Maastricht University

Influencing Organizations to Promote Health: Applying Stakeholder Theory

Citation for published version (APA):

Kok, G., Gurabardhi, Z., Gottlieb, N. H., & Zijlstra, F. R. H. (2015). Influencing Organizations to Promote Health: Applying Stakeholder Theory. *Health Education & Behavior*, *42*, 123S-132S. https://doi.org/10.1177/1090198115571363

Document status and date:
Published: 01/04/2015

DOI:
10.1177/1090198115571363

Document Version:
Publisher's PDF, also known as Version of record

Document license:
Taverne

Please check the document version of this publication:

• A submitted manuscript is the version of the article upon submission and before peer-review. There can be important differences between the submitted version and the official published version of record. People interested in the research are advised to contact the author for the final version of the publication, or visit the DOI to the publisher's website.
• The final author version and the galley proof are versions of the publication after peer review.
• The final published version features the final layout of the paper including the volume, issue and page numbers.

Link to publication

General rights
Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

• Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
• You may not further distribute the material or use it for any profit-making activity or commercial gain
• You may freely distribute the URL identifying the publication in the public portal.

If the publication is distributed under the terms of Article 25fa of the Dutch Copyright Act, indicated by the “Taverne” license above, please follow below link for the End User Agreement:

www.umlib.nl/taverne-license

Take down policy
If you believe that this document breaches copyright please contact us at:

repository@maastrichtuniversity.nl

providing details and we will investigate your claim.

Download date: 16 Aug. 2022

Check for updates

HEALTH EDUCATION & BEHAVIOR

Article

Health Education & Behavior
2015, Vol. 42(1S) 123S–132S
© 2015 Society for Public
Health Education
Reprints and permissions:
sagepub.com/journalsPermissions.nav
DOI: 10.1177/1090198115571363
heb.sagepub.com

Influencing Organizations to Promote Health: Applying Stakeholder Theory

Gerjo Kok, PhD[1], Zamira Gurabardhi, PhD[1], Nell H. Gottlieb, PhD[2], and Fred R. H. Zijlstra, PhD[1]

Abstract
Stakeholder theory may help health promoters to make changes at the organizational and policy level to promote health. A stakeholder is any individual, group, or organization that can influence an organization. The organization that is the focus for influence attempts is called the focal organization. The more salient a stakeholder is and the more central in the network, the stronger the influence. As stakeholders, health promoters may use communicative, compromise, deinstitutionalization, or coercive methods through an ally or a coalition. A hypothetical case study, involving adolescent use of harmful legal products, illustrates the process of applying stakeholder theory to strategic decision making.

Keywords
ecological model, environmental approaches, health promotion, organizational change, stakeholder analysis, stakeholder theory

Stakeholder theory may help health promoters make changes at the organizational and policy level to promote health. A stakeholder is any individual, group, or organization that can influence an organization. The organization that is the focus for influence attempts is called the focal organization (FO). Stakeholders may not recognize their potential role in the policy process. For example, one of the authors recently spoke at a conference of health care workers (HCWs) serving in Dutch penitentiary institutions about prevention of sexually transmitted infections (STIs). When discussing policy changes, the audience was visibly uncomfortable. The HCWs were not allowed to distribute condoms, because condoms may be used for smuggling drugs, and to their frustration, the formal policy was that "sex between inmates is forbidden" and condoms are therefore unnecessary. Most HCWs find an individual-level solution by handing out condoms during a confidential medical consultation, but they did not see how policy changes could be achieved. During the discussion, it was revealed that HCWs in penitentiary institutions are nationally organized and that this society has yearly meetings with the Ministry of Justice (MoJ). Due to the official policy on sex and condom use in prison, those meetings had not been used for agenda setting on the issue of condom distribution. The conference participants had not formed coalitions with other organizations such as Medical Societies, the AIDS Fund, or the Ministry of Health (MoH). When these possibilities were mentioned, the HCWs appeared uncomfortable and the discussion discontinued. In this article, we present stakeholder theory as one of the potential environmental approaches that may help health promoters make changes at the organizational and policy level to promote health, to address such examples.

Environmental Change: The Ecological Approach

Health is determined by behaviors of target populations, as well as environmental factors (PRECEDE/PROCEED; Green & Kreuter, 2005; see also Bartholomew, Parcel, Kok, Gottlieb, & Fernández, 2011). There is a long tradition in health promotion work with social networks (Heaney & Israel, 2008), communities (Minkler, 2008), media (Wallack, 2008), and policy makers (Clavier & de Leeuw, 2013). Although worksite health promotion programs are also studied, these are mostly in the context of targeting employees' health behaviors rather than the organizations (Abraham & Graham-Rowe, 2009).

Organizational change in health promotion is primarily studied in the context of program adoption, implementation,

[1]Maastricht University, Maastricht, Netherlands
[2]University of Texas at Austin, TX, USA

Corresponding Author:
Gerjo Kok, Maastricht University, P.O. Box 616, Maastricht 6200MD, Netherlands.
Email: g.kok@maastrichtuniversity.nl

Table 1. Pathways Used by Health Promotion Organizations (HPOs) to Influence Focal Organizations (FOs): Community (COM), Organizations (ORG), Media (MED), and the Government (GOV).

Pathway type	Diagram	Example
Direct	HPO → FO	HPO influences company to adopt a worksite health promotion program.
Indirect	HPO → ORG → FO	HPO recruits a physicians' organization to influence a hospital to provide opt out HIV screening to all emergency department patients.
	HPO → MED → FO	An activist nonprofit organization uses media advocacy to get a company to reduce carbon emissions
	HPO → GOV → FO	The cancer fund provides testimony regarding lives saved and costs averted to the legislature to provide funds for cancer screening in public clinics.
	HPO → MED → GOV → FO	HPO holds a press conference calling for legislators to vote for sustainable employment programs by organizations.
	HPO → [ORG-ORG] → FO	The public health department convenes a coalition of local organizations to promote school-based tobacco prevention and smoke-free policy.
	HPO → COM → FO	A community health group works with the community to boycott a store known to sell alcohol to minors.
	HPO → COM → GOV → FO	A health promotion organization mobilizes community members to lobby for smoke-free legislation requiring all organizations to be smoke-free.

and maintenance (Butterfoss, Kegler, & Francisco, 2008). Health promoters, however, may need to persuade an unwilling management to implement health promotion programs. Table 1 presents examples of health promotion organizations (HPOs) influencing FOs, often indirectly through other organizations, the media, the government, communities, and by forming coalitions (Kok, Gottlieb, Commers, & Smerecnik, 2008). The HCWs in penitentiary institutions trying to influence the MoJ, for example, in coalition with the MoH, would be a case of [HPO & MoH] → MoJ (FO). In the case of large health organizations, health promoters or a health promotion department may seek to change the organization that they themselves are part of, which then becomes the FO.

Hence, stakeholder theory suggests that, at environmental levels, the focus shifts from individuals to environmental decision makers and back. Obesity, for example, may be targeted at the individual and also at environmental levels: parents, worksites, communities, policies. A project to promote stair use in a university building by increasing the attractiveness of the stairwell (van Nieuw-Amerongen, Kremers, de Vries, & Kok, 2011) involved multiple environmental changes, including prompts and enhanced aesthetics, visibility, and accessibility of the stairwell. Total stair use increased significantly and the effect remained stable over time. However, after calculating the costs, the university board vetoed large-scale implementation. In this organizational-level example, methods used to change employees' behavior were successful, but methods to influence top managers' decisions were not. This illustrates the different focus within one level: targeting agents or targeting individuals. At the organizational level, health promoters needed to intervene on managers using persuasive communication, consciousness raising, facilitation, technical assistance, and organizational diagnosis and feedback; within the organization, employees were targeted applying feedback, modeling, goal setting, facilitation, and tailoring (Kok, Gottlieb, Panne, & Smerecnik, 2012).

Stakeholder theory is presented to demonstrate how a HPO can become an influential stakeholder for the FO. Applications of stakeholder theory are beginning to emerge in health promotion (e.g., Gil, Polikina, Koroleva, Leon, & McKee, 2010; Hoeijmakers, De Leeuw, Kenis, & De Vries, 2007), but they are mostly focused on stakeholder analysis and not specifically on the methods HPOs can use to promote change.

The research and practice of stakeholder analysis has offered a range of tools for the identification and classification of stakeholders, such as methods based on stakeholder salience (Mitchell, Agle, & Wood, 1997; Neville, Bell, & Whitwell, 2004; Page, 2002), the interest and influence of stakeholders (Bryson, 1995; Knai, McKee, & Pudule, 2011; Rowley & Moldoveanu, 2003), and the networks of stakeholders (Rowley, 1997; Rowley & Moldoveanu, 2003). Rarely have authors tried to combine these different tools for a broader analysis (Lienert, Schnetzer, & Ingold, 2013; Prell, Hubacek, & Reed, 2009).

In health promotion, Hoeijmakers et al. (2007) used stakeholder network analysis as an analytical tool to map stakeholders' position in a local health policy development, when investigating the factors influencing the success/failure of integrated and effective health policies at the municipal level in the Netherlands. Comparing the composition (closeness centrality) of three policy networks—communication networks, public health action network, and strategic network—they noticed different constellations at the same point in time, which inclined them to suggest the application of different interventions for these different networks. In addition, they hypothesized that intervention in one network might bring changes in other networks (e.g., interventions at the communication network might move stakeholder community groups

into more prominent positions within the strategic network). The authors, however, did not explore how this process might happen, what characteristics a stakeholder should possess (e.g., power, influence), and what methods should be used to reach a more prominent influencing position.

Gil et al. (2010) explored the context of policy making on alcohol in Russia. Using a detailed stakeholders' analysis, they mapped the stakeholders' influence and interest on alcohol policy as well as their relationships, in a typical Russian region. Emphasis on the stakeholders' influence level (intensive, moderate, weak), their interests (support vs. opposition), and their relationships offered the researchers an opportunity for a broad understanding of the position of stakeholders and their influence on the alcohol policy. The authors discovered that HPOs seeking to decrease hazardous drinking had little understanding of effective approaches and believed that nothing could be done to effect change. An additional analysis of stakeholders' salience might have provided more clarity on these stakeholders' characteristics and on priorities for decision making by HPOs.

This implies that the process of stakeholder analysis needs to combine different tools (such as stakeholder silence, stakeholder networks, and stakeholders' interests) to derive more useful results for the development of change strategies or methods for stakeholders' influence in the health promotion field.

The following sections present a tool that has a potential for a more comprehensive stakeholder analysis and focuses on methods/strategies to influence organizations to undertake actions on a health problem. A hypothetical case study provides a practical example.

Stakeholder Theory

A stakeholder is any individual, group, or organization that can affect or can be affected by another organization (Freidman & Miles, 2002). Stakeholder theory originated as a guide for managers to respond to stakeholders' demands. Recently, stakeholder theory has been used to analyze interorganizational systems (Boonstra & de Vries, 2008) and to understand how stakeholders can influence an organization, the FO (de Bakker & den Hond, 2008; Frooman & Murrell, 2005). A successful stakeholder influence approach should consider the stakeholder salience in the relationship between the stakeholder and a FO, and the position in the organizational network.

Salience of the Stakeholder

Salience, defined as the priority with which managers consider the stakeholder's claim, is determined by stakeholders' power, legitimacy, and urgency (Mitchell et al., 1997; Neville et al., 2004; Winn & Keller, 2001). *Power* describes stakeholders' potential influence on the FO by using normative (e.g., symbolic), utilitarian (e.g., financial or informational), or coercive (e.g., physical) means. *Legitimacy* is acting in compliance with social norms and expectations. *Urgency* implies that the stakeholder claim calls for immediate attention by the organization's managers or is of increased importance. Accordingly, HPOs can seek to acquire these three attributes—power, legitimacy, and urgency—in general and in relation to a specific FO. For example, a cancer fund could gain power through extending its financial resources, legitimacy by being seen as the primary organization for those at risk for or having cancer, and urgency through campaigns that people will die without effective treatments.

Position in the Organizational Network

A stakeholder's influence is determined by the interdependence in the organizational network and the positions of stakeholder and FO (Frooman & Murrell, 2005). Consequently, stakeholder influence goes beyond the ties between FO and stakeholder (Cross & Parker, 2004; Hoeijmakers et al., 2007; National Cancer Institute, 2007; Prell et al., 2009; Prell, Reed, Racin, & Hubacek, 2010): it also considers the density of the network (group level), the tie strength among the actors (dyadic level), and the centrality of the FO and stakeholder in the network (individual level). *Density*, as a characteristic of the whole network, describes the overall level of connectedness among the organizations (Rowley, 1997). The higher the density of the network, the more integrated the network. A dense network can facilitate exchange of information, norms, and values. *Tie strength* refers to the number and intensity of exchanges between organizations, including resources, information, or clients. Strong ties in a dense network facilitate coping with change (Granovetter, 1973; Tenkasi, Mohrman, & Mohrman, 1998). Organizations having stronger ties share similar views, communicate effectively, and tend to help and trust each other. *Centrality* refers to the organization's position in the network relative to others. Organizations with a larger number of ties are the most central in the network (Hoeijmakers et al., 2007; National Cancer Institute, 2007). Out-centrality ties (ties directed to other organizations) are the basis for influence and power, suggesting strategies for HPOs to increase their influence (Heffernan & O'Brien, 2010; ten Kate, Haverkamp, Mahmood, & Feldberg, 2010). In-centrality ties (received ties) implies that the organization has a high reputation and is worth influencing (Hanneman & Riddle, 2005).

Direct and Indirect Methods for Change

HPOs may use direct and indirect methods to increase their influence on a FO. Table 2 presents methods derived from stakeholder theory, based on the relationship between HPO and FO and their positions in the network. *Coercion*, a threat to reduce a benefit or increase a cost to the FO, may, for

Table 2. Stakeholder Influence Methods for Health Promotion.

Method	Definition	Parameters	Example
Compromise (den Hond & de Bakker, 2007; Frooman, 1999)	HPO and FO negotiate to find a solution to the issue that maximizes their common interest, formulated and accepted as a superordinate goal.	High HPO and FO salience; high interdependence	*Partnership:* A school sets a goal of improving students' health and a voluntary health agency provides technical assistance to offer comprehensive health education.
Credibility building (Brown, Lyson, & Jenkins, 2011; Brown et al., 2010; Deegan & Blomquist, 2006)	HPO increases the legitimacy by gaining or utilizing capable resources.	Low HPO salience; HPO is dependent on the FO to achieve its goals.	*Expertise:* HPO specializes in employees' health behavior screening.
Coercion (Frooman, 1999; Frooman & Murrell, 2005)	HPO, direct or mediated (through allies), restricts FO's access to critical resources.	The FO is dependent on the HPO or its allies for resources; FO's position in the network is weak.	Greenpeace activists recruit powerful allies to boycott the FO if the FO continues to use genetically engineered ingredients.
Coalition building (Butterfoss, 2007; Butterfoss et al., 2008; Tilling & Tilt, 2010)	HPO forms alliances with other stakeholders to increase its power and legitimacy and influence the FO's behavior change.	High HPO network centrality; high allies' salience to FO. Low HPO power.	HPO asks community organizations to influence retailer outlets developing and implementing policies to reduce tobacco use by adolescents.
Communication (Tilling & Tilt, 2010)	HPO indirectly restricts FO's access to critical resources by influencing the parties that provide resources.	FO is not dependent on the HPO; high allies' salience in the network and for the FO.	State or local government institutional requirements can be considered as coercive tactics, because they have power to influence the actions of FO, for example, schools are obliged to improve the active life of children.
Deinstitutionalization (de Bakker & den Hond, 2008; Snow, Soule, & Kriesi, 2004; Wasieleski, 2001)	Replacement of old norms or legitimating beliefs with new ones.	Increase of salience; ineffective counter by FO.	An HPO works in the community, using agenda building, coalition building and media advocacy, to establish a needle exchange program sanctioned by policy makers.

Note. HPO = health promotion organization; FO = focal organization.

example, be used in the case of stakeholder power or when there is low interdependence (Frooman, 1999). The classic case of Nestle and infant formula (Newton, 1999; Walt, 1994) and Greenpeace actions against genetically engineered ingredients (Frooman & Murrell, 2005) are illustrations of stakeholder groups in a position of low interdependence that were able to pursue direct coercive strategies or use communication strategies to inform potential powerful allies in their relationships with the FO about the consequences of the FO's activities. Kok et al. (2012) report that HPOs, when targeting organizations, generally shy away from using coercive methods themselves and prefer compromise and communicative methods.

If there is low power or low interdependence with the FO, the HPO may work through an ally organization with more power or through *coalitions* and social mobilization (Tilling & Tilt, 2010). Key potential allies, including media, communities, other organizations, and the government, may influence the flow of resources critical to the FO. These stakeholders may apply symbolic damage or coercive methods, which might change to compromise (den Hond & de Bakker, 2007). The HPO should strengthen its relationship with these key stakeholders in the network to influence the FO's behavior. If the FO is seen as legitimate in its actions, the stakeholder can use a *compromise* strategy, despite its power position. Heffernan and O'Brien (2010) describe how a Gold Coast–based consortium was dependent on the National Rugby League to award the Gold Coast rugby league franchise into the League. The Consortium negotiated the League's initial coercive decision (rejection) by using both a communication strategy and a compromise strategy to increase its legitimacy and subsequently obtained the national franchise.

Since legitimacy is correlated with power, organizations in the same network try to *build up credibility* by aligning themselves with organizations with high legitimacy in order to be perceived as legitimate (Deegan & Blomquist, 2006). Community-based participatory research is an example: universities partner with community-based organizations to increase their legitimacy for conducting research in the community, and the community-based organizations, in turn, are

accorded legitimacy by partnering with the university. The relationship has high interdependence and must be highly collaborative to ensure the maintenance of trust (Brown et al., 2011; Brown et al., 2010).

An organization complying with social norms gains legitimacy, which enables it to attract resources. When a FO's legitimacy is threatened or challenged, it may change itself, use persuasive methods to change the public's view, or misrepresent its activities (e.g., the tobacco industry; Tilling & Tilt, 2010). Even a powerful FO may be open for learning and HPOs may use a *communication* strategy to inform, advice, and educate an FO regarding novel ideas that have merit. This way HPOs also increase their own legitimacy. HIV activist groups, for instance, started as small and without importance or legitimacy. Because governments lacked information about AIDS and needed their service, however, in many countries they became legitimate stakeholders, close consultants to MoH (Walt, 1994).

Finally, the HPO might create new legitimating beliefs through the process of *deinstitutionalization*, that is, replacement of old norms with new ones (de Bakker & den Hond, 2008; den Hond & de Bakker, 2007). For instance, the pressure of NGOs and the public influenced governments in the United States and Europe to issue directives that oblige all companies with dangerous substances in their establishments to develop an Accident Prevention Policy and inform the general public about the risks for public health and the environment. HPOs can use social movements and may obtain public support by making an issue salient to the public and expand its urgency (Snow et al., 2004; Wasieleski, 2001). Using pressure from mass media can help get the issue on the political agenda, with the intention to place it on the FO's agenda (Wallack, 2008). However, salience is not automatically obtained, even if the HPO raises it to the political and FO's agendas. The FO will also try various strategies to keep an issue off the company's agenda. Nevertheless, the stakeholders' methods can in time change the FO's strategies from defending its legitimacy to acknowledging loss (Tilling & Tilt, 2010).

A Hypothetical Case Study

A hypothetical case study is presented to enhance practical understanding of the application of stakeholder theory to health promotion. The case is based on environmental interventions to prevent adolescent use of harmful legal products (HLPs; Courser, Holder, & Collins, 2008). The methodology of Reed et al. (2009) is adapted to identify stakeholders and their salience, and to select methods and pathways for use in environmental change. The process consists of (a) identifying stakeholders around the issue and their "stakes," (b) stakeholder mapping and visualization in the network, (c) identifying stakeholder salience, and (d) selecting methods and pathways for change.

Context

The unhealthy behavior used in this case study involves misuse of HLPs by young people for getting high. These HLPs can be inhaled, such as gasoline or aerosols, or ingested, including prescription and nonprescription drugs, such as cough syrup, and everyday household products, such as mouthwash (McCabe & Boyd, 2005; McCabe, Teter, & Boyd, 2004). National U.S. 2011 data show misuse of HLPs among 12th graders to be between 2.7% and 15.2% (Johnston, O'Malley, Bachman, & Schulenberg, 2012). In this hypothetical case, the HPO is a nongovernmental advocacy organization in a small northwestern county that has taken the initiative for a program to reduce youth misuse of HLPs. The problem analysis indicated that an intervention should not only be aimed at the individual but also at the organizational, community, and policy levels.

Step 1: Assessing Stakeholders Around the Issue and Their Stakes. The HPO first undertakes a stakeholder analysis. Personal experience, existing documents, public consultation, and interviews, starting with obvious stakeholders, are used to identify stakeholders and their interest in the health promotion intervention, until no new actors can be identified. Stakes consist of investment in human and financial resources or activities in the program (Page, 2002).

Stakeholder analysis helps identify different organizations that might provide support in reducing the misuse of HLPs, as well as those opposing the health promotion program. Communicating with stakeholders also helps refine issue identification. Table 3 lists some of the organizations that are hypothetically identified as stakeholders. The MoH will be involved by providing investment in money or activities. A community-based youth advocacy organization is already involved in a project on adolescents' misuse of alcohol and emphasizes the environmental-level influence on the problem, such as peer influence and ease of access (home, friends, and retail outlets). Local schools see their role in the development of school programs addressing the issue. Some retail organizations are also willing to cooperate, believing that the program provides benefits for them by increasing their reputation as responsible organizations. However, most retail organizations, such as independent pharmacists and owners of street kiosks, are concerned for their profit and refuse involvement (Gil et al., 2010). Health services centers consider their role mainly as providing adequate treatment for young people having problems because of misuse of HLPs, but do accept the need for prescription of some medicines under medical supervision. The national producer of inhalants, which is located in the area and is also a supplier, is willing to be involved in the program. That organization has participated in an innovative program to replace HLPs with less harmful products, subsidized by the Ministry of Economic Affairs. In contrast, the transnational producer/

Table 3. Stakeholder Analysis for Health Promotion Program: Reducing the Sales of Harmful Legal Products (Fictional Data).

Stakeholder	Scale	Type of influence	Stake
Youth advocacy organization	Local	+++	Resources and activities
Local schools	Local	+++	Activities
Ministry of Health	National	++	Resources and activities
National producer	Local and national	++	Resources and activities
Local media	Local	+	Activities
Health services centers	Regional	+	Activities
Local pharmacy/retailer	Local	−−	Activities
Transnational producer	Transnational	−−	Resources and activities

Note. + = supportive of the program; − = opposing the program.

supplier is involved in advertising activities claiming their products are legal and useful.

Based on this analysis, the intervention program will focus on reducing the availability of HLPs from retail outlets (Courser et al., 2008). The HPO's focus is on the retail organizations opposing the program. Lack of environmental pressure and policy directions, fear of change, perceived lack of time, profit concerns, and so on, describe the force field for change (Heward, Hutchins, & Keleher, 2007). The HPOs are aware that they need the cooperation of different actors in different phases of the intervention, including the local media.

Step 2: Stakeholder Mapping and Visualization in the Network. The linkages between organizations form the basis for Step 2 (Table 4). The data for this step are answers to questions such as: Whom do you ask for information related to HLPs? To whom do you give information? Who do you work with? Where do you get resources? (Cross, Borgatti, & Parker, 2001; Prell et al., 2009). First, the organizations are arrayed in order of the level of support, from highest support to lowest. The rows represent the source of directed ties; the columns represent the target. Each tie is examined and its strength estimated. Ties between each pair of stakeholders can be strong (xx), weak (x), or lacking. The matrix creates an impression of the density of the network and the linkages among the different stakeholders. The nonsupporters' relationships with each other are presented in dark grey, and their relationships with the supporters in light grey (Hanneman & Riddle, 2005). The strengths of ties do not have to be symmetrical; a small organization exchanging resources with a multinational might consider its tie with the multinational very strong. The multinational, on the other hand, has relationships with many organizations and might have stronger ties with other organizations than with the small organization.

The matrix shows that the nonsupporting stakeholders have fewer connections in the network than most of the supporting stakeholders. Increasing the relationship of these stakeholders to the network would therefore be desirable. Communication and cooperation can be used to increase awareness and involve these stakeholders, thereby increasing the density of the network and the social pressure to conform to the network's norms. The table also shows the centrality position of the stakeholders: out-centrality (strong ties as sender) in the last column and in-centrality (strong ties as receiver) in the bottom row. Those who have more ties are more influential (Hanneman & Riddle, 2005). In this hypothetical case, the most influential actors in the networks are the HPO and the MoH, followed by the schools, the youth advocacy organization and the national producer of the HLPs.

The information in Table 4 can be used for planning to influence the nonsupporting organizations. The transnational producers of HLPs and the retailer have strong connections with each other and will try to resist the program. The HPO has no connection with these organizations and will need the help of stakeholders. The retailer has strong resource relations with the national producer, which supports the HP program and can be an ally. Moreover, strengthening the relationship with the youth advocacy organization might be a strategy of the retailer to hold its market positioning. The HPO can work through both the national producer and the youth advocacy organization to influence the retailer.

Step 3: Identifying Stakeholder Salience. Analyzing the HPO's salience to its stakeholders and to the FO will inform strategies of the HPO to influence the FO. Analyzing the stakeholders' salience for the FO will help the HPO better anticipate FO's strategies to cope with the stakeholders' pressure (Frooman & Murrell, 2005; National Cancer Institute, 2007). The first step is a (hypothetical) analysis of the HPO's salience to other stakeholders (see supplementary files, Table 5; available online at http://heb.sagepub.com/content/by/supplemental-data). Its salience is strongest for the youth advocacy organization, schools, and the national producer. The HPO is also a legitimate organization for the MoH because of its involvement in programs on adolescent health. The HPO's salience to the retailer and the transnational producer is low. Although the urgency of the HPO's claims is high to the retailer, its activity is not perceived as powerful or legitimate. The HPO needs to develop strategies to increase its legitimacy and power.

Table 4. Mapping the Relationships Among Organizations (Fictional Data).

Organization	HPO	Youth advocacy organization	Local schools	Ministry of Health	National producer	Local media	Health service center	Local retailer	Transnational producer	Out-centrality: Strong/total no.
HPO	—	xx	xx	xx	xx	x	x			4/6
Youth advocacy organization	xx	—	xx	x		xx	x	x		3/6
Local schools	xx	xx	—	x	x	x				2/5
Ministry of Health	xx	x	x	—	xx		xx	x	x	3/7
National producer	xx			xx	—	x		x	x	3/5
Local media	x	xx			x	—				1/3
Health service center	x		x	xx			—			1/3
Local retailer					xx	x		—	xx	2/3
Transnational Producer				x	x			xx	—	1/3
In-centrality: Strong/total no.	4/6	3/4	2/4	3/6	3/6	1/5	1/3	1/4	1/3	

Note. xx = strong tie; x = weak tie; in-centrality = received ties; out-centrality = ties directed to other organizations.

The next step is a (hypothetical) analysis of the stakeholders' salience for the FO, the retailer (see supplementary files, Table 6; available online at http://heb.sagepub.com/content/by/supplemental-data). Organizations with the highest salience are the national producer and the youth advocacy organization. The national producer holds utilitarian power (material resources) and its legitimacy is critical. Similarly, coercive power makes the MoH an important stakeholder on the retailer's decisions. The youth advocacy organization represents consumers, who, when organized, may directly influence sales and profit by using their collective buyers' power. The local media, while less salient, have potential power to damage the FO (damaging the retailer's reputation).

Step 4: Selecting Methods and Pathways for Change. The final step involves making informed decisions about the methods and pathways the HPO will use to influence the FO. Information from earlier analyses forms the basis for these decisions as the density of the network and the salience and centrality of all stakeholders is visible. Figure 1 maps possible paths of influence of the retailer by the HPO and its allies.

The direct pathway (1) would be used if the FO had been connected to the HPO. However, the HPO has low salience for the retailer. Considering the relationship of the FO with the youth advocacy organization and schools, and the similarity of the goals of the HPO, the schools and the youth advocacy organization, the HPO may decide to build a coalition (5). Additionally, there are other indirect pathways to influence the FO through a stakeholder on which it is dependent, for example, through the national producer (2a → 2b) as the HPO has a direct relationship with the national producer.

The resource interdependence between the national producer and the FO may suggest a compromise strategy. As a supplier, the national producer will not withhold its resources from the FO, but may offer price discounts for HLPs that are less harmful. This will also increase its reputation as a socially responsible organization. The HPO should also predict the possible strategies of the other nonsupporting organizations. The transnational producer, opposing the program, may approach the FO through compromising strategies and also offer price discounts for legal harmful products. In that case, the HPO should act proactively. The HPO may use other indirect strategies, such as influencing the FO through community involvement, deinstitutionalization of the old values, and norms supported by the transnational organization through media messaging and the institutionalization of new norms through agenda setting.

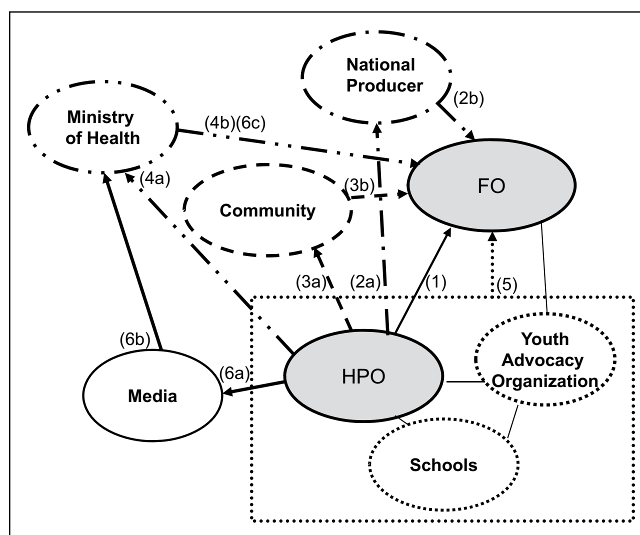

Figure 1. Pathways of stakeholders' influence.
Note. 1. HPO → Focal ORG (FO). 2. HPO → National producer → FO. 3. HPO → Community → FO. 4. HPO → Ministry of Health → FO. 5. HPO → Coalition: [Schools, Youth Advocacy Organization, & HPO] → FO. 6. HPO → Media → Ministry of Health → FO. a, b, or c represent sequential series of steps.

Community mobilization to influence the FO would be facilitated by the relationship between the HPO and the

youth advocacy organization. Expanding the coalition to include other organizations may mobilize the entire community to address the misuse of HLPs. Community social action may lead to coercive steps against the FO (3a → 3b), such as threats to buy products from other retailers that are more socially responsible.

In addition, the indirect path through government (4a → 4b) will allow the HPO to gain power and legitimate the health issue. Methods could include advocacy, agenda setting, and media to influence government to take measures to coerce FO behavior (6a → 6b/4b; Centers for Disease Control and Prevention, 2010). Stakeholder theory suggests that these pathways may be used simultaneously and may change over time (Zietsma & Winn, 2008).

Return to the Penitentiary Institutions Example

Using stakeholder theory, how could the HCWs mentioned in the introduction have tried to change the MoJ's policy on distributing condoms for STI prevention in penitentiary institutions? As suggested earlier, the most promising route might be to start with an issue and stakeholder analysis. The HPO (e.g., a specialized center for STI prevention or the national organization of HCWs in penitentiary institutions (HPO) in partnership with the MoH may work together to influence MoJ: [HPO & MoH] → MoJ. Mapping the relationships among the organizations hypothetically, the HPO is strongly tied to the MoH and MoJ, while the reverse is not necessarily the case. Looking at the stakeholder salience of the HPO for the other two organizations, the HPO probably has medium legitimacy for the MoH, but low legitimacy for the MoJ. HPO's power is low for both ministries, while the urgency for the MoH may be medium (prevention of STIs is a priority) but low for the MoJ (preventing drug use is a priority). The HPO might be able to convince the MoH to approach the MoJ on this issue and try to find solutions that fit with both priorities. Notably, the MoH is a large organization and the salience of the HPO may be high for some departments and lower for others, meaning that the departments that are willing to collaborate with the HPO also have to work through stakeholders within their own organization.

Conclusion

Stakeholder theory may help health promoters to make change at the organizational level. Health promotion applications of stakeholder theory require, foremost, a good understanding of stakeholder analysis.

The combination of different approaches for the identification and classification of stakeholders through an informed understanding of stakeholders' salience (their power, legitimacy, and urgency; Mitchell et al., 1997; Neville et al., 2004), stakeholders' interest (support and opposition toward a health problem and their influence; Bryson, 1995; Knai et al., 2011; Rowley & Moldoveanu, 2003), as well as the stakeholders' position within a network (Hoeijmakers et al., 2007; Rowley, 1997), can offer a more relevant, robust and useful tool for stakeholder analysis. The proposed tool should be considered as a framework rather than a prescribed format for stakeholder analysis.

Examples of health promotion issues for which stakeholder theory is relevant are myriad. For example, HPOs working in obesity prevention target policy change in the food industry, fast food companies, schools, and federal nutrition programs for women, infants, and children.

The conceptual analysis and the hypothetical case presented here suggest that different factors determine the development or selection of proper methods for use by a HPO. An informed understanding of stakeholders' characteristics, such as stakeholder salience, stakeholder interest, characteristics of stakeholder networks and relationships, as well as knowledge of different influencing methods can help a HPO establish priorities that may contribute to better allocate fiscal and human resources. To do this, the HPO needs to understand the importance of each stakeholder, to strengthen key relationships through communicative and compromise strategies, and to recognize the possibility of taking coercive actions itself or through allies with high salience for the FO. Strategies may be used simultaneously and are likely to change according to the shifting dynamics of the relationships between the focal organizations and health promoting organizations.

Declaration of Conflicting Interests

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

Funding

The authors received no financial support for the research, authorship, and/or publication of this article.

Supplement Issue Note

This article is part of a *Health Education & Behavior* supplement, "The Evidence for Policy and Environmental Approaches to Promoting Health," which was supported by a grant to the Society for Public Health Education (SOPHE) from the Robert Wood Johnson Foundation. The entire supplemental issue is open access at http://heb.sagepub.com/content/42/1_suppl.toc.

References

Abraham, C., & Graham-Rowe, E. (2009). Are worksite interventions effective in increasing physical activity? A systematic review and meta-analysis. *Health Psychology Review*, *3*, 108-144.

Bartholomew, L. K., Parcel, G. S., Kok, G., Gottlieb, N. H., & Fernández, M. E. (2011). *Planning health promotion programs: An intervention mapping approach* (3rd ed.). San Francisco, CA: Jossey-Bass.

Boonstra, A., & de Vries, J. (2008). Managing stakeholders around inter-organizational systems: A diagnostic approach. *Journal of Strategic Information Systems*, *17*, 190-201.

Brown, P., Lyson, M., & Jenkins, T. (2011). From diagnosis to social diagnosis. *Social Science & Medicine*, *73*, 939-943.

Brown, P., Morello-Frosch, R., Brody, J. G., Altman, R. G., Rudel, R. A., Senier, L., . . . Simpson, R. (2010). Institutional review board challenges related to community-based participatory research on human exposure to environmental toxins: A case study. *Environmental Health*, *9*, 39.

Bryson, J. (1995). *Strategic planning for public and non-profit organizations* (Rev. ed.). San Francisco, CA: Jossey-Bass.

Butterfoss, F. D. (2007). *Coalitions and partnerships in community health*. San Francisco, CA: Jossey-Bass.

Butterfoss, F. D., Kegler, M. C., & Francisco, V. T. (2008). Mobilizing organizations for health promotion: Theories of organizational changes. In K. Glanz, B. K. Rimer, & K. Viswanath (Eds.), *Health behavior and health education: Theory, research and practice* (4th ed., pp. 335-362). San Francisco, CA: Jossey-Bass.

Centers for Disease Control and Prevention. (2010). *Surgeon General's report: How tobacco smoke causes disease: The biology and behavioral basis for smoking-attributable disease*. Retrieved from http://www.surgeongeneral.gov/library/tobaccosmoke/report/full_report.pdf

Clavier, C., & de Leeuw, E. (Eds.). (2013). *Health promotion and the policy process*. Oxford, England: Oxford University Press.

Courser, M. W., Holder, H. D., & Collins, D. (2008). Evaluating retailer behavior in preventing youth access to harmful legal products: A feasibility test. *Evaluation Review* (2009), *33*, 497-515.

Cross, R., Borgatti, S., & Parker, A. (2001). Beyond answers: Dimensions of the advice network *Social Networks*, *23*, 215-235.

Cross, L. R., & Parker, A. (2004). *The hidden power of social networks: Understanding how work really gets done in organizations*. Boston, MA: Harvard Business School Press.

de Bakker, F. G. A., & den Hond, F. (2008a). Introducing the politics of stakeholder influence: A review essay. *Business and Society*, *47*(2), 8-20.

Deegan, C., & Blomquist, C. (2006). Stakeholders influence on corporate reporting: An exploration of the interaction between the world wide fund for nature and the Australian minerals industry. *Accounting, Organizations and Society*, *31*, 343-372.

den Hond, F., & de Bakker, F. G. A. (2007). Ideologically motivated activism: How activist groups influence corporate social change. *Academy of Management Review*, *32*, 901-924.

Freidman, A. L., & Miles, S. (2002). Developing stakeholder theory. *Journal of Management Studies*, *39*(1), 1-21.

Frooman, J. (1999). Stakeholder influence strategies. *Academy of Management Review*, *24*, 191-205.

Frooman, J., & Murrell, A. J., (2005). Stakeholder influence strategies: The roles of structural and demographic determinants. *Business & Society*, *44*(1), 3-31.

Gil, A., Polikina, O., Koroleva, N., Leon, D. A., & McKee, M. (2010). Alcohol policy in a Russian region: A stakeholder analysis. *European Journal of Public Health*, *20*, 588-594.

Granovetter, M. S. (1973). The strength of weak ties. *American Journal of Sociology*, *78*, 1360-1380.

Green, L. W., & Kreuter, M. W. (2005). *Health program planning: An educational and ecological approach* (4th ed.). New York, NY: McGraw Hill Professional.

Hanneman, R. A., & Riddle, M. (2005). *Introduction to social network methods*. Riverside: University of California, Riverside. Retrieved from http://faculty.ucr.edu/~hanneman/

Heaney, C. A., & Israel, B. A. (2008). Social networks and social support. In K. Glanz, B. K. Rimer, & K. Viswanath (Eds.), *Health behavior and health education: Theory, research, and practice* (4th ed., pp. 189-210). San Francisco, CA: Jossey-Bass.

Heffernan, J., & O'Brien, D. (2010). Stakeholder influence strategies in bidding for a professional sport franchise license. *Sport Management Review*, *13*, 255-268.

Heward, S., Hutchins, C., & Keleher, H. (2007). Organizational change—Key to capacity building and effective health promotion. *Health Promotion International*, *22*, 170-178.

Hoeijmakers, M. J. A., De Leeuw, E., Kenis, P., & De Vries, N. K. (2007). Local health policy development processes in the Netherlands: An expanded toolbox for health promotion. *Health Promotion International*, *22*, 112-121.

Johnston, L. D., O'Malley, P. M., Bachman, J. G., & Schulenberg, J. E. (2012). *Monitoring the future national results on adolescent drug use: Overview of key findings, 2011*. Ann Arbor: Institute for Social Research, University of Michigan.

Knai, C., McKee, M., & Pudule, I. (2011). Soft drinks and obesity in Latvia: A stakeholder analysis. *European Journal of Public Health*, *21*, 295-299.

Kok, G., Gottlieb, N. H., Commers, M., & Smerecnik, C. (2008). The ecological approach in health promotion programs: A decade later. *American Journal of Health Promotion*, *22*, 437-442.

Kok, G., Gottlieb, N. H., Panne, R., & Smerecnik, C. (2012). Methods for environmental change: An exploratory study. *BMC Public Health*, *12*, 1037.

Lienert, J., Schnetzer, F., & Ingold, K. (2013). Stakeholder analysis combined with social network analysis provides fine-grained insights into water infrastructure planning processes. *Journal of Environmental Management*, *125*, 134-148.

McCabe, S. E., & Boyd, C. J. (2005). Sources of prescription drugs for illicit use. *Addictive Behaviors*, *30*, 1342-1350.

McCabe, S. E., Teter, C. J., & Boyd, C. J. (2004). The use, misuse, and diversion of prescription stimulants among middle and high school students. *Substance Use and Misuse*, *39*, 1095-1116.

Minkler, M. (Ed.). (2008). *Community organizing and building for health* (2nd ed.). New Brunswick, NJ: Rutgers University Press.

Mitchell, R. K., Agle, B. R., & Wood, D. J. (1997). Toward a theory of stakeholder identification and salience: Defining the principle of who and what really counts. *Academy of Management Review*, *22*, 853-886.

National Cancer Institute. (2007). *Greater than the sum: System thinking in tobacco control*. (DHHS Publication No. 06-6085, Tobacco Control Monograph No. 18). Bethesda, MD: U.S. Department of Health and Human Services.

Neville, B. A., Bell, S. J., & Whitwell, G. (2004). Stakeholder salience revisited: Toward an actionable tool for the management of stakeholders. *Academy of Management Proceedings*, D1-D6.

Newton, L. H. (1999). Truth is the daughter of time: The real story of the Nestle case. *Business and Society Review*, *104*, 367-395.

Page, C. (2002). The determinants of organization stakeholder salience in public health. *Journal of Public Health Management Practice*, *8*(5), 76-84.

Prell, C., Hubacek, K., & Reed, M. (2009). Stakeholder analysis and social network analysis in natural resource management. *Society and Natural Resources*, *22*, 501-518.

Prell, C., Reed, M., Racin, L., & Hubacek, K. (2010). Competing structure, competing views: The role of formal and informal social structures in shaping stakeholder perceptions. *Ecology and Society*, *15*, 4. Retrieved from http://www.ecologyandsociety.org/vol15/iss4/art34/

Reed, M. S., Graves, A., Dandy, N., Posthumus, H., Hubacek, K., Morris, J., . . . Stringer, L. C. (2009). Who's in and why? A typology of stakeholder analysis methods for natural resource management. *Journal of Environmental Management*, *90*, 1933-1949.

Rowley, T. J. (1997). Moving beyond dyadic ties: A network theory of stakeholder influences. *Academy of Management Review*, *22*, 887-910.

Rowley, T., & Moldoveanu, M. (2003). When will stakeholder groups act? An interest-and identity-based model of stakeholder group mobilization. *Academy of Management Review*, *28*, 204-219.

Snow, D. A., Soule, S. A., & Kriesi, H. (Eds.). (2004). *Blackwell companion to social movements*. Oxford, England: Blackwell.

ten Kate, S., Haverkamp, S., Mahmood, F., & Feldberg, F. (2010, June). *Social network influences on technology acceptance: A matter of tie strength, centrality and density*. Paper presented at the 23rd Bled eConference, "eTrust: Implications for the Individual, Enterprises and Society," Bled, Slovenia.

Tenkasi, R., Mohrman, S. A., & Mohrman, A. J. (1998). Accelerated learning during transition. In S. A. Mohrman, J. R. Galbraith, & E. E. Lawler (Eds.), *Tomorrow's organization: Crafting winning capabilities in a dynamic world* (pp. 330-361). San Francisco, CA: Jossey-Bass.

Tilling, M. V., & Tilt, C. A. (2010). The edge of legitimacy: Voluntary social and environmental reporting in Rothmans' 1956-1999 annual reports. *Accounting, Auditing & Accountability Journal*, *23*(1), 55-81.

van Nieuw-Amerongen, M. E., Kremers, S. P. J., de Vries, N. K., & Kok, G., (2011). The use of prompts, increased accessibility, visibility, and aesthetics of the stairwell to promote stair use in a university building. *Environment & Behavior*, *43*, 131-139.

Wallack, L. (2008). Media advocacy: A strategy for empowering people and communities. In M. Minkler (Ed.), *Community organizing and community building for health* (2nd ed., pp. 419-432). New Brunswick, NJ: Rutgers University Press.

Walt, G. (1994). *Health policy: An introduction to process and power*. London, England: Zed Books.

Wasieleski, D. (2001). Agenda-building theory: A stakeholder salience approach for determining agenda placement. *Journal of Behavioral and Applied Management*, *2*, 113-130.

Winn, M. I., & Keller, L. R. (2001). A modeling methodology for multiobjective multistakeholder decisions: Implications for research. *Journal of Management Inquiry*, *10*, 166-182.

Zietsma, C., & Winn, M. (2008). Building chains and directing flows: Strategies and tactics of mutual influence in stakeholder conflicts. *Business & Society*, *47*, 68-101.