

Exploring Agenda-Setting for Healthy Border 2010: Research Directions and Methods

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Abstract

Policy makers take action largely on issues that attain the pinnacle of the policy agenda (Pertschuck, 2001). As a result, how decision makers choose which issues are important has been the subject of much research. Agenda-setting conceptualizes the process of how issues move from relative unimportance to the forefront of policymakers' thoughts (Dearing & Rogers, 1996). An area within agenda-setting research, Health Promotion Agenda-Setting, provides Health Promotion practitioners with an innovative framework and strategy to set agendas for sustained courses of action (Kozel, Kane, Rogers, & Hammes, 1995). In this interdisciplinary and bi-national exploratory study, funded by the Center for Border Health Research of the Paso del Norte Health Foundation, we examine agenda-setting processes in the Paso del Norte Region and evaluates how the public health agenda is determined within the U.S.-Mexico border population. Integrating both quantitative and qualitative data collection methods, the current research is focused on identifying deficiencies in the public health infrastructure in the U.S.-Mexico border area, and identifying channels that exist for working toward the bi-national goals presented in Healthy Border 2010 (U.S.-Mexico Border Health Commission, 2003). Research directions, design, and methodologies for exploring health promotion agenda-setting in applied settings, such as Healthy Border 2010, provide health practitioners and policy makers the potential to improve public health leadership by influencing the public health and policy agendas.

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Introduction

The U.S.-Mexico Border is a crucial area of study in health due to the unique health issues faced by its population, and the impact of those issues on border regions of the U.S. where Mexican workers migrate. Healthy Border 2010 outlines health promotion and disease prevention agendas in the regions that lie on both sides of the U.S.-Mexican border. The document created with cooperation between the public and private sectors of both countries. However, it is unclear

if those responsible for and/or influential in their community's health services are aware of the Healthy Border 2010 program topic areas and objectives, if they were communicated, and if they were also on the public's agenda. In *Community Health Education: Settings, Roles and Skills for the 21st Century*, Breckon, Harvey and Lancaster (1998) stated "a good place to begin...is with a discussion of the concept of politics. In a very real sense, health education (and health promotion) are intensely concerned

with politics as most other important aspects of life” (p. 3). Kingdon (2003) clarified, “we want to know something about the game itself. Aside from the participants, we are interested in the processes by which agendas are set and alternatives specified” (p. 16).

While there is significant research about agenda-setting, little exists related to the application of agenda-setting to health promotion and health policy formulation. The present (Healthy Border 2010) research project seeks to link agenda-setting and health promotion by examining the roles of the media and policy-makers agendas on both sides of the border. What emerges is a new direction in both agenda-setting and health promotion research, an area called Health Promotion Agenda-Setting (HPA-S) (Kozel et al., 2003; Kozel, Kane, Rogers, & Hammes, 1995).

Health Promotion professionals must continuously address health promotion issues using the latest strategies and research. Understanding how the public health agenda is determined in the Paso del Norte region to address the Healthy Border 2010 goals and objectives allows the study of agenda setting processes in an applied setting. The crucial link between agenda-setting and the process of establishing effective legislation, policy, and programs has been well researched regarding health research directions and methods, as in this article. Research about health promotion agenda-setting provides preliminary data to build upon emerging public health evidence regarding deficiencies in the public health infrastructure for public health policy formation and adoption.

Agenda-Setting

An agenda is a set of issues communicated in a hierarchy of importance at any point in time. Agenda-setting addresses the ongoing competition among issues to gain the attention of media professionals, the public, and policy elites (Dearing & Rogers, 1996). The relative importance of an issue determines how often an issue appears in the media. What the media relate as important, tells viewers, readers, and listeners what issues to discuss (Cohen, 1963).

Agenda-setting is based on the belief that media do not control what we think but do influence what we talk about (Dearing & Rogers, 1996). If an issue is “salient” and receives frequent and/or expansive coverage by media, it is likely that audience members will think more about that issue than one that is not as salient. This suggests that the salience of an issue on the media agenda determines the public agenda, or the perceived most important problems by the community, and in turn influences what policymakers consider (Dearing & Rogers, 1996).

Health Promotion Agenda-Setting (HPA-S) uses interrelationships of the media, public, and policy agendas to explore how health issues move to the forefront of policymakers’ actions (Farmer & Kozel, 2005). Agenda-Setting does not attempt to change individual risk behaviors, but strives to focus attention on the innovation, diffusion, and adoption of change process to move the issue to the critical mass stage of adoption. By specifying and prioritizing problems and alternative solutions to set strategic agendas, the mission of public health to protect, promote, and preserve the health of the community may ultimately advance (Kozel et al., 2003). An important consideration for health promotion stakeholders is the challenge to refocus media, public and policy interests through creative research, epidemiology, issue framing and access to key gatekeepers in the media, public and policy areas. The agenda-setting process is presented in Figure 1.

Agenda-Setting Research

The major developments in research on agenda-setting were reported by Dearing and Rogers (1996). The term “agenda-setting” was first addressed in McComb and Shaw’s (1972) study of the media’s role in the 1968 presidential election campaign in Chapel Hill, North Carolina. The media agenda correlated almost perfectly with the public agenda; that is, issues like foreign policy, law and order, fiscal policy, etc. ranked similarly on both the public and media agenda. The authors suggested that the people (society) had their agenda set by the media. McCombs and Shaw suggested an appropriate methodology for studying the public

agenda-setting process, and the number of public-agenda setting publications increased considerably and regularly (Rogers et al., 1993). Political scientists, sociologists, and other scholars established the importance of the pre-decisional process of agenda-setting in determining what issues are to be discussed, and what alternatives are to be considered by

decision-makers in government (Cobb & Elder, 1971; Cobb and Elder 1983; Fawcett et al., 1982; Rogers et al., 1993). They concluded that power is often exerted by controlling information and communication, thus limiting what will and what will not be contemplated by decision-makers.

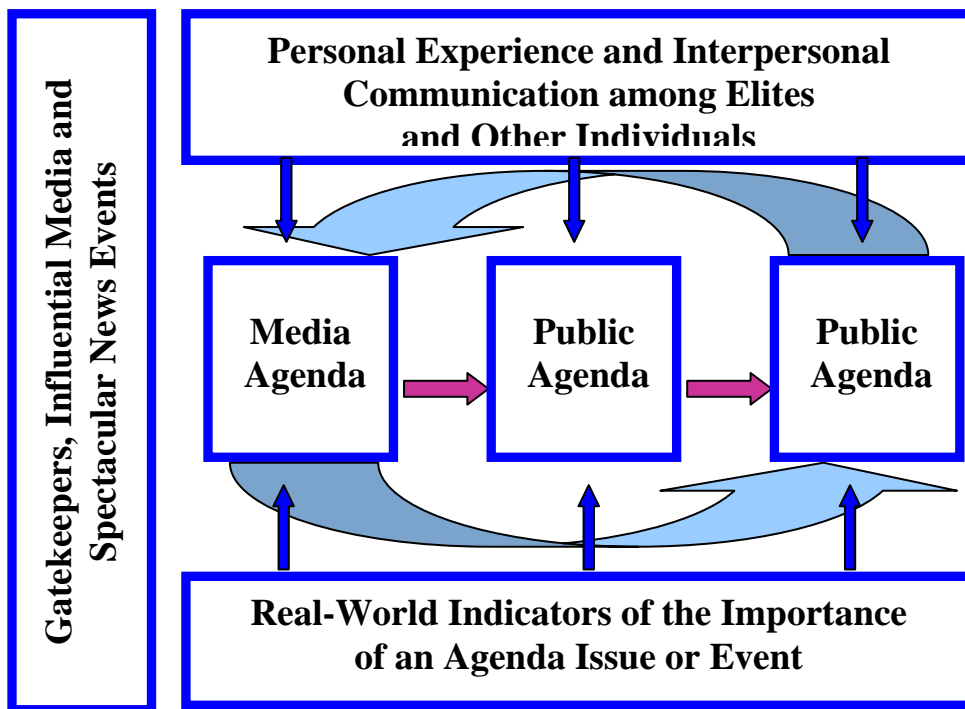


Figure 1
Main Components of the Agenda-Setting Process: Media, Public and Policy Agendas.
(Rogers & Dearing, 1988)

The policy agenda-setting tradition has been more consistent over time than the public agenda-setting tradition in the number of publications produced (Rogers et al., 1993). Rogers and Dearing (1988) presented a meta analysis of the agenda-setting research literature and a history of the media, the public, and the policy agenda-setting research traditions (1993). They found that 223 publications explicitly or implicitly were concerned with agenda-setting over the 70-year period from 1922 to 1992. Specifically the policy agenda-setting tradition

consisted of 65 publications with the vast majority of agenda-setting publications completed after 1971. There is no sign of diminution or decline (Rogers et al., 1993). Concerning the relationship between a media agenda and its corresponding public agenda, the authors (1993) indicated that 131 of 223 publications were mainly concerned with this association.

This trend has continued. On October 12, 2005, using the Expanded Academic Index, a search

for articles about agenda-setting and agenda-setting and health included 213 peer-reviewed articles published after December 30, 1993 (the end of the period explored by Rogers et al., 1993). Only 18 of the 213 articles were specific to health and agenda-setting, covering many disciplines including public health, medicine, and psychology. Only 10 of the 18 included at agenda-setting, health, and policymaking. Overall, the agenda-setting approach has contributed to a more advanced understanding of

media's role in society. This approach has helped to change the emphasis of mass communication research away from the study of short-term attitudinal effects to a more longitudinal analysis of social impact (Carragee, Rosenblatt, & Michaud, 1987). It also directly refutes earlier beliefs that mass media can control what consumers of media think and believe (Dearing & Rogers, 1996). Table 1 lists the major developments about research on the agenda-setting process.

Table 1
Major Developments in Research on the Agenda-Setting Process

Theoretical and Methodological Innovations in Studying the Agenda-Setting Process	Publication Setting Forth the Innovation
1. Postulating a relationship between the mass media agenda and the public agenda	Lippmann (1922)
2. Stating the definition of the alternatives is the supreme instrument of power	Schattschneider (1960)
3. Stating the metaphor of the media agenda's effects on the public agenda	Cohen (1963)
4. Giving a name to the agenda-setting process	McCombs and Shaw (1972)
5. Investigating the public agenda-setting process for multiple issues	McCombs and Shaw (1972)
6. Explaining a model of policy agenda-setting process	Cobb & Elder (1972)
7. Describing an agenda-setting approach changes the emphasis of mass communication research on the short-term effects of the media to a more longitudinal analysis of social impact	Carragee et al. (1987)
8. Presenting a meta-analysis of the agenda-setting research	Rogers and Dearing (1988)
9. Creating an Agenda for School-Based Health Promotion (Comprehensive Review)	Lavin et al. (1992)
10. Stating agenda-setting research is increasing; 1987 and 1991 highest publishing years	McCombs and Shaw (1993)
11. Roles of local newspapers and community partnerships in community health initiatives	Hubbell & Dearing (2003)
12. Exploring health promotion agenda-setting for reshaping health promotion leadership	Kozel, Kane, Rogers, Brandon, Hatcher, Hammes et al. (2003)

1-10 Adapted (Dearing & Rogers, 1996; 11-12 updated in 2005)

Health Promotion Agenda-Setting

Researching agenda-setting practices applied to health promotion provides health promotion practitioners and policy makers with the

potential to improve public health leadership by increasing the understanding of how public health and policy agendas are influenced. Finnegan and Viswanath (2002) emphasized the

possible applications of agenda-setting “by those in public health who seek to use the mass media to raise the salience and awareness of specific health problems” (p. 374). Health promotion agenda-setting uses interrelationships of the media, public, and policy agendas to explore how health issues move to the forefront of policymakers’ actions (Farmer & Kozel, 2005).

There are numerous health promotion and public health planning models that indirectly address innovation and diffusion, the innovation-development process and the diffusion planning and implementing process was described by Havelock (1971) and later expanded by Kolbe, Iverson and Krueter (1981), the Comprehensive Health Education Model (McKenzie & Jurs,

1993), the Linkage Approach (Glanz, Lewis, & Rimer, 1997; Orlandi, 1990); and the Precede/Proceed model (Green & Krueter, 2005). However, none of these models specifically address agenda-setting as an essential process of health education and health promotion. Health promotion agenda-setting can be integrated through all seven major responsibility areas of Health Education, including assessing, planning, implementing, coordinating, evaluating, acting a resource person, and communicating health education needs. A more comprehensive and direct model is needed, that includes health promotion agenda-setting (HPA-S) to reshape border health policy and leadership. A model of this is presented in Figure 2.

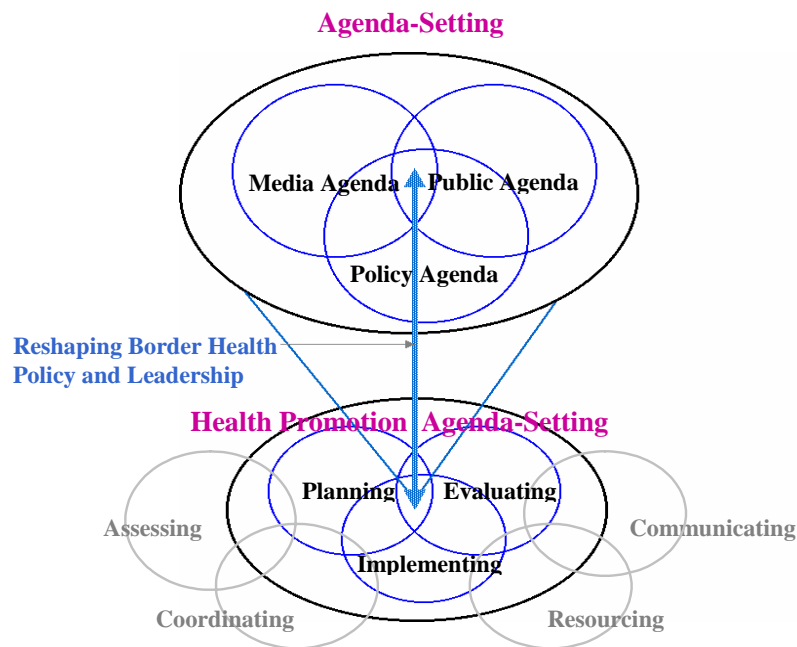


Figure 2
Health Promotion Agenda Setting Process

Health promotion agenda-setting (HPA-S) is a planned transformational process for awakening, reinforcing, and redirecting our health promotion approach in the 21st century and establishes a basis to guide applied research and public health leadership. Understanding the agenda-setting process offers health promotion practitioners guidance for formulating innovative health policies. Health promotion agenda-setters, using agenda-setting practices, introduce an innovative advocacy approach to improve health policy formulation and adoption (Kozel et al., 2003).

Health Concepts Supporting Agenda-Building

The primary focus of the current research is to understand what issues are important in the border region, and how they became important. Is it because they truly are major health issues or

is it because they are “popular,” interesting, or “hot” topics as perceived by members of the media? Four pertinent health concepts supporting agenda-building in the field of health promotion include refocusing upstream (McKinlay, 1975); the use of partnerships; media advocacy (Pertschuk, 1987); and health promotion innovation and diffusion (Backer et al., 1992; Rogers, 1971; 1973; 1995; 2003).

Refocusing Upstream

Traditionally, health resources and activities are downstream oriented. Downstream professionals (primarily providers, physicians and other health care professionals) provide services after the damage occurs. Prevention focusing on individuals, rather than the manufactures of illness, also suggests a downstream effort. Table 2 illustrates upstream efforts.

Table 2
Refocusing Upstream

UPSTREAM		DOWNSTREAM
1	2	3
Activities of the manufactures of illness	Various at-risk behaviors	Observable morbidity and mortality
Intervention with a political-economic focus	Intervention with a prevention focus	Intervention with a curative focus

Efforts upstream aiming at the manufacturers of illness, considered primary prevention, uses intervention(s) with a political-economic focus. Refocusing upstream involves legislative interventions (taxation commensurate with risk to the public from a product) such as increased taxes on tobacco (to cover the widespread smoking-related consequences, such as lung cancer, etc.) lobbying, and public education (McKinlay, 1975).

Use of Partnerships

An important concept related to agenda-setting in the fields of Public Health and Health Promotion is collaborating to accomplish health

promotion and disease prevention goals. Healthy People 2010 (2000), U.S.-Mexico Border XXI Program (1996), Health on the U.S.-Mexico Border: Past, Present, & Future (1998) and Healthy Border 2010 (2003, 2004), by the U.S.-Mexico Border Health Commission, represent current national and U.S.-Mexico border health promotion and disease prevention initiatives aimed at improving bi-national health. These initiatives and documents are the result of a consortium of local, state, regional, national and international organizations including the U.S. Public Health Service, Institute of Medicine of the National Academy of Sciences, U.S.-Mexico

Border Health Commission, and numerous others.

Collectively they reflect what many sectors of society consider the priorities for prevention in the coming decades. Only when institutions become partners in the endeavor (corporations through philanthropic contributions, culture carriers through their influence and endorsement; and health organizations and agencies through their involvement and support) will the strength and momentum to improve the health of the nations become actualized (Sullivan, 1991).

Media Advocacy

Media advocacy in public health and health promotion agenda-setting involves the strategic use of mass media for advancing a social or public policy initiative. Media advocacy is described as an issue oriented, media support approach to health promotion (Pertschuk, 1987). It does not directly attempt to change individual risk behaviors, but instead focuses on changing the way a problem is understood as a public health issue (Backer, Rogers, & Sopory, 1992). For example, this strategy shifts attention from defining alcohol problems as the responsibility of individuals to highlighting the role of those who shape the environment where individual decisions about health-related behaviors are made.

Interest groups engage in media advocacy to empower one segment of the public to participate more fully in democratic policy-making. Atkin & Wallack (1990) identified anti-smoking groups engaged in the process of media advocacy because they strategically use the mass media for advancing a public policy initiative. In media advocacy a pro-social issue is purposively promoted through media coverage (Atkin, & Wallack, 1990; Singhal & Rogers, 1989) and issues previously perceived to be exclusively the problems of individuals are redefined to include the source of the problem that requires governmental remediation (Dearing & Rogers, 1996).

Health Promotion Innovation and Diffusion

Partnership development and media advocacy are critical elements of effective agenda setting. Additionally, innovation and diffusion are underlying components that affect the processes for setting, directing, and implementing the multifaceted approaches of agenda setting for health promotion and disease prevention. An innovation is an idea perceived as new by an individual or by another adopting unit, e.g. a community or organization (Rogers, 2003). Innovation adoption addresses the change process, which is difficult, and often produces fear, resistance, and other inhibiting reactions (Backer et al., 1992). Two types of innovation related to health are incremental and preventive (Backer et al., 1992). Preventive innovations are more difficult to diffuse rapidly (Backer et al., 1992; Rogers, 1995). An individual must take action (adopt a life-style change) now, in order to lower the probability of occurrence of a probable or expected (undesirable) event at some point in the distant future (such as cancer or an unwanted pregnancy) (Backer et al., 1992). The motivational reward is distant in time, and the relative benefit of the preventive innovation is a delayed incentive (Rogers, 1995). Under these conditions, it is understandable why individuals do not adopt preventive innovations easily or rapidly (Backer et al., 1992).

The acceptance of an innovation depends on the success of the diffusion process (Rogers, 1971; 1983; 1995; 2003), which is communication through acceptable channels over time to spread a new idea from its creation to its ultimate adoption. The priority strategy in diffusing an innovation consists of reaching the critical mass. Slowly the audience effects build and the process reaches the critical mass at about 15-25% adoption (Backer et al., 1992). Eventually the diffusion is self-sustaining (Rogers, 1995). Apparent applications of the diffusion theory to health promotion and health education (Rogers 1971, 1983; Backer et al., 1992) include the following:

1. Adaptability to any program to assist in its implementation
2. Potentially useful as a paradigm for describing the process of adopting new

- behaviors, or developing/implementing a program idea
3. Possible benefit as a useful tool in marketing health promotion services and activities.

Relevance of the Research

Researchers examining agenda-setting and political processes understand there is a changing focus from the issue of power to the power of issues, and that power is a critical concept in this field of study (Dearing & Rogers, 1996). Dearing and Rogers (1996) identified research related to three types of agenda-setting. The first is media agenda-setting. Its main focus is the priority of an issue on the mass media news agenda (Dearing & Rogers, 1996; McCombs & Shaw, 1972). The second, public agenda-setting concentrates on the ordering of one issue in relation to other issues, or the order of a set of issues on the public agenda (Dearing & Rogers, 1996; Lippmann, 1922; McCombs & Shaw, 1972). The third, policy agenda-setting, studies the concern with policy actions regarding an issue as a response to both media agenda and the public agenda (Cobb & Elder, 1971; Cohen, 1963; Dearing & Rogers, 1996; Schattschneider, 1960).

Healthy Border 2010 and the US-Mexico Border XXI Program outline health promotion and disease prevention agendas, and cooperation in

the public and private sectors. The collaborative intentions of this project research team was to investigate the agenda-setting process related to public health problems influencing Healthy Border 2010, not to attempt to change individual or community risk behaviors. The information resulting from this pilot research project will be helpful to formulate larger research projects applying agenda-setting for Healthy Border 2010. Project benefits applied to agenda-setting may improve the local and regional public health infrastructure, system deficiencies, and public health solutions within the Paso del Norte region and throughout the US-Mexico border.

Healthy Border 2010 Initiative

The U.S.-Mexico border covers an area of 2,000 miles, spanning four U.S. and six Mexican states, 48 U.S. and 80 Mexican “municipios,” or counties, and extends 100 kilometers (62 miles) from the international boundary, both north into the United States and south into Mexico (Bureau of Primary Health Care, n.d.). Up from six million in 1970, the US-Mexico border area currently has a combined population of approximately 13 million (U.S.-Mexico Border Health Commission, 2003), and is projected to double by the year 2020 (Homedes & Ugalde, 2003). Figure 3 illustrates the Paso del Norte border region.



Figure 3
Paso Del Norte Region (http://www.pdnhf.org/who_we_serve.asp)

Rapid population growth on both sides of the border has resulted in *colonías*, a Spanish term for “neighborhood” or “community” that are generally unincorporated settlements north and south of the border, typically characterized by substandard housing, roads and drainage, lack of access to potable drinking water, adequate wastewater systems, and healthcare services (Davidhizar & Bechtel, 1999). Approximately 450,000+ people live in *colonías*, and over a third of U.S. border families live at or below the poverty line. The unemployment rate along the border is 250-300 percent higher than the rest of the country (Bureau of Primary Health Care, n.d.; U.S.-Mexico Border Health Commission, 2003).

When compared to non-border regions and the nation as a whole, the U.S.-Mexico border faces highly unique health challenges. Highly mobile populations, coupled with chronic shortages of health care providers and services promotes the cross-border transmission of communicable and vaccine preventable diseases (Weinberg, Waterman, Alvarez Lucas, et al., 2003). Tuberculosis is endemic on both sides of the border, and salmonella and shigella infection are 4 times higher than in the rest of the nation (Homedes & Ugalde, 2003). According to the U.S.- Mexico Border Health Commission (2003), if made the 51st state, “the border region would rank last in access to health care; second in death rates due to hepatitis; third in deaths related to diabetes; last in per capita income; first in the numbers of school children living in poverty; and first in the numbers of children who are uninsured” (U.S.-Mexico Border Health Commission, 2003).

The need for bi-national cooperation for the purpose of improving health conditions along the border is widely recognized (Homedes & Ugalde, 2003). Healthy Border 2010 agenda of health promotion and disease prevention was created to serve as an agenda for both nations. It identifies key health issues of significance to both the United States and Mexico and establishes 10-year objectives, or topic areas, defined and interpreted differently by each country, based on local, state, and national planning and implementation activities. The

overall goals of Healthy Border 2010 are to improve the quality of life, increase the years of healthy life, and eliminate health disparities (U.S.-Mexico Border Health Commission, 2003).

Research Goals and Objectives

The research goals provide preliminary data for increasing the understanding of health promotion agenda-setting practices, applied to Healthy Border 2010 initiatives in the Paso del Norte Region. The project’s research objectives are threefold.

1. Establish a baseline of media’s role in the Healthy Border 2010 initiative by analyzing content of local and regional newspaper articles and editorials.
2. Investigate and collect preliminary information to identify and report characteristic factors of border health agenda-setters and of the border health agenda-setting process.
3. Identify the potential role of reported border health agenda-setting practices in specifying and prioritizing border health problems and alternative solutions.

These data address characteristic factors and demonstrate unique and significant influences on the agenda-setting process. Key mechanism factors include shared vision, salience, synchronicity and social justice, as depicted in Table 3.

Characteristic factors are descriptive elements or attributes including demographics, which describe the people using the agenda-setting process for health promotion, e.g. grass roots/community focus, political popularity, and ability to attract attention to an issue. Design factors are strategies and methods used as part of the agenda-setting process for health promotion, for example network development, alternative solution development, and issue champions. Mechanism factors include strategic pre-decision systems and processes of successful agenda-setting for health promotion including: Networks (key individuals, organizations and communities), local social movements /coalitions, partnerships and constituent groups.

Table 3
Shared Vision, Synchronicity, Salience and Social Justice

Key Health Promotion Agenda Setting (HPA-S) Mechanism Factors	
Shared Vision	Clarity of a common purpose and mutual commitment to a larger vision, or dream, with a genuine cooperate intention for action.
Synchronicity	A coming together of people, ideas, resources (time, money, and exchange), events and circumstances.
Salience	The high comparable value or the perceived relative higher importance of an issue. The pivotal focus is on issues that reach the top of an agenda and can maintain high salience. The perceived importance of an issue will affect the intended outcome or goal.
Social Justice	How the issue fits into the current or the emerging socially acceptable limits of justice (fairness).

Both qualitative and quantitative research was employed to address these objectives. For the qualitative portion, the following four questions were posed:

1. What are the characteristic factors (e.g. demographics) of people using the agenda-setting process for Healthy Border (A-SHB) 2010 within the Paso del Norte region (PDNR)?
2. What practice factors are used by people in the A-SHB 2010 within the PDNR?
3. What mechanism factors are used by people in the A-SHB 2010 within the PDNR?
4. What are identifiable relationships between factors and mechanisms in the actions reported by people in the A-SHB 2010 within the PDNR?

The quantitative portion, in contrast, addresses the first objective with the following question:

1. What are the similarities and differences between media coverage of regional health issues and those issues identified as border health issues in Healthy Border 2010?

The current project seeks to understand the salient issues communicated by the media and compare them to Healthy Border 2010 Report. This then informs influential community members and organizations on what needs to

receive more focus in the media and in their own community presentations and conversations. The research goals and objectives regarding agenda-setting for Healthy Border 2010 aim at building on the results from the New Mexico HPA-S study where numerous health promotion agenda-setting factors emerged, representing agenda-setter characteristics, design and mechanism factors, systems and processes (Kozel et al., 2003).

HPA-S Design Factor Definitions

Respondents in a previous New Mexico HPA-S study indicated consistently high agreement on the importance of four key HPA-S design factors - shared vision, synchronicity, salience and social justice (Kozel et al., 2003). This research additionally found that the HPA-S design factors have been used as tools for advocacy in New Mexico involving the roles of mass media, public and policy sectors. This is consistent with findings of Labonte (2001) when he reported that agenda-setting was an important tool used for advocacy “from setting the agenda to enabling the actors” (Labonte, 2001, p. 35). The 2003 findings further confirmed the findings of others that health promotion agenda-setting supports community engagement efforts that mobilize, organize, empower, and enable individuals, grass roots and community-based organizations, plus institutions to exert influence, take action, and make decisions about

critical issues (CDC/ATSDR, 1997; Hatcher & Nicola, 2001). Numerous characteristic, design and system and process factors were identified and described in that study, specifically as part of the interactive areas of agenda setting (mass media, public and policy) (Kozel et al., 2003). A HPA-S approach works to specify and prioritize health issues and alternative solutions to set agendas for planned courses of action (Kozel et al., 2003). Health promotion leaders can use this approach to compete more effectively among other issues, solutions, and agendas, which arise from various sectors to gain attention of mass media, the public, and policy makers for improving public policy and influencing resource allocation. It also offers implications for national and international levels.

The New Mexico research identified findings similar to those of Kingdon (2003). Agenda-setting was used by leaders and other stakeholders in issue initiatives to identify alternative responses to health and social challenges facing communities. The emergence of Shared Vision, Synchronicity, Salience and Social Justice as key Health Promotion Agenda Setting, (HPA-S) factors provide health promotion specialists with key tools to enhance their roles in HPA-S. Health promotion leaders can take a more systematic approach in all levels of prevention and foster the establishment of health promotion agendas in response to real-world political, social, and economical influences.

Research Design and Methods

The design of the present study funded by the Center for Border Health Research of the Paso del Norte Health Foundation is exploratory and employs both cross-sectional (point-in-time survey) (Gay, 1992; Mausner & Kramer, 1985; Windsor, Baranowski, Clark & Cutter, 1994) and longitudinal approaches (Hubbell & Dearing, 2003). Two data collection methods allow for a more comprehensive understanding of the border health agenda-setting process and issues (or the Most Important Problem). One is qualitative and the other quantitative. Qualitative data methods in the form of interviews are used to understand agenda-setting for Healthy Border 2010 from the community leader's perceptions.

The second method, more quantitative in nature, includes an exploration of newspaper articles on Healthy Border 2010 to identify the mass media's role in agenda-setting for Healthy Border 2010.

Building on New Mexico research study, binational scholars from different disciplines were invited from different disciplines. A multidisciplinary collaborative research cluster with twelve members, plus numerous graduate and undergraduate research assistants was comprised of health education and public health communication researchers from the U.S. border region universities and Mexico, national and international public and private sector experts involved in policy-making and regional collaborators. One of the greatest strengths of the research is it focuses on regional/border issues and includes scholars and policy-makers who understand the nuances of the border region.

Sampling Methodology

First, exploring the qualitative research, during the 18-month research project, a snowball sampling methodology (Rubinson & Neutens, 2002) provided an efficient and accessible means for studying the "hidden" or population of Healthy Border 2010 agenda-setters. Participants were identified and selected from the population of agenda-setters in the Paso del Norte region. Respondents answering questions focused on agenda-setting for Healthy Border 2010 were conducted in Las Cruces, El Paso and Juárez. This technique has been broadly used in qualitative sociological research (Biernacki & Waldorf, 1981) and provides a coherent and rigorous ascending methodology for studying hidden populations (Kotz & Johnson, 1988; Van Meter, 1990). A snowball sample is developed through a chain of references that are made within a circle of people who are connected by one or more links of relationships, which offer insider knowledge for identifying individuals for study (Kotz & Johnson, 1988). Three stages or waves are recommended (Kotz & Johnson, 1988).

In the first stage an initial set of 10 individuals possessing apparent requisite characteristics

were identified and interviewed by investigators in the research area (Las Cruces, New Mexico). Individuals were selected according to their involvement and role(s) in border health issues representing the mass media, public leadership and policy affiliations, cultural representation, years of agenda-setting experience, and have diverse demographic characteristics. Participants include opinion leaders who helped shape agenda-setting for Health Border 2010 within the Paso del Norte Region.

In the second and third stages, a group of 10 individuals possessing similar apparent requisite characteristics as in the first stage were identified and interviewed by investigators with advice from collaborators in the research areas (El Paso and Juárez). Note the sample size of ten respondents in each location provided the first wave of a snowball sample as literature review indicates large networks are difficult to assess through snowball sampling (Kotz & Johnson, 1988; Rubinson & Neutens, 2002). The stages of snowball sampling are presented in Table 4.

Table 4
The Data-Collection Phases for Qualitative Analyses

Snowball Sampling Stages for Each Site		
Stage	Location	Number of Respondents
Stage I	Las Cruces	10 Respondents
Stage II	EL Paso	10 Respondents
Stage III	Juárez	10 Respondents
Total Possible		30 Respondents for project

Significantly, the first wave (consisted of three stages) provided referrals for sufficient participants to sustain subsequent additional snowball sample waves, contingent upon additional financial support or grants. The second research design, quantitative, is exploratory and confirmatory in nature. Content analyses accesses how and what the media cover regarding health issues in Las Cruces, El Paso, and Juárez. Using these data, the health issues that are most salient become known. Salience is central to the agenda-setting process and determines how an issue on media, public, and/or policy agendas increases or decreases over time in frequency. If an issue receives frequent or expansive coverage by media, it is likely that audience members will think more about that issue than one that is not as salient on the media agenda (Dearing & Rogers, 1996; Trumbo, 1995.) This is further supported by McCombs & Reynold (2002) who state that “After decades of exploring the cognitive, long-term implications of daily journalism,

researchers have discovered that media audiences not only learn factual information from exposure to news, but that people also learn about the importance of topics in the news based on how the news media emphasize these topics” (p. 2).

Media researchers commonly count the number of published articles about an issue as an indicator of salience (Dearing & Rogers, 1996; Riffe, Lacy, & Fico, 1998; Weber, 1990). In terms of issue salience among a population and, therefore, policy development, more exposure increases the likelihood an issue will be discussed (Dearing & Rogers, 1996; Hubbell & Dearing, 2003).

For a small to mid-sized community, local media can set an issue on a community’s agenda (Hubbell & Dearing, 2003). For example, Mead (1994) conducted a study of the Charlotte Observer newspaper and its editors’ attempts to put the issue of metropolitan reform on the local

policy agenda. Mead tells how the Charlotte Observer was successful in placing an issue of government inefficiency on the local policy agenda by virtue repetition of media coverage, affecting the policy makers' perception of public interest. Such an example demonstrates the ability of a local paper to influence what issues become salient to influential individuals within a community. Hubbell and Dearing (2003) found a similar trend in three different communities. Coverage of a health initiative by the predominate newspaper in each community influenced support for the initiative. In addition, when the coverage was positive and backed by policy makers, it had an increased chance of being sustainable.

Therefore, it was determined that the content analysis of three newspapers represent the three largest cities on both sides of the border within the Paso del Norte Region should indicate the media's portrayal of the most important or salient problems. It should also illustrate if local media are communicating about the relevant (based on Healthy Border 2010) health issues for the region.

Data Collection

Quantitative and qualitative methods were used to assess the data. A mass media content analysis with a focus on identification of the most important problem (MIP) and evaluation of discrepancies and similarities with Healthy Border 2010 represents the quantitative portion of the research. The content analysis includes examining 12 months during 2004. The newspapers used for the analysis were: The Sun News in Las Cruces, The El Paso Times in El Paso, and El Diáριο de Juárez. The qualitative research was conducted over 18 months. Information was obtained from 10 interviews in each border city, (1) Las Cruces, NM, (2) El Paso, TX and (3) Juárez, Mexico, leading the way for a snowball sampling methodology to obtain an efficient and accessible means for studying the population of border health agenda-setters. Data-collection consisted of a guided structured interview with study participants. These interviews aided in the identification of the characteristic factors of border health agenda

setters and border health agenda-setting processes.

Limitations of the Study

The researchers recognize that the existing study is limited by the information obtained from the self-reported responses of the study participants through a cross-sectional structured survey using an interview with a guided structured format (Gay, 1992). The researchers do not know whether the characteristics of the study population will be the same characteristics of HPA-S found in other parts of the United States and Mexico. That said, to create targeted promotions it is appropriate to first understand what health issues are salient and/or being addressed within the specific region. For the same reason, data collected in other regions of the U.S. or Mexico are not always applicable in the U.S.-Mexico border region. Another limitation is the time period chosen for the newspaper content analysis. One year was chosen (2004) to keep the research as recent as possible. Coverage of health issues is often the responsibility of one or a few individuals (Hubbell & Dearing, 2003) at a newspaper. If an individual who was in charge of health features left a paper during the timeframe when the analysis was conducted, it could influence what is covered. However, using a year of data from three sources would help counter this limitation, along with the study's length of time.

Instrumentation

Kozel, et al. (1995) established the first instrument used in Health Promotion Agenda-Setting data collection. The initial HPA-S interview guide was developed in accordance with recommended major steps in data measurement and collection. For Healthy Border 2010 research, the HPA-S interview guide (Kozel et al., 1995) was further modified by the investigators and collaborators to specifically collect border health data through interviews in Las Cruces, New Mexico, El Paso, Texas and in Juárez. All interview scheduling, interviews and materials including cover letters, informed consent, and interview guides were presented in English and/or Spanish, according to respondents' preferences.

The variables measured were intentionally limited to include agenda-setting components derived from the New Mexico HPA-S study, and explored:

1. Level of agenda setter's involvement
2. Perceived importance of characteristic, design and mechanism factors
3. Types of sectors (organizations/ affiliations) by category of agenda-setters that provide support
4. How agenda-setters become interested in border health issues
5. Roles and actions agenda-setters implemented in relation to border health issues.

Data analysis will use the variables identified and will be explored in association with agenda-setting for Healthy Border 2010 and their linkage with various demographic characteristics (for example, age, gender, years of experience as a HPA-S, years resided in the local area and net accumulated financial assets).

Research Methodology

The instrument incorporated six demographic questions, 38 structured and six open-ended questions. Necessary modifications in the instrument, data-collection methods and procedures were incorporated for the data-collection sites. Participants were informed verbally and in writing of the purpose, potential benefits, and efforts to protect their confidentiality at the time they were invited to participate. They were also advised that they could choose not to answer any questions, and/or discontinue their participation at any time. The participant's completion of the interview or questionnaire was considered passive evidence of consent to participate. For confidentiality purposes the respondent's names were coded. The respondent's name does not appear on the interview guide, and there will be no public release of individual identifiers. Following the suggestion of Backer, Rogers & Sopory (1992) a digital voice recording was made at the interview sessions to preserve the flavor of the interviewee's words and colloquial expressions. The primary investigator was responsible for maintaining all data in a secured

and locked location, and for destroying all tapes and the master key of subject names upon completion of the research.

The quantitative research was being conducted in three phases. The first phase or supply unit (Riffe et al., 1998) includes an exhaustive search to identify and examine all articles discussing health issues during the 12 months prior to receiving funding (2004) within the three newspapers identified. One year was selected for the content analysis to ensure an appropriate time and sufficient number of articles indicates the topics most currently discussed. For the second phase, as the articles were collected, researchers met regularly to discuss findings, location of the articles in the newspapers, and monthly totals. Themes or categories for coding emerge. For example, it was discovered a significant amount of the health coverage was from the Associated Press and not local journalists. Also, the Associated Press articles tended to be placed in the front of the paper while local issues appeared toward the back of the paper or in a designated "health" section. Determined to be an important trend, the coders in the third phase were then trained to record article location.

The third phase includes coding each article using the themes that emerged in the second phase. The themes now represent recording units, or those units that will be used for analysis (Riffe et al., 1998). In this phase, two , trained on the units to code, enter data on a spreadsheet containing the relevant "categories." Paragraphs were used as the original unit of analysis but changed when the search for articles produced over 100 articles on health within one month's time in just one of three newspapers. This trend continued over many months within all three newspapers. In addition article placement, not just content, was decided to be crucial to depiction of the most important problems. Therefore the original coding scheme was altered, with the placement, size (number of paragraphs), writer (A.P. or local), and health issues covered as the focus of the analysis. This is an appropriate way to assess the most important problem or salience of an issue in that according to Dearing and Rogers (1996), " an

agenda-setting investigator does not care what the media say about an issue of study, just how much they say about it” (p. 90). Further, Riffe et al. (1998) asserted that if physical units are the area of study (and not symbolic or units where meaning needs to be inferred), “they are used to infer to allocation decisions about the content and the degree of impact on users of content” (p. 65). Since one of the major objectives of the study was to assess whether the media are communicating Healthy Border 2010 topics as an important issue, this type of coding scheme matches the goal.

Once the coding sheet was developed and coders trained, data were collected about how often each of the categories occurred within each article. Due to the expected low number of categories from which coders could select for each article, with the exception of the health issue, the expected agreement for coders was anticipated to be high. An anticipated agreement will be calculated using Scott’s pi, which is appropriate for inter-rater reliability, using categorical or nominal data. To ensure a high inter-rater reliability, coders were trained using five articles randomly selected from each of the three newspapers (Hubbell & Dearing, 2003). The percent of agreement and Scott’s pi as first calculated with 10 other randomly selected articles will be used to assess coder inter-rater reliability. Once an acceptable percent of agreement and Scott’s pi is achieved, coders are given the remainder of the articles to code. Triangulation of the salience or perceived importance of the border health issues in the Healthy Border 2010 will be sought. Existing epidemiological data from the Border Epidemiology Center and data from the most current Behavioral Risk Factor Survey Report (2005) will be compared to the Healthy Border 2010 objectives.

Data-Reporting and Analysis

Collected data consists of categorical, nominal, ordinal, and interval information and will be analyzed using frequency tables, measures of central tendency and graphs, and tables. Cronbach's Alpha Coefficient (Cronbach, 1950) and Confirmatory Factor Analysis will be used to assess the extent of inter-item correlation

among all variables for determining internal consistency and reliability for the interview data (Rosenthal, & Rosnow, 1991). Scott’s pi will be used for inter-rater reliability in the content analysis. A Scree Plot will be used to analyze Eigenvalues (Harris, 1985). At this point additional analyses are being considered to test the identified research questions, and other secondary analyses including principal component analysis, factorial multivariate analysis of variance (MANOVA) and/or regression analysis that may be used to identify the relative impact of each variable (e.g. shared vision, design factors, etc.) on the variables of interest (e.g. gender, age, years of experience, etc.) to determine first order effects (Harris, 1985; Rosenthal & Rosnow, 1991; Tukey, 1977). Additionally, ethnographic and qualitative data analysis will be conducted to examine any relationship(s) between or among factors of agenda-setting for Healthy Border 2010 (Creswell & Maietta, 2002; Rosenthal & Rosnow, 1991; Tukey, 1977). Additional tests will be used to clarify assumptions, e.g., homogeneity of variance and for post hoc comparisons including a Scheffe’s test (Gay, 1992).

Use of Anticipated Results

The Healthy Border 2010 and the US-Mexico Border XXI Program framework outline health promotion and disease prevention agendas, goals, and the need for cooperation from both the public and private sectors. The collaborative intentions of the project research team are to investigate the agenda-setting process related to the public health problems identified in Healthy Border 2010, not to attempt to change individual or community risk behaviors. The new preliminary information resulting from this pilot research project will be helpful to obtain funding for larger research projects for agenda-setting applied to Healthy Border 2010 within the Paso del Norte region from agencies such as Agency for Toxic Substances and Disease Registry (ATSDR).

Project benefits can be applied to improve local and regional public health infrastructure and system deficiencies and public health solutions within the Paso del Norte region and throughout

the U.S.-Mexico border. Information presented about the directions and methods in this article provide a research basis for exploring agenda-setting for Healthy Border 2010 and U.S.-Mexico Border health.

Summary

Exactly how decision makers choose which issues are important has been the subject of much research. Agenda-setting is one way researchers have conceptualized the process of how issues move from relative unimportance to the forefront of policymakers' thoughts. The agenda-setting process consists of the media agenda, the public agenda, and the policy agenda (Dearing & Rogers, 1996) and the interrelationships among these three components. Salience, described as "the degree to which an issue on the agenda is perceived as relatively important." is the key factor considered in agenda-setting (Dearing & Rogers, 1996, p. 8).

Health promotion issues tend to be controversial and frequently involve divergent viewpoints. The relative importance of an issue rises and falls with time within each of the public, media, and policy agendas, and it is a continuing struggle among the proponents of an issue to gain and keep the attention of media professionals, the public, and the policy elites. Numerous groups representing public and private sectors share strong interests in preparing and using agenda-setting stakeholders to serve in more effective collaborative diffusion models for prioritizing community, state, national and international health promotion innovations. In order to advance health policy formulation, the issue must become an important shared problem for the community, affecting the media, public, and policy agendas. Health promotion

professionals must collaborate with various community entities such as advocacy groups, supportive media outlets, and neighborhood associations to accomplish a shared vision for health promotion and disease prevention goals (Kozel et al., 2003).

The key challenge in health promotion agenda-setting involves clarifying a common purpose and obtaining a shared commitment to a larger vision with a genuine cooperative intention for action (Kozel et al., 2003). Researching agenda-setting practices provides health practitioners and policy makers the potential to improve public health leadership by increasing the understanding of how public health and policy agendas are influenced. Preliminary data from exploring agenda-setting for Healthy Border 2010 research will provide emerging public health evidence regarding deficiencies in public health infrastructure and in the channels that exist for working toward bi-national solutions presented in Healthy Border 2010 (U.S.-Mexico Border Health Commission, 2003).

Researchers examining agenda-setting and political processes understand there is a changing focus from the issue of power to the power of issues, and that power is a critical concept in this field of study (Dearing & Rogers, 1996). Understanding this process is paramount in setting a public health agenda that will protect, promote, and preserve the health of our border communities. Health promotion agenda-setting (HPA-S) research can provide an improved understanding of the agenda-setting process and may offer health promotion practitioners new directions for reshaping health policy formation for advocating innovative border health policies.

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