

V. THE 3D HEALTH ALLIANCE APPROACH: CALLING ALL HEROES

Introduction

In spite of all the potentially disheartening evidence about the present state of adolescent health and certain ineffective efforts to improve it, long-standing and newly proven approaches do exist for providing health education that can produce positive behavior change. The 3D Health Alliance Project is a means of strategically combining and applying a number of the theoretical constructs and practical strategies underlying such approaches.

Major Underlying Theories and Assumptions

As mentioned near the beginning of this review, Bandura's Social Cognitive Theory (SCT) provides much of the theoretical foundation of the 3D Health Alliance Project. This theory holds that environment, personal factors, and existing behaviors all interrelate and contribute to future behavior in a reciprocally determinative fashion (Bandura 1977). Observational learning, that which can occur by watching others engage in and receive positive reinforcements for behaviors, is another SCT construct. Adolescents are expected to attempt to emulate well-rewarded behaviors they witness. Facilitating observational learning can include instructor modeling of positive behaviors as well as teaching students to (a) look for examples of positive behaviors and (b) interpret examples in empowering ways.

Attitudes, along with perceptions of behaviors and health outcomes from the Health Belief Model are also logical targets of presentation messages. Explanations that increase audience members' perceived susceptibility to threats, particularly when combined with increased perceived severity of the respective outcomes, tend to promote new (more conservative) behaviors (Janz 2002). In addition, viewing a demonstration of an activity like gardening and learning about opportunities to engage in it can improve audience members' self-efficacy. This often promotes increased participation in the activity (Janz 2002). Likewise, increased comfort or liking (attitudes) related to activities like walking or biking to school tends to promote those behaviors (Montaño 2002).

Though not incorporated into Figures 1 or 2, the Transtheoretical (a.k.a. Stages of Change) Model has a role in Health League presentation development as well. This model is based on a view of people as being in various stages of preparation or execution related to a behavior (Prochaska 2002). Stages include

pre-contemplation, contemplation, preparation, action, and maintenance (Prochaska 2002). Effectively presenting information to audiences with members in different stages requires preparation and creativity. First, the presenter must learn about the stage-related composition of the audience ahead of time by interviewing members or “key informants” (Marshall 1996). Second, he or she must be able to address unawareness or resistance in audience members in earlier stages without boring those in later stages, as well as encourage and reinforce actions made by those in later stages without confounding those not yet in action. To meet these challenges, 3D Health Alliance presentations will include entertaining forms of consciousness-raising, such as video clips of a Scottish 3D Health advocate ranting in a thick Scottish accent. Meanwhile, the presenter will invite all to visualize being in action prior to providing behavior-reinforcing messages.

The 3D Health Alliance Project design reflects several additional theoretical assumptions shared by other health behavior researchers and intervention designers. These include:

- Ideas on which people focus (e.g., in their minds and conversations) tend to shape what they become or the reality *into* which they live (Linkenbach 2006, Landmark Education 2008).
- Wellness promotion focused on enhancing well-being and competence is more likely to have positive impacts compared to traditional “reactive” interventions (Zins 1999) or those emphasizing “disease model conceptualizations” (McLoughlin 2004).
- It is possible and important to increase consumer awareness about sustainable food production by describing potential values and benefits of purchasing such foods (Robinson 2002).
- Food purchase and consumption decisions can change along with beliefs about healthiness, ethical animal husbandry, and liking (Baker 2004).
- Clever use of media (Huhman 2007) and compelling program champions (Pate 2005) can increase the effectiveness of adolescent health interventions.
- Empowering audience members to adopt new or different behaviors requires providing them with both information and empowering tools (e.g., decision-making skills) (Van Reusen 1996).
- Behavior changes motivated by intrinsic factors tend to be more sustainable compared to those based on extrinsic factors (Wilson 2005).
- Involving youth as active contributors to changing social systems is essential (Kenney 1996).

- School-wide change requires support of leaders in schools and from enough staff to change the social system (Durlak 2007).
- Schools are logical places to share information about wellness based on the opportunity to reach large audiences that are in the process of developing health habits and making new lifestyle choices (Nader 2000).

Marketing Effectively

A clear focus of the 3D Health Alliance Project is creating “positive affect” for health-promoting behaviors. The author perceives this as crucial due to people’s tendencies to use mental shortcuts, or “heuristics” in decision-making moments (Tversky 1974). Rather than weighing the pros and cons of a specific behavior, they tend to make quick decisions based on a few thoughts or images (Keysar 2002). Keysar et al (2002) assert that in those moments, even key attributes of a health-promoting behavior are subject to disregard unless they occur “within an affective frame of reference.”

Thus, the accents, dancing, projected images, costumes, humor, enthusiasm, and music characteristic of 3D Health Alliance presentations have potential to do more than simply amuse and entertain. They are also included to encourage audience members to associate things like being physically active and eating vegetables with positive emotions.

Specifically using fictional health-promoting characters may also be a useful strategy for identifiable reasons. There are precedents for using fictional heroes, including for successfully influencing youth eating behaviors (Duncker 1938, Marinho 1942). More recently, social marketers like the “Organ Wise Guys” have developed characters to help market successful efforts to increase school lunch vegetable consumption (Agatston 2007).

Such successes probably relate to how audiences have perceived the fictional heroes/characters. Students are expected to enjoy the various members of the 3D Health Alliance, some of which are parodies of heroes from popular movies. Showing a clear commitment to “putting on a good show” should encourage the audience to like the presenter as well. According to author and professor of rhetoric Herbert W. Simons, regardless of the exact direction of such liking, it will likely contribute to the persuasive effect of the messages (Simons 2001).

Using media in a variety of ways should also promote the project's overall marketing success. Blanchette et al (2005) stress the importance of having multi-component interventions, including multiple media channels. By promoting ongoing initiatives, the 3D Health Alliance Project will serve as an extra component for them. Presentations will incorporate various forms of media, while eventual print, internet, and television news coverage of Alliance character appearances will further multiply channel use.

Presentation and Discussion Topics

The topics covered in 3D Health Alliance presentations and classroom discussions agree with those advocated by several adolescent health intervention researchers and advocates. Selected Alliance characters will comment on environmental and biological factors, respectively, that influence behavior, health, and body size. This is in accord with health education curricula described by Contento et al (2007), who measured significantly increased fruit and vegetable intake, decreased TV watching, and decreased intake of fast food, sweetened beverages, and nutrient-poor snacks among a group of 7th-graders in New York City exposed to it. The curriculum included lessons on how the modern "obesogenic" environment promotes overeating and sedentary lifestyles, along with explanations of how these behaviors can produce adverse health outcomes. The goal of such approaches is to help youth develop personal agency (competence) in navigating modern food and activity "scapes" (i.e., to "beat the system").

Additionally, in a recent review of positive youth development program effects, Durlak et al (2007) advocate for focuses that include social awareness, relationship skills, responsible decision-making, self-control of behaviors and emotions, and self-efficacy. These are all major components of the messages and behavior modeling activities of 3D Health Alliance characters.

Teaching about the health "Big Picture" is another fundamental component of 3D Health Alliance presentations. This is based on the idea that such understandings can guide health-promoting decision-making by providing context and motivation. Nutrition professor, curriculum developer, and project contributor Alison Harmon (2006) asserts for instance that helping consumers to conceptualize the food system increases the likelihood that they will be able to contribute to community health, sustainability, and food security.

Ethical Considerations

Before going public, social marketers must be clear about the ends they are seeking and the rhetorical means (e.g., images and statements) they will use to attain those ends (Larson 1989). In this case, an ultimate achievement would be to have the messages be sufficiently empowering so as to convert audience members (Simons 2001) into champions of health in their schools and communities.

The ability to produce such outcomes carries unavoidable risk as well. This calls for carefully considering and testing content and also conducting formative and process evaluation (Simons 2001). For the author, it also precludes using fear as a motivator, since scare tactics can have unpredictable (including negative) effects on young audiences (Simons 2001). An ethical approach to the persuasive process also includes resolving audience anxiety that straight talk can produce. An example is complimenting messages that create cognitive dissonance (e.g., exposing apparent loss of integrity) with plenty of consonance-creating messages (e.g., reinforcement, rewards, and reassurance) (Larson 1989).

Obtaining and Maintaining Audience Attention

An essential step to delivering messages effectively is gaining and holding audience members' attention. One means of doing this is to make things personally relevant to them (Simons 2001). This requires gaining knowledge about audience characteristics (Keysar 2002, Simons 2001). Many members will recognize accents or whole characters (e.g., parodies of Harry Potter and Frodo Baggins with health-related names) in 3D Health Alliance presentations. A number of audience members will also relate to demonstrations of physical skills they may have or hope to develop, such as juggling or dunking a basketball. Framing messages in terms of how something might affect them in the near future can further foster attentiveness (Simons 2001). One way of doing this is by describing how desired behaviors (e.g., playing sports with others) can help them fulfill needs like those in Maslow's hierarchy (e.g., friendship) (Larson 1989).

Presenter characteristics can also promote or detract from gaining or holding an audience's attention. Having sufficient credentials can help initially convey authority about a subject (Simons 2001). The presenter's master's degree and former status as a registered dietitian will serve in this capacity. At the same time such authority should not preclude being able to address audience members as a "superrepresentative" rather than a true outsider (Simons 2001). The presenter's youthful appearance and demeanor, along with

frequent references to local events and community members (e.g., teachers) should likewise promote achieving superrepresentative status.

Sharing high-quality messages is another way to keep audiences engaged in presentations. This means providing accurate information tailored to each group's levels of intelligence and familiarity with the topic. Conversely, making gross generalizations, oversimplifying situations, exaggerating the benefits or dangers of behaviors, providing misleading or statistics, or making fallacious claims about causality oppose message quality. In addition to being unethical, these approaches jeopardize the credibility of the presenter and all accompanying information should they be suspected or revealed (Simons 2001).

Preserving message quality also warrants "belief consistency," or following proper reasoning from premises to conclusions (Simons 2001). An example might be sharing ideas for behaviors proven to promote outcomes that are among a student's stated goals. The degree of explicitness with which one could draw conclusions from such examples depends on audience members' ability to make inferences as well as their perceived openness (or hostility) towards those conclusions (Simons 2001).

Reinforcing and Checking for Comprehension

Having audience members receive and internalize the intended messages is a major challenge requiring attention to many details. There is a strong likelihood that a number of audience members will be in a medicated or sleep- or nutrient-deprived state during presentations, compounding the difficulty. Although miscommunication is a constant risk (Keysar 2002), clear explanations and visual aids, along with songs to further implant concepts, will reduce it. Impression management and attention to metacommunication (e.g., non-verbal communication about the communication) also help (Simons 1989). For 3D Health Alliance presentations, this will entail the presenter demonstrating behavioral integrity on and off stage and being fully "present" when interacting with audience members. Finally, checking and re-checking message comprehension by posing questions to the audience during presentations and class discussions will permit making corrections or clarifications. Combined with follow-up surveys, these measures will also allow for adjusting subsequent presentation messages or delivery approaches.

Behavioral Modeling

All the members of the 3D Health Alliance are designed to be positive role models for children, adolescents, and adults who don't take themselves too seriously. Several will model being physically active, while one will specifically model food preparation skills, another portion control in life, and another personal health decision-making skills. Defining integrity (as consistency between one's words and actions) and modeling it will be another presentation and discussion theme. The presenter will also regularly recognize examples of integrity and refer to local role models while additionally challenging teachers, administrators, and cafeteria staff (along with students) to attain new levels of integrity in supporting health-promoting behaviors in speech and deed.

These approaches follow SCT conceptions of observational learning and McLoughlin's and Kubick's (2004) assertion that students need exposure to healthy behavior modeling by adults in school. Facilitating positive connections to adult role models is also a focus of Positive Youth Development, which reflects a holistic view of health education that includes physical, personal, social, emotional, intellectual, and spiritual development (Durlak 2007). Furthermore, a panel of health experts following a 3-round Delphi method named having "visible people who are physically active" a key characteristic of "activity-friendly communities" (Ramirez 2006). The characters will epitomize traits ascribed to effective role models in research, such as having a positive outlook, commitment to excellence and growth, integrity, and leadership (Wright 2002). Presenting numerous characters and acknowledging and encouraging other role models is also in accord with the assertion that multiple role models may be particularly effective in promoting healthy behaviors (Wright 2002).

The 3D Health Alliance Project design's focus on modeling healthy behaviors reflects a goal of establishing conservative behavior norms. This can be an important means of reducing adolescent smoking, drinking, and illicit drug use (Hansen 1991). Facilitating it will involve exposing audiences to repeated and consistent messages in oral, written, and image-based form. Exposure will begin prior to presentations through Health League promotional announcements and posters, continue during presentations, and persist in general (and increasingly over time) through media coverage of character activities such as appearances in schools and at public promotions of health interventions. According to Zajonc and Markus (1982),

exposure by itself can create positive attitudes and preferences for something. In this case, that something will ideally be approaches to health that reflect awareness of how individual decisions often have broad implications.

Reinforcing Ongoing Interventions and Curricula

One project aim is to reinforce the efforts of local health contributors and well-designed existing health promotion initiatives and educational curricula. To accomplish this, the 3D Health Alliance Project will incorporate components such as:

- Acknowledging local health contributors like farmers, teachers, coaches, and cafeteria staff
- Encouraging audience members to contribute to well-designed ongoing interventions like Focus on Agriculture in Rural Maine Schools (FARMS) Program (Winston 2007), the Maine Nutrition Network's (2008) "Buy Local, Eat Healthy" Program, and the United Way-led Let's Go! Program (Let's Go! 2008)
- Providing materials to intervention developers about "best practices" as well as contact information of others working toward the same goals

These approaches are in accord with the work of researchers like George et al (2008), who note the importance of community champions to prevent adolescent Type 2 diabetes and obesity. In addition, Sorensen et al (2004) highlight the need to build and expand networks of community partnerships.

The Maine Learning Results for Health and Physical Education also include a number of specific focus areas that 3D Health Alliance presentations will creatively address (Maine 1997). These include:

- Distinguishing environmental influences on personal and community health
- Taking responsibility for personal health
- Developing strategies to improve or maintain personal and family health
- Evaluating the effects of media and other factors on personal, family, and community health
- Working cooperatively as an advocate for healthy individuals, families, schools, and communities
- Recognizing how health behaviors have consequences for individuals and others
- Adjusting health goals to changing information, abilities, priorities, and responsibilities

Promoting Audience Action

To maximize the long-term impact of one-day appearances at schools, Alliance characters will consistently challenge audience members to be in action to support 3D health. The two primary steps will be to develop personal health experiments and service learning projects. The nature of audience members' actions could involve one or more of the following:

- Working toward some health goal
- Parents and children buying or preparing more vegetables
- Modeling healthy behaviors for siblings or peers and challenging them to do likewise
- Volunteering to support ongoing community programs or interventions
- Creating new projects at school or elsewhere in their communities

There is a growing body of evidence of the efficacy of well-designed, “promotable” projects addressing many different health challenges. A number have been youth-directed, as with an intervention to increase school safety that resulted in significant decreases in violence and reported fear among students of being hurt in school (Kenney 1996). Others have increased fruit and vegetable consumption using economic incentives like subsidies (French 2003) or hands-on learning (Belansky 2006). Parent and teacher support are frequently crucial. Evaluation research positively associating such support with results [e.g., increased physical activity among 237 mostly Hispanic middle school students of low SES (Vierling 2007)] is evidence of this.

Designing interventions based on Social Cognitive Theory (SCT) constructs can also promote successful outcomes. In 24 South Carolina high schools, “LEAP PE” programs resulted in significant increases in 30-minute blocks of vigorous physical activity among participating students compared to others in control schools (Pate 2005). Also in South Carolina, an SCT-based after-school snack/physical activity program for “underserved adolescents” significantly increased participants' motivation and self-concept (Wilson 2005).

In some cases, the presence of effective leaders and the ability to utilize local resources are keys for creating successful community-wide projects. In Peterborough, NH, then-superintendent of the Con-Val School District Tony Geraci found niches for younger and older students, local businesses, cafeteria staff, and community volunteers to forward an agriculture-rich educational agenda over a period of several years (Geraci 2007). Younger students picked locally grown apples and designed USDA guidelines-appropriate

meals to be served in the cafeteria. Students, teachers, and volunteers planted, tended, and harvested a vegetable garden that yielded produce to nutritiously compliment more conventional lunch items. Other contributors included a local carpenter and Keene State University dietetic interns. Along with strengthened community bonds, invaluable hands-on learning opportunities, and in some cases lives transformed by opportunities to engage in agriculture, the participation rate in the middle school lunch program rose from 42% to 81%.

The presenter will describe himself and 3D Health Alliance characters as part of a global network of project developers, farmers, teachers, and other health champions looking for others to join them. Audience members may thus feel empowered through a sense of being part of something bigger than themselves (Doolittle 2007). Positive psychology researchers have associated this concept with achieving “personal mastery” (Doolittle 2007). In the end, motivating students, teachers, and others to initiate or contribute to projects like those described above could be a particularly meaningful project outcome. The potential for learning and development through cooperative efforts to build health is vast.

Conclusions

Consumer empowerment is a key potential means of engendering widespread health-promoting behaviors by adolescents. To help achieve this objective, the Centers for Disease Control and Prevention recommend “better health education” (CDC 1997). At present, signs of poor adolescent health like increasing overweight and obesity are alarming. Worse yet, certain unhealthy behaviors have spread across families and communities, amplifying adverse health outcomes such as asthma and Type 2 diabetes. The 3D Health Alliance Project is a novel means to deliver empowering messages as well as to promote initiatives and use behavior modeling to reinforce individual, community, and environmental health. From its sound theoretical framework to carefully planned content and delivery strategies, the design reflects the author’s commitment to the field (as well as the cause) of health promotion. As 3D Health Alliance presentations grow in frequency and the characters in popularity, the potential results promise to be more than just a “sight to see.”

(continued)