Chapter 16
Public Policy Advocacy in Culturo-Behavior Science

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The Alliance for Justice (2005) defines *advocacy* as "efforts to influence public policy" (p. 4). Many more detailed and varied definitions have been used in the literature but few include the inequities experienced by marginalized groups. For example, and perhaps surprisingly, in reviewing the literature on advocacy in public health, Cohen and Marshall (2017) report that, "significantly, there were relatively few examples of definitions that specifically identified equity and/or social justice for disadvantaged populations as a primary goal" (p. 311). In some of B. F. Skinner's earliest work (1948, 1953), he suggested (and later strongly emphasized; 1987) that behavior science had the potential to reshape societies for the better, in ways we often now discuss using terms like social and environmental justice. The post-World War II era, when Skinner wrote his earliest applied behavior science-oriented books, overlapped with the period when the newly organized United Nations developed and globally ratified the 1948 Universal Declaration of Human Rights (https://www.un.org/en/universal-declaration-human-rights/). The Declaration affirmed universal political, economic, social, and cultural rights, including among others access to adequate food, housing, medical care, and education; participation in governance; and freedom from oppression (although the rights elaborated have not yet been fully realized anywhere on earth).

Most behavior science and practice at the time, probably necessarily, focused on basic research and small-scale intervention, laying the groundwork for subsequent advances. Regardless of the limited available knowledge base however, many

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behaviorally oriented researchers and practitioners subsequently became deeply involved in the social movements of the 1960s and 1970s, including the civil rights, antiwar, ecological, and women's movements (and a few in the LGBTQ+ movement). Those efforts have not yet been extensively documented, given that most participation was in and through non-behavioral organizations and collectives. For further information on the early history of social and environmental justice efforts within behavior science, see Chap. 17, "Advocacy, Accompaniment, and Activism."

By the late 1980s, the Association for Behavior Analysis[1] (ABA) was encouraged by members, particularly those working in community settings, to examine how behavior analysts and the organization itself could "contribute to policymaking relevant to the public interest" in a more systematic way (Fawcett et al., 1988a, p. 27). Therefore, in 1987, ABA assembled a Task Force on Public Policy "to examine ways to encourage members to contribute to policymaking relevant to the public interest" (Fawcett et al., 1988a, p. 27). The goal of the Task Force was to outline "ways for behavior analysts to be more functional citizen scientists in the policymaking arena" (Fawcett et al., 1988b, p. 11), to become "scientist-advocates" (Fawcett et al., 1988a, p. 27). The Task Force published an annotated set of recommendations (Fawcett et al., 1988a) and a more extended article summarizing "the contexts and processes of policymaking; and … [outlining] issues regarding the roles of behavior analysts in creating policy-relevant conceptual analyses, generating research data, and communicating policy-relevant information" (Fawcett et al., 1988b, p. 11).

Foundational Considerations: Values and Ethics

It is essential that those engaging in public policy advocacy supporting social and environmental justice, especially as scientist-advocates, ground their practice in foundational values and ethics. Many policy issues involve complex issues in that they can have profound impacts, often especially for vulnerable persons and marginalized groups.

Values Guiding Cultural and Community Advocacy

Values and ethics, both of which have important implications for culturo-behavior science research and intervention, have been contested constructs in behavior science at least since Skinner's (1953) *Science and Human Behavior*. Skinner (1987) indicated that, "What is good for a culture is whatever promotes its ultimate survival, such as holding a group together or transmitting its practices" (p. 58)—which although helpful, provides only limited guidance for cultural and community

[1] Renamed the Association for Behavior Analysis: International (ABAI) in 2008.

research and intervention within the behavior analytic community. Hayes, Barnes-Holmes, and Roche (2002) defined values as "verbally-constructed, globally-desired life directions … [that] manifest themselves over time and unfold as an ongoing process" (p. 235). Statements of cultural values can be viewed as relational networks established within a collective that, in Hayes et al.'s terms, "over time … become 'frozen metaphors.'" Some professional groups, for example the National Association of Social Workers (2017), begin their ethical code with a list and explication of collective core values, potentially producing a shared relational network, believed to be consistent with Skinner's (1987) "what is good for a culture." Scholarly and professional behavior is expected to be consistent with those values, including behavior expected or proscribed in the more specific ethical code that follows. The six identified core values in the NASW Code are (a) service, (b) social justice, (c) dignity and worth of person, (d) importance of human relationships, (e) integrity, and (f) competence. It is relatively easy to make an argument that each of these, and the aggregate, are "good for a culture."

Social and environmental justice are essential values in such work, and underlie ethical practice (see Chap. 9 in this volume for related ethical content). Inevitably, more detailed relational networks related specifically to the work of culturo-behavior science and practice in these areas will be shaped as the field matures. Other disciplines have focused on justice-related work guided by similar values for many years, and it can be valuable for behavior scientists to expose themselves to existing perspectives and their applications as we develop those networks. There is an enormous existing literature related to social and environmental justice across multiple disciplines (e.g., Alejandro, 1998; Erickson, 2018; Holifield, Chakraborty, & Walker, 2017; Jost & Kay, 2010; Rawls, 2001) that has considerable potential to provide guidance.

Jost and Kay (2010) offer a preliminary definition of social justice that begins to capture much of the related literature:

> [I]t is possible to offer a general definition of social justice as a state of affairs (either actual or ideal) in which (a) benefits and burdens in society are dispersed in accordance with some allocation principle (or set of principles); (b) procedures, norms, and rules that govern political and other forms of decision making preserve the basic rights, liberties, and entitlements of individuals and groups; and (c) human beings (and perhaps other species) are treated with dignity and respect not only by authorities but also by other relevant social actors, including fellow citizens. (p. 1122)

They add, "A just social system is to be contrasted with those systems that foster arbitrary or unnecessary suffering, exploitation, abuse, tyranny, oppression, prejudice, and discrimination" (p. 1122)—patterns that also have been studied intensively (e.g., Brady & Burton, 2016; Young, 1990). These descriptions can be relatively easily translated in terms of the analysis of cultural systems that determine relative access to reinforcers, established schedules of reinforcement and exposure to aversives, as well as motivative operations and stimulus relations that shape and contribute to supporting networks of cultural practices.

Erickson (2018), describes environment justice and its links to social justice as follows (again easy to reframe in behavioral terms):

> Environmental justice occurs when all people equally experience high levels of environmental protection and no group is excluded from environmental decision-making or affected disproportionately by environmental hazards (Forbes, Nesmith, Powers, & Schmitz, 2016). Environmental justice also affirms ecological unity and the interdependence of all species—and the right to be free from ecological destruction. (p. 10).

There are many areas of public policy in which advocacy is valuable; issues of social and environmental justice however are central to healthy cultures, and therefore receive particular attention in the material that follows.

Ethical Considerations in Advocacy Research and Practice

Most of the disciplines involved in culturo-behavior science and practice (for example, psychologists, social workers, licensed or certified behavior analysts, medical professionals, and educators) have established codes of ethics. There are, however, some specialized considerations related to (a) ethical integrity and (b) the obligation to act that are particularly salient in policy advocacy.

Integrity in Advocacy

It may seem obvious that justice-oriented advocacy activities should be handled with integrity; the professional disciplines involved in this work generally include a requirement for integrity in their codes. Most effective advocacy is directed toward achieving specific changes in individual or collective behavior. In many cases, however, the best policy directions to take are not yet well established by data. Furthermore, some advocacy is intentionally focused on choices that are optimal for some, and potentially dangerous for others. Advocacy or lobbying focused on commercial or disciplinary advantage or funding are common, and require particular caution. In addition, advocates and lobbyists in some cases are not familiar with existing data (although they have an obligation to be so informed).

There is a clear ethical obligation in science to advocate with integrity based on the best available information. As indicated by the ABA Task Force, “When testing one or more controversial alternatives in a study, behavior analysts should pay particular attention to the authenticity and ecological validity of interventions” (Fawcett et al., 1988a, p. 28). Full disclosure is ethically essential, as well as crucial for maintaining the advocate’s reputation with policy makers and citizens who may be pivotal in the future. There are several approaches that can be consistent with the requirement for integrity. For example, the Research to Policy Collaboration (RPC, https://www.research2policy.org/), which grew out of the work of the National [United States] Prevention Science Coalition (https://www.npscoalition.org/), recommends collaboratively sharing the full range of established research around an issue within ongoing partnerships between research experts and legislative staff. In cases in which participants are open to databased decision-making consistent with

both science and social and environmental justice, this may be a useful approach. As is the case across most of the advocacy literature, however, evidence that the use of this approach produces actual policy change has yet to be demonstrated.

In many critical areas of public policy, policy-makers may be unwilling to act based on well-established data for political reasons, or because of established, contradictory relational networks. (Resistance to effective action addressing climate change is a powerful example, as discussed extensively in Chaps. 10, 11, and 12 in this volume.) In such cases, there remains a clear ethical obligation to advocate for justice, even where less collaborative approaches may be required. In such cases, advocacy necessarily and appropriately involves persuasion—convincing decision-makers (and as discussed later, often the public) to consider a desired action. Current data indicate that persuasion often relies on shifting or expanding relational networks. In their work on persuasion and rhetoric, Hayes et al. (2002), outline ways that stimulus relations can be affected to support necessary social change.

At the same time, it is clear that such approaches can be used in manipulative ways, a potentially serious threat. Recent political movements across many nations have demonstrated that damaging and dangerous relational networks can be constructed to include links like {immigrants ≈ criminals}, {climate change ≈ political fiction}, or {strongman governance ≈ citizen safety}. Intentional efforts to shift relational networks are clearly central to advertising, lobbying, and many types of advocacy, and demonstrate the power to profoundly strengthen or damage societies. As an example, the growth of "fake news" risks establishing and supporting false equivalence relations and relational networks that can produce poor policy decisions (Mattaini, 2013; Tsipurski, Votta, & Roose, 1918). Decisions to intentionally attempt to shift relational responding toward more prosocial patterns (see, for example, Dixon, Belisle, Rehfeldt, & Root, 2018) therefore require careful weighing to avoid deceptive and manipulative actions inconsistent with sustainable cultures of justice. One approach that can reduce such risks is to commit to operating transparently from participatory community bases in research, analysis, and advocacy (Biglan, 1995; Fawcett et al., 2003; Israel et al., 2010, see also Chaps. 9 and 14 in this volume).

The Obligation to Act

In 1971, B. F. Skinner made the widely quoted statement that "if your culture has not convinced you that there is [a good reason why you should be concerned about the survival of a particular kind of economic system], so much the worse for your culture" (p. 137). He goes on to suggest there are "many reasons why people should now be concerned for the good of all mankind," including environmental, population, and nuclear threats, and describes in broad strokes how to arrange contingencies to evoke responsible behavior. Most professions structure education and practice around collective responsibilities, including obligations to provide professional service to those in need, with preferential attention to marginalized populations in the greatest need (Farmer, 2013; National Association of Social Workers,

2017). Scientists also commonly recognize that they have responsibilities, not only to do responsible science and advocate for that science when it addresses significant issues like addictions and climate change (Pollard, 2012), but also in some cases to decide on their areas of scientific activity based on social need.

For example, New York Times journalists Kristof and WuDunn (2020) describe the damage that economic despair leading to increasing prevalence of suicide, drug and alcohol abuse, and resulting family breakdowns has created among working class rural populations in the US over the past two decades. One important theme highlighted in this work is that these challenges are typically framed as individual problems (that can only be resolved through increases in personal responsibility), when broader systemic analysis indicates that the core issues are economic and cultural—calling for much more attention to social responsibility. Much the same is the case for a number of other cultural-level issues. Given the seriousness and breadth of social and environmental issues, and consistent with Skinner's (1971) warning, a case can be made that those behaviorists who have the socially supported education, capacity, and scientific resources to contribute to the good of the larger culture carry a particular ethical responsibility to do so. (Members of the Behaviorists for Social Responsibility Special Interest Group within ABA/ABAI have worked for decades to explore and commit to our individual and collective responsibilities, and approaches for exercising them.)

The community of culturo-behavior science researchers, educators, and practitioners includes members from multiple professional groups, some of which are more explicit than others about attention to social responsibility beyond work with individuals. Both public health (Cohen & Marshall, 2017; Weed & Mckeown, 2003) and social work place heavy emphasis on this commitment as a central element in education and field training. For example, one of the six major sections in the social work code of ethics is entitled "'Social Workers' Ethical Responsibility to the Broader Society," indicating that social workers have obligations to (a) promote social welfare, (b) facilitate public participation in shaping social policies and institutions, (c) provide services in public emergencies, and (d) engage in social and political action, with specific guidelines for each.

The situation for licensed psychologists has been viewed as more complex. Nadal (2017), in an article in the *American Psychologist,* reviews "major controversies or dilemmas regarding psychology, social justice, and political participation" (p. 935). He traces psychologists' history of activism in major social issues including civil rights, women's rights, marriage equality, and rights to health and mental health care, as well as significant barriers, including, among others, a lack of advocacy training, ethical concerns around boundary issues, and the utility of political neutrality in practice. Nadal outlines the possibilities of framing oneself as a "psychologist-activist," prepared to challenge oppression on individual, interpersonal, group, and institutional levels. The responsibility to participate in such work at the organizational and institutional levels is a final emphasis in his analysis. (Professional practice as a psychologist-activist as framed by Nadal has strong similarities to what is labeled "structural social work" in that field [e.g., Mullaly &

Dupre, 2018], recognizing that cultural institutions and practices structure advantages, possibilities, and limits for diverse groups.

The Policy Process

Near the beginning of this chapter, we noted the 1988 article prepared by the ABA Task Force on Public Policy (Fawcett et al., 1988b), and the accompanying set of recommendations (Fawcett et al., 1988a). Notable in these publications is a strong rationale for the importance of the scientist-advocate, with specific recommendations for engaging in policy advocacy, an area that had seldom been discussed in a scientific way in behavior science or most other disciplines.

Early Behavioral Perspectives on the Policy Process

Fawcett et al. (1988b) describe the typical policy process as including four stages: (a) agenda formation, (b) policy adoption, (c) policy implementation, and (d) policy review. They further explain that while these stages generally are common across issues and context, the content, sequencing, and actors in each stage varies in part based on the roles of key decision-makers, which may be in legislative, executive, judicial, bureaucratic, or regulatory positions or institutions, or among the general population in the case for example of public referendums. Seekins, Maynard-Moody, and Fawcett (1987), in an article with crossover authors with the two Fawcett et al. papers cited (1988a, 1988b), emphasize that political or administrative decisions are significantly influenced by context, including the realities of institutions, individual actors, and contingencies affecting those actors. They note that:

> A decision that produces a policy or non-policy response rarely occurs between all policy actors on an issue instantaneously. Rather, each actor makes many decisions over time. The consequences of these individual decisions influence the future decisions of other actors and those of the individual actor. Thus, policymaking may be described as involving a series of events taking place over time that set the occasion for other events by other individuals. (p. 68)

Seekins et al. (1987) describe two frameworks for examining analyses of policy decisions, the Rational Model, and the Dynamic Interest Group Model. In the first, the policy process is viewed as linear, with each of the previously listed stages proceeding neatly into the next. While such a framework can be useful for taking a beginning look, in public arenas, realities generally are more complex, characterized by multiple concurrent streams of activity. The Dynamic Interest Group Model emphasizes that the four stages listed at the beginning of the last paragraph may overlap, and indeed may occur in any order—and that the crucial role of interest group actions that shift contexts must be included in most adequate analyses.

Other Systemic Policy Perspectives

There are a large number of public policy decision-making models; some give much more attention and interest to group dynamics than others. One widely used model is the Advocacy Coalition Framework (ACF), "a loosely systemic framework in which "coalitions compete within a policy subsystem to translate their beliefs into policies" (Pierce, Peterson, Jones, Garrard, & Vu, 2017, p. S15; Weible, Sabatier, & McQueen, 2009). The ACF has been widely implemented; unfortunately, nearly all of the data collected have been qualitative, limiting the extent of validation considerably. One useful contribution this framework offers however, is a graphic depiction of the model, as displayed in Fig. 16.1, which reminds us of the frequent and often unpredictable competition among interest groups, as well as that considerable effort over an extended period is typically required for large-scale policy change.

More complex models from other disciplines also offer lessons to culturo-behavior science, pertaining particularly to ecological systems analysis.[2] Orach and Schlüter (2016) indicate that:

> "Social-ecological systems (SES) research emphasizes the interdependencies between human and natural systems (Berkes et al., 2000; Liu et al., 2007) and their importance for governance of SES. It moves forward from studying society and the natural environment

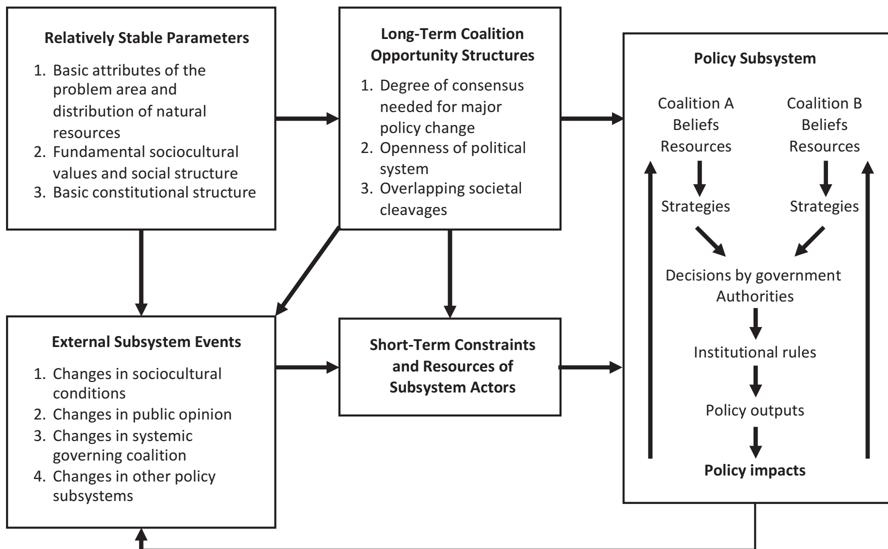

Fig. 16.1 Flow diagram of the Advocacy Coalition Framework. (Source: Jenkins-Smith et al., 2014)

[2] See Chap. 3 in this volume for more information on cultural systems analysis.

within their own disciplinary domains towards focusing on the relationships between components of the two systems" (p. 13).

They recommend as examples "five established theoretical frameworks of the policy process originating in political science and public policy research with respect to their potential to enhance understanding of governance and complex policy dynamics in social-ecological systems" (p. 13), including the previously discussed ACF as well as:

- Punctuated Equilibrium theory (Baumgartner & Jones, 1993) which draws on evolutionary biology;
- the Institutional Analysis and Development Framework (Kiser & Ostrom, 1982), a largely rational choice approach;
- the Multiple Streams Framework (Kingdon, 1984), an approach for analysis under conditions of ambiguity; and,
- the Policy Networks Approach (Atkinson & Coleman, 1989; Kenis & Schneider, 1991; Rhodes, 1997).

Each of these, and other available frameworks, are worth exploring, and sometimes can be consistent with work in our own field, for example related to recent evolutionary analyses within behavior science (e.g., Wilson, Hayes, Biglan, & Embry, 2014). Some of this work can be of real assistance as culturo-behavior science strives to develop meaningful and effective approaches for advocating with integrity for critical policy change.

The State of Advocacy Research

Recall that the overall policy process can be conceptualized as consisting of four phases (a) agenda formation, (b) policy adoption, (c) policy implementation, and (d) policy review (Fawcett et al., 1988a), and that the process is often not linear, with phases intermixing, overlapping, and repeating, often with many decisions being made by multiple actors throughout (Seekins et al., 1987). Even though there is considerable literature available on three of the four phases (agenda formation, policy implementation, and policy review/evaluation), the process of policy adoption—the actual decision-making—is considerably less developed. Recall that we initially defined advocacy as "efforts to influence public policy." The question we need to answer here is what actions result in actual policy decisions—specifically what data support the effectiveness of particular advocacy behaviors, and what advocacy behaviors actually result in decisions producing desired policy changes?

As Devlin-Foltz, Fagen, Reed, Medina, and Neiger (2012) state "it is one thing to catalog meetings held, position papers drafted, and pamphlets distributed, it is quite another to demonstrate that these outputs resulted in useful policy change outcomes" (p. 581). Unfortunately, the literature on policy advocacy focuses primarily on single examples, without rigorously demonstrating that, for instance,

developing and sharing a policy brief, participating in a collaborative meeting with legislative staff, or organizing a protest are key factors leading to policy change even in a single case, much less across cases. The level of generalizable knowledge present in the literature around such questions is therefore quite limited. Addressing a related challenge, Pawson, Wong, and Owen (2011) argue that the standard predicament of evidence-based policy is that such "[e]vidence does not come in finite chunks offering certainty and security to policy decisions. Rather, evidence-based policy is an accumulative process in which the data pursue but never quite capture unfolding policy problems." (p. 518).

Perhaps the most significant, and terribly important, challenge is that effective cultural and community work generally must be done in partnership with community members, in ways that align with community values, shared stimulus relations, and traditional repertoires, reflecting the central importance of social validity—an ethical requirement (Adkins, 1997; Goldiamond, 1976, 1984, 2002; Wolf, 1978; see also Chapters 9 and 14, this volume). The scientist-advocate must therefore be prepared to adjust their work to fit within cultural and community dynamics, with considerable self-awareness, even when their own values may be quite different.

The impact of larger political factors can also not be ignored. There have recently been some movements in Europe, the US, and elsewhere toward federal governments developing national behavior science teams, generally focused on achieving "small wins," often using language like "behavioral insights" (Sousa Lourenço, Ciriolo, Rafael Rodrigues Vieira de Almeida, & Troussard, 2016). A similar process was initiated in 2014 in the US during the Obama presidency (Congdon & Shankar, 2015). A web search completed on January 25, 2020, however, opened a page with the following message at the top: "This is historical material frozen in time on January 20, 2017" (sbst.gov). Which is to say, political interest in this work was no longer of interest under the Trump administration.

Given such collective realities, it should not be surprising that there are no well-controlled experiments persuasively demonstrating that the application of one advocacy repertoire produces a specific policy change (outcome) more effectively than any other, much less rigorously demonstrating specific changes on the level of the relevant social issue (impact). The uniqueness of conditions, structures, and personnel from setting to setting further complicate the discovery of generalizable findings. Treatments in medicine can often be almost entirely standardized, for example, by offering standard medication regimens. Such standardization is more challenging in evaluating individual behavioral treatments, given differences in histories of clients and professionals and contextual factors, limiting the utility of reviews and meta-analytic studies (Mattaini, 2012). Standardization at cultural levels, within highly-varied systemic contexts, is at least an additional order of magnitude more complex.

Nonetheless, there are many available reports offering potentially useful examples of advocacy, some with considerable social validity, as well as conceptual models grounded in well-developed behavior science (e.g., Hovell, Wahlgren, & Adams, 2009 [an important behavioral public health model]; Mattaini, 2013). A classic

model developed and implemented by Fawcett and colleagues (Fawcett et al., 1988b; Fawcett, Seekins, & Jason, 1987; Seekins & Fawcett, 1986), advocated successfully for state laws to encourage child safety seat use in vehicles throughout the state of Kansas. The investigators began by identifying interested parties, including medical and highway safety advocacy groups as well as a legislative sponsor. They then spent time interviewing those parties, determining what information would be helpful to them in deciding how to proceed (e.g., current public sentiments, related prevalence data), and ensuring that the information requested was provided in a timely manner. Recognizing that there would be opposition, as is true in many advocacy processes, media and more personal strategies were developed from the beginning and throughout the process as needed to address concerns. Two factors that the researchers indicated were most important are (a) very active, timely, and wide engagement required from the first discussion with a potential sponsor through the final outcome, and (b) use of behavioral research methods, including direct observations to determine prevalence, review of literature on child passenger safety, and survey methods to explore social validity.

An example of somewhat similar work currently under development is the RPC, a nonprofit coalition mentioned earlier. The RPC takes the position that "it is more fruitful to work within the context of existing policy priorities because our primary objective is to facilitate trusting partnerships between research and policy communities" (RPC, Our Approach) through ongoing non-partisan relationships with policy-makers (e.g., Congressional staff). This approach avoids taking particular policy stances and instead focuses on bringing the best range of evidence to the table. It also clearly has limitations when strong opposing positions are present (e.g., seriously engaging climate change denying members of Congress in this way would likely fail under current conditions). However, in cases when the issue is primarily lack of knowledge rather than rigid political stances, the approach seems to be of value.

RPC work by D. Max Crowley and colleagues particularly appears to have potential for successfully engaging policy-makers, at least those who demonstrate interest (Crowley et al., 2018; Crowley, Scott, & Fishbein, 2018; Scott, Larson, Buckingham, Maton, & Crowley, 2019). In their report, Crowley, Scott, and Fishbein (2018) discuss the development of "strategic legislative needs assessments and a rapid response researcher network to accelerate the translation of research findings into usable knowledge for policymakers" (p. 260) in a pilot program of legislative engagement. This report provides considerable detail about how the pilot translational program was planned and implemented, and elaborates the financial and time costs for all participants. Although the article uses the language of "impact analysis," what is measured are primarily the number of participating scientists, number of participating legislative offices, and number of legislative requests for evidence relevant to policy-making. However data on associated policy changes are not presented.

Both the Kansas example and the RPC examples are based on an expectation that providing research information to inform policy will have a meaningful influence, a

position that is not without challenges. The question as to whether policy-makers actually use research has been studied extensively. Newman, Cherney, and Head (2016) summarize:

> Over many decades, the study of how policy decisions can be based on—or impervious to—the outputs of academic research has grown, inspiring subgenres with names such as "research utilization," "knowledge transfer," "knowledge brokering," and "evidence-based policy." (p. 24) … A substantial number of survey respondents indicated that they do not value academic research very highly and do not often use the findings of academic research when constructing advice for making policy (p. 25).

Many policy decisions depend in part on forecasts (estimates, predictions) of what will happen in the future, but forecasts are commonly shaped by political positions; decision-makers often solicit forecasts using questions and selecting sources based on those political positions. Cost and utilization estimates often vary dramatically by political position, and the estimates often prove inaccurate. Forecasting relies on technical information and analysis, but in fact also involves ethical questions as "In the end, forecasts are often expected to be advocacy which at the same time can be presented to the public for political reasons as the results of unbiased analysis" (Wachs, 1990, p. 141). Wachs (1990), a senior specialist in the area, indicates that he has come to be doubtful of "virtually all forecasts introduced into political debates by government agencies, consultants, or supposed technical experts" (p. 146). As one response, Tetlock, Mellers, and Scoblic (2017) report on a process called "forecasting tournaments" (originally developed within the US intelligence community) which involves particular ways of integrating multiple forecasts that may have potential for "depolarizing political debates and resolving policy disputes" (p. 481). Some behavior science lab procedures and artificial intelligence research may be well positioned to participate in this work.

Advocating for Specific Decisions and their Implementation

Advocacy as it is being discussed in this chapter is in all cases directed toward decision-makers (individually or collectively), and those with influence on decision-makers related to a specific area of concern. The more specific the action on which advocates focus, the easier planning and execution will be. Advocacy for "peace," for example, generally reflects good will, but is not specific enough to bring about meaningful change. Gandhi (1945) noted that "Civil Disobedience [an important form of advocacy in extreme circumstances] can never be directed for a general cause such as Independence. The issue must be definite and capable of being clearly understood and within the power of the opponent to yield" (p. 28). The same is generally true for other forms of advocacy. An advocacy campaign can be organized around a general value or principle (like increasing diversity, or support for science), but specific advocacy acts, including ultimately "making the ask," directed

toward specific actors or classes of actors are required to advance toward the general goal (Lee, 2016; Seekins & Fawcett, 1986).[3]

Depending on the case, key decision-makers may be legislators, executives (e.g., state governors, corporate CEOs), administrators of many kinds (e.g., state agency directors), practitioners, or others depending on organizational structures (public or private). Broader advocacy around a specific issue or campaign is often directed toward specific actions of multiple key persons, including the persons who make and implement decisions themselves, but also in many cases toward "influencers" whose actions and advice shape and sustain the behavior of the decision-makers; this is often the most realistic option (Mattaini, 2013; Paul & Motskin, 2016). Influencers may be financial contributors, media figures, or others with more direct contact with decision-makers than is true for the general public, and often than many behavior analysts.

Research on each group indicates that economic elites, organized business interests, other organized interest groups, and ordinary citizens have influence across a large range of US government policy issues (Gilens & Page, 2014). Large-scale multivariate analysis by Gilens and Page, however, proves less encouraging, indicating that most influence lies with economic elites and organized business interest groups, while private citizens and organized citizen groups demonstrate little independent influence. (Similar factors are likely to be relevant to state and local decisions; the situation may be different in other nations, a question worth exploring if comparable data are available.) This analysis should not be interpreted as hopeless, but rather as an incentive to expand the influence of citizens by increasing their engagement, as discussed below, with the networks of influence currently operative (Coffman & Beer, 2015; Mattaini, 2013).

Advocacy Repertoires

The literature suggests a number of modest but potentially valuable repertoires for engaging in advocacy. The pioneer behavior analyst Richard Malott has for many years recommended the classic *How to Win Friends and Influence People* (Carnegie, 1936) as highly consistent with behavior science principles, including arousing "an eager want" in the person you are trying to persuade. The 2-Minute (or Elevator) pitch (Lee, 2016)— making your key points with your reasons very quickly and interestingly—clearly can facilitate further discussion in many cases. Preparation of policy briefs (Demarco & Tufts, 2014; Wong, Green, Bazemore, & Miller, 2017), is not only important, it is an expected skill. The power of narrative is well established. The first author of this chapter has been heavily involved in two major legislative

[3] The material in Chap. 17 in this volume provides additional helpful material on integrating advocacy work into a broader activism framework.

advocacy efforts (among others), one directed toward funding for services for children and adolescents on the autism spectrum (in Utah), and another for funding for youth mental health services (in Alaska). Stories of the struggles faced by particular young people (and in some cases their voluntary attendance at legislative hearings), combined with accessible data presentations and handouts, were among the factors that were associated with funding successes in both cases. These efforts emerged from ongoing collective efforts by parents, youth, and professionals. While not minimizing the experience of such standard approaches, current challenges often can benefit from more rigorously developed strategic approaches to incentivizing action by those in a position to make decisions regarding important social and environmental issues.

Some basic requirements of this work are known; for example Oliver, Innvar, Lorenc, Woodman, and Thomas (2014) found in two extensive surveys that, “Timely access to good quality and relevant research evidence, collaborations with policymakers and relationship- and skills-building with policymakers are reported to be the most important factors in influencing the use of evidence” for policy change (p. 2). Findings from marketing studies (much of advocacy is a form of marketing) suggest that conscientiousness, extraversion, and active listening skills can be particularly valuable repertoires, and a good deal of specificity about the relevant behaviors is available (Drollinger, Comer, & Warrington, 2006; Helfert & Vith, 1999). These widely acknowledged recommendations, and analytic tools to explore the contextual dynamics of influence in particular cases, can be effectively combined. Dolan et al. (2012) noted that:

> The usual route to behaviour change in economics and psychology has been to attempt to “change minds” by influencing the way people think through information and incentives. There is, however, increasing evidence to suggest that “changing contexts” by influencing the environments within which people act (in largely automatic ways) can have important effects on behavior (p. 264).

Dolan et al.’s statement is clearly congruent with our cultural systems perspective (See Chap. 3), in that in most cases effective advocacy requires not only specifying the primary objective (a decision by the key actor[s]), but also analyzing the often-multiple factors that are most likely to support and sustain that action.

Strategic Influence[4]

Advocacy is at base a behavior change strategy that in many cases relies primarily on persuasion and protest. Although persuasion may appear to be the preference much of the time, there is also commonly an element of protest, acknowledged or

[4] The material in this section is drawn largely from Mattaini (2013), and Mattaini et al. (2016). These will not be additionally cited in this section. Mattaini (2013) is available in open access at: http://www.aupress.ca/index.php/books/120224

not. Persuasion is based primarily on two processes: changes in contingencies of reinforcement, and changes in relational responding. In the simplest (and very common) cases, subtly or directly offering incentives to a decision-maker in financial, voter, or even personal support terms can have powerful influence. Shifts in relational networks, alone or in conjunction with enriched reinforcement, are also often important; for example, constructing or altering the interlocking verbal relations among climate change, current resulting deaths in marginalized parts of the world, and personal responsibility, under the right conditions, may lead to behavior change without other incentives (Dixon et al., 2018; Hayes et al., 2002). A smaller example: the first author's US Congressional Representative called to request a significant campaign contribution; in a very friendly and complimentary conversation, I agreed, and asked her not to forget the importance of protecting public lands, one of many issues in which she is immersed. The next day I arranged a gift membership in an outdoor advocacy and social community that distributes continuous, very engaging, and consistently high quality materials and activities for my representative (a gift that fell within the legal limits). My hope is that this combination (financial contribution, recognition, and continuing access to related advocacy materials) strengthened and/or altered the functions of established verbal relations related to my advocacy intentions.

There is also typically an element of protest (based in negative reinforcement) involved in advocacy, even when persuasive processes are primary. When important influencers come to a state senator with disturbing stories of child abuse, for example, and express concern that the state is not doing more, there are at least two potential aversives established—one the painful stories (which if well-presented are often very powerful, particularly at local and state levels), and the dissatisfaction of the influencer that not enough action has been taken by the senate that includes the senator. Specific narratives about such serious problems can be very powerful, particularly at local and state levels, with the potential to present sensory or perceptual functions, bringing them into psychological proximity (motivative augmenting; Hayes et al., 2002; Valdivia, Luciano, & Molina, 2006). There is recently a growing and important literature in behavior science on the value and processes of narrative—a rich and ancient cultural practice—as a technology to shift relational responding and thereby to influence public policy (Critchfield, 2018; Grant, 2007; Hineline, 2018). Chapter 13 explores this valuable persuasive option in detail.

Successful advocacy often requires strategic application of persuasive action (and protest where appropriate) directed toward multiple actors. Advocacy for legislative change, for example, typically requires action directed to, and often individually tailored for, multiple members of the legislative body. Action directed toward influencers valued by the decision-makers (funders, advocacy group members, disgruntled citizens) may be even more important. Such efforts are discussed in the next section on Strategic Systemic Advocacy. First, however, for completeness, we mention four strategic options other than persuasion and protest, each of which generally requires greater resources, sometimes can be controversial, and for which ethical dimensions require attention. Even so, serious social or environmental

injustices are often deeply structured into networks of cultural practices, and may require more powerful strategic actions. These additional options include:

- Constructive noncooperation: refusal to participate in unjust systems by constructing alternate, competing arrangements (extinction and constructive resistance to unjust systems, e.g., alternative support networks for homeless young people) (Holtschneider, 2016).
- Disruptive noncooperation: refusal to participate in unjust systems by withdrawing from them (extinction), often accompanied by protest (negative reinforcement).
- Resource disruption: actively disrupting unjust systems (e.g., shutting down roads or electricity)—generally only a temporary tactic.
- Retaliation: application of aversives (punishment); generally carrying all of the disadvantages of punitive processes.

In-depth exploration and extensive examples of these four options are provided in Mattaini (2013) and Mattaini, Holtschneider, and Williams (2016).

Strategic Advocacy: Cultural Systems Technologies

Beginning with detailed cultural systems analysis and the existing knowledge base (limited as it is), there are several ways that science may contribute to advocacy efforts, and much that our science can learn from existing work in other disciplines. Three such possibilities will be summarized here, supplemented by a list of possible cultural strategies for advocacy directed toward the general population within communities. Readers are encouraged to develop further examples using these tools that can contribute to their own areas of social and environmental concern.

Nested Contingency/Cultural Practice Mapping

Contingency diagrams are common tools used in behavior science research and practice (Malott & Shane, 2019; Mattaini, 1996). Figure 16.2 is a simplified example, depicting a case in which advocacy focuses on asking an urban mayor to initiate and sustain a review of the use of force by the local police, especially with young men of color.

Sample (a) antecedents (motivative operations and discriminative stimuli), (b) essential and facilitating resources and conditions, and (c) consequences that may support or limit their response are included in the diagram. Unless actual data are available—and sometimes they are with this kind of issue, such elements can often be estimated from observation, history, and conceptual models; additional variables would typically be included in an actual case. For example, strong citizen demands and possible outside funding, if those were available, might facilitate successful advocacy; threatened protests from within the police department may serve as

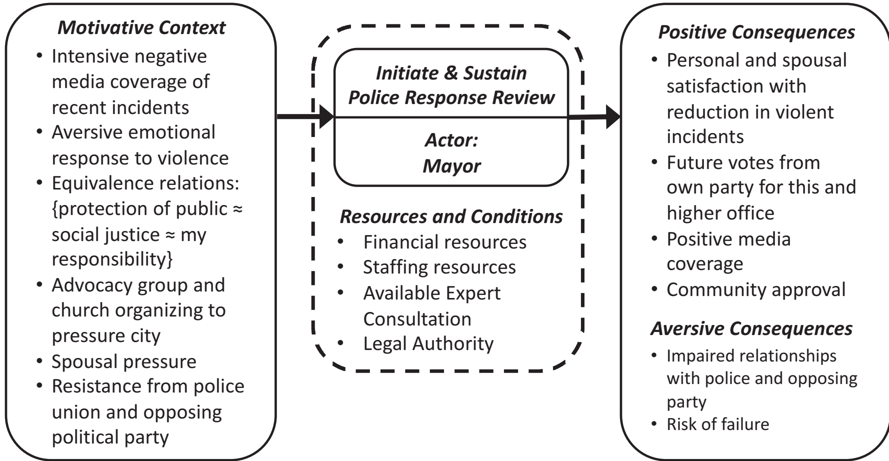

Fig. 16.2 Contingency diagram of contextual factors relevant to action by the mayor

abolishing operations. Potential reinforcers might include increased campaign contributions for the next election; assignment of potential public blame for unfavorable statistics could be a punishing outcome.

An effective advocacy plan, however, could be more systemic, nesting the diagram in Fig. 16.2 into an overall graphic (Fig. 16.3) exploring potential antecedents and consequences for classes of actors/influencers whose actions contribute to the pattern depicted in Fig. 16.2.

While Fig. 16.2 attempts to capture contingencies related to the behavior of an individual, Fig. 16.3 is largely tracing hypothesized or known patterns of contingencies (in some cases metacontingencies) that shape and sustain the cultural practices present in the community situation. The analysis could be carried on to additional levels, diagramming potential contingencies for other individuals and collectives who participate in contingencies for the central players. See Mattaini (1996, 2013) for further examples and details for using the nested contingencies tool.

Force Field Analysis

Staying with the same community example, a tool originally developed by Kurt Lewin called *force field analysis* (FFA; see Fig. 16.4) is widely used in social science, community planning, and business (Kruglanski et al., 2012; Spier, 1973).

The goal in FFA is to identify "drivers" and "inhibitors" that encourage or discourage a decision by a key actor or group, for example the mayor above, or the city council. The items included are actions (certain or likely) from other sets of actors—actions that may constitute important contingencies. Although FFA diagrams like Fig. 16.4 are not as detailed as contingency mapping, they can be a useful summary

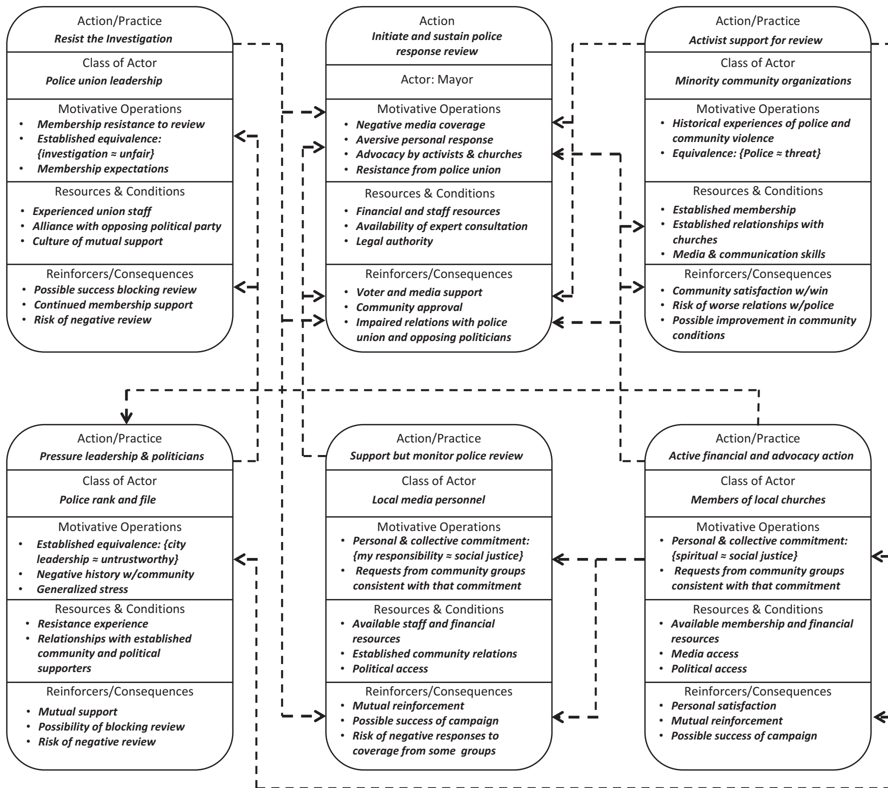

Fig. 16.3 Nested contingency diagram

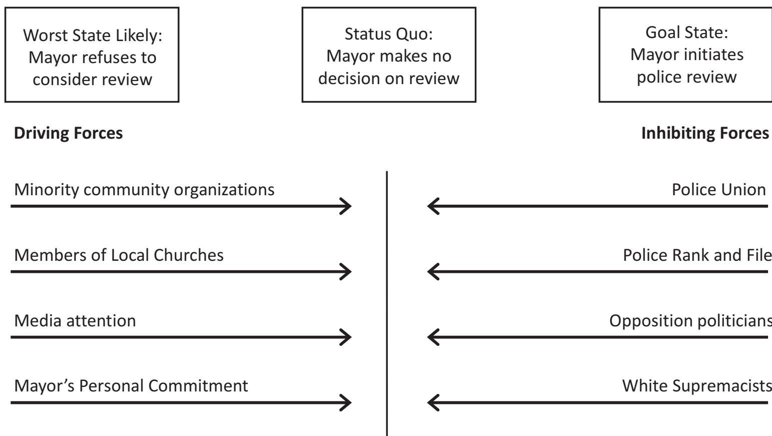

Fig. 16.4 Sample force field analysis

tool, especially when working with non-behavioral groups. An advantage of FFA in planning is that the tool is built around the expectation that to increase the probability of the desired decision, activists would construct a specific plan to essentially increase the level of drivers, and/or decrease the level of inhibitors. For additional examples, please see Mattaini (2013).

Community Matrices

Behaviorists for Social Responsibility (BFSR) has in recent years devoted considerable effort to the development of the Matrix Project (Mattaini & Luke, 2014; Seniuk, Cihon, Benson, & Luke, 2019), a means for applying culturo-behavioral systems analysis to issues of social importance, noting that, "By understanding the contingencies that hinder or promote working in a particular area we can begin to create the conditions that will facilitate such work" (p. 911). The Matrix tool was originally developed by Biglan (1995) and later expanded in Mattaini (2013). As is clear throughout this chapter, while problems of social importance are often viewed narrowly as emerging from individual behavior—and therefore requiring individual behavior change to ameliorate, in nearly all cases the practices of many community systems contribute to initiating and sustaining problems, *and can contribute to reducing them* (Holtschneider, 2016). As an example, Table 16.1 provides a subset of possible entries in a matrix examining the potential for constructive community responses to the risks facing women living and working on the streets of major cities. Footnote: The analysis of approaches for reducing community violence in Chap. 13 provides a detailed example.

Most members of this population experience violence and health issues, many are victims of trafficking, many must support themselves through sex work, and sadly many disappear. Rigorous research on risks faced living under these conditions (with the exception of HIV) is surprisingly thin, although there is occasional media coverage in major cities (e.g., Chandler, 2018; Deering et al., 2014; see also streetsafenewmexico.org). The Matrix tool can be used to analyze current and potential dynamics related to a broad range of issues; both contingency mapping and FFA can be integrated into policy work as outlined by Matrices.

Advocacy Approaches Focused on the General Public

The primary focus of this chapter is on advocacy directed toward persons in positions of some authority who hold responsibility for community or organizational processes. There are however some important forms of advocacy directed toward members of the general public (who may then engage in collective advocacy directed toward community leaders). Space allows only a brief listing with published resources for three approaches of this kind; each has at least some empirical support. There are many possible extensions to each, once the underlying

Table 16.1 Sample entries in matrix of practices supporting or reducing street safety by community sector

Sector	Practices supporting street safety	Practices reducing street safety	Possible incentives and facilitating conditions[a]
News media	Publish stories identifying structural factors contributing to issues, examples of resilience, and supportive service needs	Prioritize stories emphasizing community costs, criminal behavior	Community response to stories published; advertising dollars; sources for types of stories listed
Police	Connect women to available resources; participate in street safety trainings; participate in circles of understanding	Emphasize surveillance and enforcement; participate in dehumanization	Training resources; availability of models of respect; person-to-person contacts in joint projects and circles of understanding, positive media attention
Local businesses	Contribute to outreach efforts providing services; encourage innovative governmental responses; participate in circles of understanding	Treat struggling women as neighborhood threat to be managed primarily through exclusion and law enforcement	Positive media attention, actions of respected models within business community
Arts community (including students)	Active outreach to engage women as peers in collaborative street-level and community arts projects related to social justice and human rights	Maintain distance from women; regard those living or working on the street primarily as threats to rather than members of the community	(As an exercise, the reader is asked to develop motivative options here)

[a]To increase supporting and decrease reducing practices

conceptual underpinnings are understood. It is important to emphasize that each of these social technologies can best be constructed within a community-based participatory research framework, as discussed in the conclusion of this chapter.

Public Health Media Campaigns

Public health research has demonstrated the power of mass media campaigns, the challenges faced in a crowded media world (Randolph & Viswanath, 2004), as well as some of the parameters that lead to effectiveness (Davis & Duke, 2018). Social media also are proving powerful (Gough et al., 2017); many behavior analysts are active in that explosively expanding world. Behavior scientists have not rigorously studied the extent to which such media could be used as a tool for constructing socially important, or challenging socially toxic relational networks, but this seems like a promising direction for further exploration.

Consequence Analysis

Sanford and Fawcett (1980) tested a consequence analysis procedure over 40 years ago that demonstrated that giving community members opportunities to think in detail about the possible social and community results of a policy change (in this case a proposed roadway project) led to more environmentally sensitive opinions. To the best of our knowledge, only two partial replications have been reported (Moore & Mattaini, 2001, 2014). In both cases, the procedure (basically collecting opinions before and after a questionnaire exploring multiple consequences of a decision) led to more socially and clinically responsible opinions. This procedure appears to be potentially powerful in terms of sensitivity to both delayed consequences and social responsibility; further replications should not be neglected.

Collective Leadership and Circle Processes

Initial work has been done to create and test novel procedures that solicit and organize input on community and organizational concerns and plans from community members. The outcomes of such sessions can in many cases assist in developing consensus decisions, which can then structure advocacy efforts with other decision-makers. Fawcett, Seekins, Whang, Muiu, and de Balcazar (2008) developed a systematic databased process to organize member-led concerns reports from consumers of public institutions and clients of human service systems, in which clients themselves gathered to construct and conduct surveys of peers, resulting in demonstrable improvements in services. Ball, Caldwell, and Pranis (2010) report on both successful and less successful applications of circle processes (now a well-developed social technology) for public planning in a range of settings, and Mattaini and Holtschneider (2017) developed an integrated model for structuring circle processes within a culturo-behavioral framework.

Conclusion: A Research and Evaluation Agenda

There is clearly much more research required to provide rigorous guidance for advocacy, particularly of four types, each of which will prove challenging. Because we are only beginning to identify what variables under what conditions should receive priority for experimental research, much more data collection from observational and retrospective studies is needed. For example, one of the authors is tracking the approaches being taken by a nonprofit advocacy group focused on preserving public lands, wilderness, and opportunities for outdoor recreation with over 40,000 members (growth rate, over 50% annually), that has had remarkable success advocating with state and provincial governments. Specific relational and contingency

oriented approaches have been used consistently both to grow and sustain membership, and in legislative and administrative advocacy (technical analysis pending). There is much to learn from success, and from direct observation, in order to identify what data are the most important to track (a question that also concerned Willems, 1974).

Secondly, it is likely that the richest guidance for future advocacy will come from experimental studies, challenging as they may be. Initially the most workable focus is likely to be on single-system (Mattaini, 2016), and community-level time series designs (Biglan, Ary, & Wagenaar, 2000). There are also multiple quantitative approaches for extracting knowledge from existing or newly connected data that can be helpful, including for example data-mining, multilevel structural equation modeling, and deep neural networks (Jason & Glenwick, 2016; Ninness, Ninness, Rumph, & Lawson, 2018). Data visualization (Cardazone & Tolman, 2016; Tufte, 2006) can be particularly effective in advocacy work with community members and decision-makers.

A critical third recommendation is to seriously engage in community-based participatory research, as Fawcett recommended in Fawcett, 1991 and elsewhere. A particularly valuable resource for research guidance and technology is the Center for Community Health and Development at the University of Kansas, described in detail in Chap. 14 of this volume. Such community research is challenging work, especially for scientists who are accustomed to controlling as many variables and procedures as possible, but community members typically are much better informed about variables, values, and options, and thus have much to contribute. Particularly important for our purpose here, Israel et al. (2010) argue that such research can function as “a capacity-building approach for policy advocacy” (p. 2094). Many community psychologists and social workers (e.g., Swenson, Henggeler, Taylor, & Addison, 2009) note both the ethical and practical advantages of such community partnerships for research and effective advocacy for social and environmental justice—the central goals of this chapter.

Finally, there is much to learn from existing advocacy groups, and there are many opportunities to join and support such collectives. As a member/participant, opportunities will present themselves to contribute from your knowledge of behavior science, including many chapters in this volume. Chap. 17 of this volume on advocacy, accompaniment, and activism may be of particular value “on the street.” There are also opportunities to engage in this work through participation in BFSR, including in the Matrix Project.

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