment of the intervention with the school approach, goals, or programs; and turnover of staff. Similarly, in a study about the implementation of positive behavior support interventions on schools, the authors documented the following factors affecting implementation: administrative support, a reward system for students and staff, data, working as a team, involving family and communities, turnover, time constraints, lack of knowledge, and team preparation (Kincaid, Childs, Blase, & Wallace, 2007).

While the studies for this review came from only five countries (Argentina, Venezuela, Peru, El Salvador, and Mexico), the factors identified could represent realities present in many other countries in Latin America. For example, the studies by Berk-Seligson et al. (2014), Schnell (2012), Uy (2012), Medan (2011, 2012, 2013) portrayed the case of a program implemented in a generalized context of violence, while Castro & Escribens (2012) described a context where strikes among teachers are frequent and similar to Bustos and Aldaz (2006) presents the

case where constant staff turnover on the health and educational system occurs.

To conclude, the results of this synthesis add valuable information by identifying potential factors that can affect implementation and outcomes of promising interventions to prevent youth violence in Latin America. This synthesis could guide practitioners to anticipate situations that could be present during implementation (Kok, Vaandrager, Bal, & Schuit, 2012). The information could be useful for both newly designed programs and those seeking to be adapted from other contexts. Program designers could consider the benefits of promoting an active involvement of different institutions and key players, but at the same time, strategies for avoiding problems related to such active engagement should be planned. This synthesis shows the need of more rigorous research on this topic in Latin America.

Critical Findings

- Youth violence is a public health concern in Latin American, but the evaluation of preventive programs in the region is limited.
- Research is needed to understand how interventions operate under conditions present in the region.
- This systematic review identified factors affecting the implementation of five programs in Argentina, Venezuela, Peru, El Salvador, and Mexico.
- The majority of barriers and facilitators affecting implementation were aspects relating to features of the programs and to social or political constraints.
- Few factors were found relating to the recipients of the programs.
- The implementation of an intervention could be adversely affected by providers or stakeholders having low commitment to a program.
- Many of the programs experienced difficulties related to the training of providers.
- The involvement of different sectors, institutions, organizations or stakeholders, and the creation of links between new programs and previous prevention efforts, contributed to the implementation of the programs.
- The need to choose between adherence to high standards of implementation or a more flexible scheme was frequently outlined.
- Most of the studies lacked a clear description of data collection, participants' selection, and ethical matters or analysis.

Implications for Practice, Policy, and Research

- Aspects identified in this synthesis could guide practitioners to anticipate situations that could be present when implementing preventive strategies in Latin America.
- The factors addressed here could be valuable for new programs being designed and those being adapted from other contexts.
- Program designers should consider a multidisciplinary, multisectoral, and/or multilevel approach involving different stakeholders and key players in the planning and implementation.

- At the same time, a focus should be placed on achieving an effective coordination and communication between the key players involved.
- Also important is to increase levels of awareness among providers and other stakeholders regarding the problem of youth violence and relevance of preventive programs.
- More research is needed regarding the implementation of programs to prevent youth violence, crime, and bullying in Latin America, assuring a clear reporting of methodological features and findings.

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: This study was funded by a grant for postgraduate studies from the Mexican National Council of Science and Technology (CONACYT) [Scholarship number 381216]. The funding agency had no influence over the design, conduction, or reporting of this study.

Supplemental Material

The online data supplements are available at http://tva.sagepub.com/supplemental.

References

Berk-Seligson, S., Orcés, D., Pizzolito, G., Seligson, M. A., & Wilson, C. (2014). Impact evaluation of USAID's community-based crime and violence prevention approach in Central America: El Salvador Country Report. Retrieved from http://www.vanderbilt.edu/lapop/carsi/El_Salvador_v22_English_W_04.08.15.pdf

Bilukha, O., Hahn, R. A., Crosby, A., Fullilove, M. T., Liberman, A., & Moscicki, E., ... Preventive, T. F. o. C. (2005). The effectiveness of early childhood home visitation in preventing violence—A systematic review. *American Journal of Preventive Medicine*, 28, 11–39. doi:10.1016/j.amepre.2004.10.004

Briceño-León, R., Villaveces, A., & Concha-Eastman, A. (2008). Understanding the uneven distribution of the incidence of homicide in Latin America. *International Journal of Epidemiology*, 37, 751–757.

Bustos, O., & Aldaz, E. (2006). Reporte final de la evaluación del proyecto "Contra la Violencia, Eduquemos para la Paz, por Ti, por Mi'y por Todo el Mundo," con base en el convenio de cooperación no. 2004-05 entre UNICEF Y GEM, celebrado el 25 de Junio de 2004 para la ejecución de este proyecto. Retrieved from http://www.unicef.org/evaldatabase/files/EVALUACION_ IMPACTO_GEM_16junio_2006.pdf

Castro, A., & Escribens, P. (2012). Experiencia de Implementación del Programa Familias Fuertes Amor y Límites en el Perú. Una Experiencia de Institucionalización. Retrieved from http:// www.bvsde.paho.org/documentosdigitales/bvsde/texcom/sct/ 052213.pdf

- Cooke, A., Smith, D., & Booth, A. (2012). Beyond PICO: The SPI-DER tool for qualitative evidence synthesis. *Qualitative Health Research*, 22, 1435–1443. doi:10.1177/1049732312452938
- Critical Appraisal Skills Program. (2014). *Qualitative Research Checklist 31.05.13*. Retrieved from http://media.wix.com/ugd/dded87_29c5b002d99342f788c6ac670e49f274.pdf
- Crosse, S., Williams, B., Hagen, C. A., Harmon, M., Ristow, L., & DiGaetano, R., ... Program Studies, S. (2011). Prevalence and implementation fidelity of research-based prevention programs in public schools (Final Report). Washington, D.C.: U.S. Department of Education, Office of Planning, Evaluation and Policy Development, Policy and Program Studies Service. Retrieved from https://www2.ed.gov/rschstat/eval/other/research-based-prevention.pdf
- Dahlberg, L. L., & Krug, E. G. (2002). Chapter 1. Violence—A global public health problem. In E. G. Krug, L. L. Dahlberg, J. A. Mercy, A. B. Zwi, & R. Lozano (Eds.), World report on violence and health (pp. 1–21). Geneva, Switzerland: World Health Organization.
- Forman, S. G., Olin, S. S., Hoagwood, K. E., Crowe, M., & Saka, N. (2009). Evidence-based interventions in schools: Developers' views of implementation barriers and facilitators. *School Mental Health*, 1, 26–36. doi:10.1007/s12310-008-9002-5
- Galbraith, J. S. (2004). An examination of the re-invention process of a health promotion program: The changes and evolution of "Focus on Kids" HIV prevention program. Doctor of Philosophy, University of Maryland, College Park, MD. Retrieved from http://drum. lib.umd.edu/handle/1903/1392
- Glenton, C., Colvin, C. J., Carlsen, B., Swartz, A., Lewin, S., Noyes, J., & Rashidian, A. (2013). Barriers and facilitators to the implementation of lay health worker programmes to improve access to maternal and child health: Qualitative evidence synthesis. *Cochrane Database of Systematic Reviews*. doi:10.1002/14651858.Cd010414.Pub2
- Guerra, N. (2005). Youth violence prevention. Community based crime and violence prevention in Urban Latin America and the Caribbean. Washington, DC: The World Bank.
- Hahn, R. A., Bilukha, O., Lowy, J., Crosby, A., Fullilove, M. T., & Liberman, A., ... Task Force on Community Preventive Services. (2005). The effectiveness of therapeutic foster care for the prevention of violence—A systematic review. *American Journal of Preventive Medicine*, 28, 72–90. doi:10.1016/j.ampre.2004.10.007
- Hahn, R., Fuqua-Whitley, D., Wethington, H., Lowy, J., Crosby, A., & Fullilove, M., ... Task Force on Community Preventive Services. (2007). Effectiveness of universal school-based programs to prevent violent and aggressive behavior—A systematic review. American Journal of Preventive Medicine, 33, S114–S129. doi:10.1016/j.amepre.2007.04.012
- Heinemann, A., & Verner, D. (2006). Crime and violence in development: A literature review of Latin America and the Caribbean. Washington, DC: The World Bank.
- Imbusch, P., Misse, M., & Carrion, F. (2011). Violence research in Latin America and the Caribbean: A literature review. *International Journal of Conflict and Violence*, 5, 88–154.
- Kelly, M., Morgan, A., Ellis, S., Younger, T., Huntley, J., & Swann, C. (2010). Evidence based public health: A review of the experience of the National Institute of Health and Clinical Excellence (NICE) of developing public health guidance in England. Social Science & Medicine, 71, 1056–1062. doi:10.1016/j.socscimed.2010.06.032

- Kincaid, D., Childs, K., Blase, K. A., & Wallace, F. (2007). Identifying barriers and facilitators in implementing schoolwide positive behavior support. *Journal of Positive Behavior Interventions*, 9, 174–184. doi:10.1177/10983007070090030501
- Kingdon, G. G., Littlem, A., Aslam, M., Rawal, S., Moe, T., Patrinos, H., ... Sharma, S. K. (2014). A rigorous review of the political economy of education systems in developing countries (Final Report). Education Rigorous Literature Review: Department for International Development. Retrieved from https://eppi.ioe.ac.uk/cms/Portals/0/PDF%20reviews%20and%20summaries/Political%20economy%202014Kingdon.pdf?ver=2014-04-24-141259-443
- Kok, M. O., Vaandrager, L., Bal, R., & Schuit, J. (2012). Practitioner opinions on health promotion interventions that work: Opening the 'black box' of a linear evidence-based approach. Social Science & Medicine, 74, 715–723. doi:10.1016/j.socscimed.2011.11.021
- Kremer, K. P., Maynard, B. R., Polanin, J. R., Vaughn, M. G., & Sarteschi, C. M. (2015). Effects of after-school programs with at-risk youth on attendance and externalizing behaviors: A systematic review and meta-analysis. *Journal of Youth and Adolescence*, 44, 616–636. doi:10.1007/s10964-014-0226-4
- Limbos, M. A., Chan, L. S., Warf, C., Schneir, A., Iverson, E., Shekelle, P., & Kipke, M. D. (2007). Effectiveness of interventions to prevent youth violence a systematic review. *American Journal of Preventive Medicine*, 33, 65–74. doi:10.1016/j.amepre.2007.02. 045
- Matjasko, J. L., Vivolo-Kantor, A. M., Massetti, G. M., Holland, K. M., Holt, M. K., & Dela Cruz, J. (2012). A systematic meta-review of evaluations of youth violence prevention programs: Common and divergent findings from 25 years of meta-analyses and systematic reviews. Aggression and Violent Behavior, 17, 540–552. doi:10.1016/j.avb.2012.06.006
- Maughan, D. R., Christiansen, E., Jenson, W. R., Olympia, D., & Clark, E. (2005). Behavioral parent training as a treatment for externalizing behaviors and disruptive behavior disorders: A meta-analysis. School Psychology Review, 34, 267–286.
- Medan, M. (2011). Sociabilidad juvenil masculina y riesgo: Discrepancias y acuerdos entre un programa de prevención del delito juvenil y sus beneficiarios. [Sociability male youth risk: Disputes and agreements between a crime prevention program for youth and their beneficiaries]. *Ultima década*, 19, 61–87. doi:10.4067/s0718-22362011000200004
- Medan, M. (2012). ¿"Proyecto de vida"? tensiones en un programa de prevención del delito juvenil ["A life's project"? tensions in a youth crime prevention program]. Revista Latinoamericana de Ciencias Sociales, Niñez y Juventud, 10, 79–91.
- Medan, M. (2013). Prevencion del delito y construccion de feminidades juveniles [Crime prevention and youthful femininity construction]. *Revista de Ciencias Sociales*, 2, 73–83.
- Moher, D., Liberati, A., Tetzlaff, J., & Altman, D. G., & Preferred Reporting Items for Systematic Reviews and Meta-Analyses Group. (2009). Preferred reporting items for systematic reviews and meta-analyses: The PRISMA statement. BMJ-British Medical Journal, 339. doi:10.1136/bmj.b2535
- Moher, D., Shamseer, L., Clarke, M., Ghersi, D., Liberati, A., & Petticrew, M., ... Preferred Reporting Items for Systematic

- Reviews and Meta-Analyses-P Group. (2015). Preferred reporting items for systematic review and meta-analysis protocols (PRISMA-P) 2015 statement. *Systematic Review*, 4, 1. doi:10. 1186/2046-4053-4 -1
- Moser, C., & McIlwaine, C. (2006). Latin American urban violence as a development concern: Towards a framework for violence reduction. *World Development*, 34, 89–112. doi:10.1016/j.worlddev. 2005.07.012
- Moser, C., & van Bronkhorst, B. (1999). Youth violence in Latin America and the Caribbean: Costs, causes, and interventions. Washington, DC: The World Bank.
- Mytton, J. A., DiGuiseppi, C., Gough, D., Taylor, R., & Logan, S. (2006). School-based secondary prevention programmes for preventing violence. *Cochrane Database of Systematic Reviews*. doi: 10.1002/14651858.CD004606.pub2
- Mytton, J. A., DiGuiseppi, C., Gough, D. A., Taylor, R. S., & Logan, S. (2002). School-based violence prevention programs—Systematic review of secondary prevention trials. Archives of Pediatrics & Adolescent Medicine, 156, 752–762.
- Office of the Surgeon General (United States), National Center for Injury Prevention and Control (United States), National Institute of Mental Health (United States), & Center for Mental Health Services (United States). (2001). Chapter 1—Introduction youth violence: A report of the surgeon general. Rockville, MD: Office of the Surgeon General.
- Oliver, R., Wehby, J., & Daniel, J. (2011). Teacher classroom management practices: Effects on disruptive or aggressive student behavior. *Campbell Systematic Reviews*. doi:10.4073/csr.2011.4
- Peetz, P. (2011). Youth violence in Central America: Discourses and policies. *Youth & Society*, 43, 1459–1498. doi:10.1177/ 0044118x10384236
- Perel, P., Casas, J. P., Ortiz, Z., & Miranda, J. J. (2006). Noncommunicable diseases and injuries in Latin America and the Caribbean: Time for action. *PLoS Medicine*, 3, 1448–1451. doi:10.1371/journal.pmed.0030344
- Petrosino, A., Turpin-Petrosino, C., Hollis-Peel, M. E., & Lavenberg, J. G. (2013). 'Scared Straight' and other juvenile awareness programs for preventing juvenile delinquency: A systematic review. *Campbell Systematic Reviews*, 5. doi:10.4073/csr.2013.5
- Piquero, A. R., Farrington, D., Welsh, B., Tremblay, R., & Jennings, W. G. (2008). Effects of early family/parenting programs on antisocial behavior and delinquency. *Campbell Systematic Reviews*, 11, 122. doi:10.4073/csr.2008.11. Retrieved from http://www.campbellcollaboration.org/lib/project/43/
- Schnell, C. E. (2012). Community-based crime and violence prevention project a project systematization El Salvador, 2008–2012. El Salvador: USAID/RTI International.
- Supporting the Use of Research Evidence Collaboration. (2011). SURE guides for preparing and using evidence-based policy briefs (Version 2.1) [updated November 2011]. Retrieved June 03, 2015, from http://global.evipnet.org/SURE-Guides/
- Tolan, P., Henry, D., Schoeny, M., & Bass, A. (2008). Mentoring interventions to affect juvenile delinquency and associated problems. *Campbell Systematic Reviews*, 16, 1–112.

- Tong, A., Flemming, K., McInnes, E., Oliver, S., & Craig, J. (2012). Enhancing transparency in reporting the synthesis of qualitative research: ENTREQ. BMC Medical Research Methodology, 12. doi:10.1186/1471-2288-12-181
- United Nations Office on Drugs and Crime. (2014). Global study on homicide 2013. Trends, context, data (pp. 163). Retrieved from https://www.unodc.org/documents/gsh/pdfs/2014_GLOBAL_ HOMICIDE_BOOK_web.pdf
- Uy, M. (2012). Venezuela's National music education program El Sistema: Its interactions with society and its participants' engagement in Praxis. *Music and Arts in Action*, 4, 5–21.
- Weinstein, M. B., Fuller, K., Mulrooney, T., & Koch, G. (2014). The benefits of recreational programming on juvenile crime reduction: A review of literature and data (pp. 344). Retrieved from https:// www.gocolumbiamo.com/ParksandRec/About_Us/documents/ nrpa-report_juvenile_crime_reduction.pdf
- Willman, A., & Makisaka, M. (2010). Interpersonal violence prevention: A review of the evidence and emerging lessons (Background paper, 2011 World Development Report). Retrieved from http://siteresources.worldbank.org/EXTWDR2011/Resources/6406082-1283882418764/WDR_Background_Paper_Willman.pdf
- Wilson, S. J., & Lipsey, M. W. (2000). Wilderness challenge programs for delinquent youth: A meta-analysis of outcome evaluations. *Evaluation and Program Planning*, 23, 1–12. doi:10.1016/ S0149-7189(99)00040-3
- Wilson, S. J., & Lipsey, M. W. (2007). School-based interventions for aggressive and disruptive behavior—Update of a meta-analysis. *American Journal of Preventive Medicine*, 33, S130–S143. doi: 10.1016/j.amepre.2007.04.011

Author Biographies

- **Erika E. Atienzo** is a PhD student in the School of Health and Related Research at the University of Sheffield, United Kingdom. She has experience in research related to adolescents' health, particularly in the context of Mexico. Her major research interests are adolescents' health and well-being, evidence synthesis, preventive programs, and impact evaluation studies.
- **Eva Kaltenthaler** is professor of health technology assessment and deputy section director of the health economics and decision science (HEDS) section within the School of Health and Related Research, University of Sheffield. She has wide expertise in systematic reviewing and how this is used in decision-making in health care. Her research interests include systematic reviews on many health topics, cost-effectiveness models, and health technologies.
- **Susan K. Baxter** is a research fellow working in the School of Health and Related Research at the University of Sheffield. She has carried out a considerable number of systematic reviews for funders including the National Institute for Health and Social Care Excellence and the National Institute for Health Research. Her research interests include methodologies for reviewing complex interventions, qualitative evidence synthesis, theoretical perspectives underpinning research, and the use of logic models for evidence synthesis.