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Concepts and Issues in Public Health: Culture, Psychology, and the Ecological Approach

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ABSTRACT

An ecological approach focuses on both population-level and individual-level determinants of health and interventions. It considers issues that are community-based and not just individually focused. It highlights people's interactions with their physical and sociocultural environments. This article discusses the purposes, shortcomings, and extensions of the ecological approach to public health to be more inclusive of interpersonal characteristics, education, and ultimately upstream solutions to correcting health inequities among disenfranchised communities. Briefs are discussed regarding the concepts of health psychology, victim blaming, geography, culture, and cooperate responsibility - and the impact of those concepts on the adoption and adherence of pro-active health campaigns.

Keywords: Health education, public policy, upstream approaches, root causes, health inequity

Introduction:

Successful interventions aimed at modifying individual behaviors include taxing tobacco, clean air laws, more mass media campaigns – all of which were built on one another to reverse the epidemic. I advocate that this approach needs to be instituted for physical activity and healthy food options, and in many ways, it has – no junk food in school vending machines; school lunch reform; a proposed soda tax; limiting marketing of unhealthy foods on children TV networks, and other mass media campaigns aimed at increasing physical activity. Some of these are great approaches but they still "restrict freedom" in the views of some. While removing deep fryers and soda from vending machines in Philadelphia and has seen some success in reducing the occurrence of childhood obesity, there are some that oppose the action. It is in this way that the culture of health conflicts with the culture of freedom.

Highlighting health as a cultural norm in the United States is essential and comprises the attitudes and expectations for health, a sense of community, and civic engagement (Mockenhaupt & Woodrum, 2015). Developing a culture of health includes enabling a broader understanding of how one person's health affects the health of a family, a neighbor, a coworker, or the overall community. A society with a culture of health not only believes that every person, no matter who they are, has the chance to lead a healthy life. However, I contend that the cultural norm for Americans is possessing personal freedom more often than it is community health. What is normal is freedom; not restriction. Many Americans believe opting 'healthy' is to deny what they really desire.

Distributions of money, power, and resources shape social determinants of health, the focus of most related work is on the conditions in which people are born, grow, live, work, and age, and only more recently on the processes that determine these conditions (Golden et al., 2015). Recognizing the interplay among individuals, groups, and their proximal and distal social environment is paramount for affecting the culture of health. Unfortunately, in their allegiance to the status quo, powerful elites often resist upstream policies and programs that redistribute wealth and power (Freudenberg et al., 2015). An honest culture of health requires that our nation improve the built environment and physical conditions, social and economic environments, and policy, governance, and investments that prioritize health and support access to opportunities for healthy living and high-quality health care for everyone (Mockenhaupt & Woodrum, 2015) *above* their personal capitalist enterprises. To that end, I take some issue with the perspectives of Freudenberg and colleagues (2015) in their lack of incooperating other socio-political theoretical models into their views. The authors claim to focus on underlying social problems rather than individual "downstream" issues, but in actuality, what these authors appear have an issue with is Capitalism. A Foucauldian perspective on these issues of health and access would illuminate the dangers of Capitalism's intersection with health and society, thus adding explanation to how these issues "are" and "become". Unequal distribution of wealth and power across race, class, and gender produces the differences in living conditions that are "upstream" drivers of health inequalities, but I challenge that merely raising the minimum wage and preventing mortgage foreclosures will have a lasting impact on positive health practices without observing how these Capitalistic enterprises are constructed to limit the acquisition of power for the people, thus impact behaviors and health practices.

The purpose of this article is to emphasize the importance of identifying the multiple congruent goals of health professionals, and how those goals focus one toward their role in the profession. An additional purpose is to echo the call to discover, translate, and apply evidence-based research in the practice of our transformative approach to health as a way to build bridges between our practice and the community. Furthermore, the elements and issues discussed in this article have an opportunity to play a role in shaping a culture of health for which health professionals must advocate.

The Ecological Model

An ecological approach towards understanding and correcting public health concerns focuses on both population-level and individual-level determinants of health and interventions. It considers issues that are community-based and not just individually focused (National Association of Student Personnel Administrators [NASPA], 2004, p. 3). The ecological perspective of addressing major concerns in public heath as the interaction between, and interdependence of, factors within and across all levels of a health problem. It highlights people's interactions with their physical and sociocultural environments. Because significant and dynamic interrelationships exist among these different levels of health determinants, interventions are most likely to be effective when they address determinants at all levels. Historically, the health field has focused on individual-level health determinants and interventions (U.S. Department of Health and Human Services, 2008, para. 18), which may be highly flawed.

In the ecological model health status and behavior are the outcomes of interest (McLeroy, Bibeau, Steckler & Glanz, 1988, p. 355) and viewed as being determined by the following: *Public policy* [local, state, national, and global laws and policies]; *Community* [relationships among organizations, institutions, and informational networks within defined boundaries]; *Institutional factors* [social institutions with organizational characteristics and formal (and informal) rules and regulations for operations]; *Interpersonal processes and primary groups* [formal and informal social networks and social support systems, including family, work group, and friendship networks]; and *Intrapersonal factors* [characteristics of the individual such as knowledge, attitudes, behavior, self-concept, skills, and developmental history] (McLeroy, e al., 1988). *Intrapersonal factors* include gender, religious identity, racial/ethnic identity, sexual orientation, economic status, financial resources, values, goals, expectations, age, genetics, resiliency, coping skills, time management skills, health literacy and accessing health care skills, stigma of accessing counseling services (McLeroy, e al., 1988).

Public policy, as a public health concept, is an interesting one. Public policies include those that allocate resources to establish and maintain a coalition that serves a mediating structure connecting individuals and the larger social environment to create a healthy community. Other policies include those that restrict behavior such as tobacco use in public spaces and alcohol sales and consumption and those that provide behavioral incentives, both positive and negative, such as increased taxes on cigarettes and alcohol. Many other additional policies relate to violence, social injustice, green policies, foreign affairs, the economy, global warming (McLeroy, e al., 1988). Traditional approaches to public health and the health initiative may have been flawed. A great focus has been on manipulating public policy towards healthy behavior and as punitive deterrents to undesirable health behavior, but to only a limited amount of success.

A modern body of research in public health has been successful in demonstrating why the novel *ecological* approach to health and wellness is necessary to encourage wellness and foster permanent lifestyle and behavioral modification towards desirable health behaviors and the limit of undesirable, risk-taking behavior. Furthermore, the ecological approach is important in order to develop an understanding of *root causes* of inequities and discriminations [as highlighted by characteristics within the *Intrapersonal factors* paradigm], which lead to unhealthy behaviors or conditions in which individuals struggle to prosper. A traditional definition of the ecological perspective in public health implies reciprocal causation between the individual and the environment from micro- to macro-levels (McLeroy, Bineau, Stechkler, & Glanz, 1988); for example, the *host-agent-environment* model of ecology in public health. Whereas the ecological model, as described by Minkler (1999), is composed of intra- and inter-personal factors, community and organizational factors, public policies which are *interdependent* levels of analysis to be considered. This conception is much more appropriate for a modern and holistic public health perspective. Individual's developmental histories and their social support systems; the organizational structures and process that can positively or negatively affect health behavior; community networks and power structures; and both the content of our public policies and the role of participation, advocacy, and other process in their formation all are key components of a broad ecological perspective in health.

Root Causes: Upstream and Downstream Approaches

Public health advocates have often argued that public health scholars should address the 'causes of the causes' while also addressing the 'root of the causes'. Literature exploring racial injustice from a public health perspective (i.e. *The Story Behind Ferguson* [Rothstein, 2015] and *Health Equity with Housing Inequalities* [Woods, Shaw-Ridley & Woods, 2014]) echo this argument. Using the socio-cultural conditions of the St. Louis suburb as a case study, should we health professionals search upstream for solely the root of the causes, ignoring all subsequent causes, failing to address downstream needs brought on by the Root cause, we would not find a tangible object upon which to institute change – rather, we would face an ideology [racism] as the target for change. Ferguson came to be deeply segregated (predominantly black), deeply impoverished, and undereducated by way of racist policies of the federal, state, and local governments. The end result was "de facto" segregation. The belief that segregation is the result of accident, income difference, private discrimination, or the unintended result of race-neutral policy – is mythical. Rather it is deliberate segregation, brought on by policy (Rothstein, 2015; Woods et al., 2014). Sadly, there is nothing unique about racial history in Ferguson – many municipalities in the US operate(d) in the same manner. But if public health officials and professionals aimed solely at defeating the ideal of racism (upstream approach) in effort to improve the health and wellbeing of communities under the effect of institutionalized racism, they would be missing important opportunities to improve present-day conditions for the effected populations along the way (using downstream approaches). Years and decades will pass before measurable improvements to racially divided communities could be felt, yet the citizens living under such present-day conditions could still feel the benefit of micro-level improvements (e.g. installing playgrounds in a segregated community to encourage physical activity; passing legislation to ban the sale of liquor and firearms in living communities; institute re-training programs for police forces, et cetera). I recognize that simply building parks, sidewalks, and cosmetic changes to low socio-economic and minority neighborhoods are superficial improvements, fails to illuminate the macro-problems. It is, in fact, why health professionals must continue to swim upstream, discover and address root causes (Braveman & Gottlieb, 2014), so we may attack the problem [ideological racism and the tangible consequences] from both sides.

The relationships between social factors and health are easily identified, but not simply explained. Half of all deaths in the United States can be attributed to behavior. Naturally, health behaviors are shape by social factors – income, education, employment (Braveman & Gottlieb, 2014). It is accepted that potentially avoidable factors associated with lower educational status account for half of United States adult deaths per year. This indicates a connection between social factors and health. Some connections to social factors and health are more direct (e.g. lead ingestion in substandard housing, pollutants in less affluent neighborhoods, et cetera). Additional socio-economic connections include exposure to violence in low socio-economic neighborhoods increase the likelihood that youth will perpetuate violence, exposure to alcoholism in youth increases likelihood of misuse of alcohol in adulthood (Woods et al., 2014). Some connections are less direct (e.g. poor neighborhoods have fewer recreational facilities potentially attributing to the adoption of a sedentary lifestyle of neighborhood youth; chronic childhood stress leading to drug use, and the domino effect thereafter).

Findings: Education as a Mid-Stream Solution

There are noteworthy challenges to studying upstream socio-economic and other factors' effect on health. For instance, these conditions cannot be observed through traditional experimentation. Additionally, there is a long lag time for any health benefits to be expressed (Braveman & Gottlieb, 2014). Because of these reasons, identifying long-term successful interventions to causes and root causes has been challenging. I believe one *mid-stream* intervention for promoting and achieving goals in public health is to address the disparity in education among disenfranchised populations. Education is a strong predictor of health, so reducing K-12 school dropouts should be a priority for health professionals – most notably in minority groups who tend to be less healthy and experience a higher dropout rate. Freudenberg and Ruglis (2007) identified several health-related reasons for drop outs: pregnancy, psychological, emotional, and behavioral problems, and mental illness. A more developed

education leads to higher paying jobs. More income translates to house in safer neighborhoods, healthier food, better medical care and access to better health insurance, among many other health-related benefits. Achieving a more developed, further reaching education could save more lives than advances in medicine (Freudenberg & Ruglis, 2007). Many interventions aimed at addressing health-related dropouts have been limitedly successful. I echo sentiments advocating for increased focus on reducing dropout rates – the expectation being a measurably positive effect on community-wide, public health and wellness.

The Role of Psychology in Health Promotion

McLeroy and colleagues (1988) suggest it is "regrettable" that dominant contributions to the literature on intervention in health have been from psychology. Is it "regrettable" because these behavioral change theories (rooted in psychology) regarding health would be merely at the individual level rather than the population level? I agree that the concentration of behavioral science application would be better serving if renewed focus was on its application in the organizational, institutional, environmental, and economic domains – this would promote macro-level improvements to behaviors and conditions. But in order to initiate motivation for individuals to act towards or against ideals greater than themselves, they should also recognize the effects of behavioral change on the micro-level, which I believe can be demonstrated through psychological behavior change theories.

***Victim Blaming*.** Ignoring root causes and the impact societal factors have in an individual's health is a prerequisite for victim blaming. Psychological behavior theories are misapplied when put to public health (McLeroy et al., 1988). When applying psychological theories to specific health behaviors, the result is an incorporation of multiple process and influences. This is problematic from a public health perspective because the focus is on how to change individuals rather than alter the social environment (Braveman & Gottlieb, 2014). Even when the aim is prevention of undesired behavior rather than treatment, what is missing is recognizing the importance of the source of influence and social groups to which individuals belong. Social networks affect the access and acceptability to information and behaviors; for example, professional and organizational membership. Organizational/professional context provides an inventory for financial and social benefits, provide context for sedentary lifestyle, or hazardous tasks. It may also provide opportunity for physical activity and positive social relationships, as well. One of the purposes of health promotion in the workplace is to change "cooperate culture". This is observable in many locations such as *Google* and other industry firms that extend lunch breaks to allow for exercise/offer gym memberships as benefits. I recommend these befits in the pursuit of improved health be extended to include more industries.

Already identified by Rothstein (2015) and Woods and colleagues (2014), community factors are supremely important in shaping the social relationship between an individual and health. In addition to a physical aggregate of individuals in a geographical location, *community* may refer to the psychological sense of community, political entity, functional spatial unit, or unit of patterned social interaction. The socially constructed power structures within community are what drive the political action of the community; the disadvantaged tend to have softest voice and can affect the least amount of change. The end result of ignoring such social phenomena is a tendency to blame the victim for their health status, rather than to explain the root of their behavior.

Geography, Community, and Food

The geographical location of a community is very important for eating habits. Geographic location *used* to dictate the readiness of certain foods and resources. For example, before the advent of refrigerated trucks and mass-transit of food resources, Americans used to be privileged to only foods which were geographically available (corn and wheat in the Mid-west; beans, squash, and sweet potatoes in the East). Now it is not uncommon to see (in any grocery store) bananas and other tropical fruits for sale in the month of January. How can this be? Bananas are not native to any American region in the dead of

winter. Picture the geographical location growing bananas in January and consider the cost [fuel and transportation cost, the economic cost, and the carbon-footprint Burdon] to bring it across the Globe to a southern United States grocery store. This act is an environmental burden in numerous ways. This is a relatively new phenomenon. Over thousands of years humans have evolved to be able to obtain the most amounts of nutrients from their native growing regions – in harmony with the regions' seasons. Certainly, culture can influence the selection of foods community-by-community, but no more than what the region will provide in the first place. Picture traditional *Italian* food, *Japanese* food, *Mexican* food; each of these types of food are products of what their soil and climate are capable of providing. Now picture "American" food. Is traditional American food fast-food? I suggest this may be the case, because our culture of instant gratification, paired with a lack of long-term geographical and cultural history with the continent, has removed our need or ability to develop a culture of food unique to America. Instead of developing the evolutionary trait of absorbing the nutrients provided by our specific growing regions in the United States, we "cherry pick" desired foods from any place on the map whenever we would like them – often times from outside our region, out of season, and typically of the fast-food variety. What are the hidden costs – to our physical environment, to our finances, to our health?

This is no accident; we have been trained to behave this way concerning our food decisions. The food industry is designed, not to nourish people, but for profit (Stucker & Nestle, 2012). At the very same time billions are hungry and malnourished, billions are overweight - let that sink in. This is because *Big Food* seeks first to serve itself before serving the people. A shift from traditional diets to Western diets (processed foods, novelty foods and, fast-food) is a key agent in the prevalence of obesity and non-communicable diseases. Insufficient nutrients and excess calories from cheap, non-nutrition foods lead to obesity (Dorfman et al., 2012). There is a peculiar relationship between junk food, soda consumption and the use of tobacco and alcohol world-wide. Soft drinks and tobacco are among the most profitable industries in the world. Where there is high consumption of alcohol and tobacco there is also a high consumption of soft drinks and unhealthy food commodities, but these correlations do not predict economic development. Obviously, like the over consumption of processed food, alcohol and tobacco are also leading contributors for chronic diseases. Public health professionals have been very successful in reducing the exposure to alcohol and tobacco. Stuckler and Nestle (2012) cite an example of how Brazilian policy was able to reduce the use of tobacco. Using this example as a case study, one could claim that domestic policy might be *critical* for exposure to junk foods. Additionally, free-trade agreements could be adjusted to increase the price of international commodities, thus reducing their likelihood of being purchased. Some public health scholars have advocated for taxing unhealthy consumer items [fast food, soda, et cetera] for years – although other research suggest the barrier of increased cost does not detour behavior, rather it acts as a defacto 'sin' tax on users. Nevertheless, the spirit of any policy aimed at detouring unhealthy behaviors would provide a secondary benefit of environmental health consideration. To further reduce the exposure and selection of poor food choices, striking a partnership with physical activity promotion, cooperate responsibility, and legislative policy towards accessibility would likely go a long way. Lastly, although they are less profitable, the food industry must market healthier food.

Corporate Social Responsibility: "It's Marketing, not Philanthropy…"

I was pleased to read the soft-drink industry took one on the nose after a thinly-vailed attempt to increase sales disguised as a corporate social responsibility campaign caused public health official to roll their eyes. Before the soda companies attempted a similar strategy, the tobacco industry used corporate social responsibility as a means to focus responsibility on consumers rather than on the corporation, bolster the companies' and their products' popularity, and to prevent regulation (Dorfman, Cheyne, Friedman, Wadud, & Gottlieb, 2012). Big Tobacco's message, "tobacco is wacko if you're a teen" was perceived to be employing reverse psychology to actually encourage teen smoking. Eventually the youth smoking prevention programs were dropped. In response to health concerns about their products, soda companies have also launched corporate social responsibility initiatives. Unlike tobacco corporate social responsibility campaigns, soda company corporate social responsibility campaigns explicitly aim to

increase sales, including among young people. Public health officials must continue to pressure policy makers to make the consumption of unhealthy beverage options less exposed and less available for young people and consumers. Warning labels and additional taxes on tobacco and alcohol products has been met with some success. Similar measures for soft drinks and novelty foods may have similar results.

Conclusion

Individual behaviors are still the highest cause of morbidity (Minkler, 1999). Naturally, in the modern United States we take a uniquely American approach to the concept of individuals being responsible for their health. We believe in the American dream; that we all are capable and able to be successful, so this notion is extrapolated to health practices - which is very problematic. Freedom is very valuable to Americans: the freedom (and right) to act and do what we would like. It is downright *American* to exercise our right to drink and smoke, to go to strip clubs, and to gamble. However, from observing "American freedom" through a public health lens, we see our model of freedom has limitations: (a) it comes with the responsibility to make wise health choices; (b) it blames the victim; (c) it holds the less affluent and disenfranchised equally responsible for their health as the affluent and privileged population. I hold the view that the "American Culture of Health" is directly opposed by American culture.

In conclusion, neglecting the extent to which public health is affected by socially constructed dynamics is problematic in the following ways: (a) any benefits of downstream innovations felt will not be far reaching; (b) the socially deviant and socially disenfranchised (drug users, elderly, delinquent adolescents, the isolated) will not be adequately addressed; (c) any behavior change benefits will not be permanent, and; (d) any benefits felt will not last for individuals in fluid social and/or economic conditions. Public health professionals and health and wellness advocates may find success by seeking to find and solve the socially-constructed root problems, while also engaging in downstream interventions. The goal for health professionals should be to put ourselves out of business – this undoubtably will not come to fruition, because public health officials are in an uphill battle with the public.

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