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Abstract

This paper describes a *Narrative Engagement Framework (NEF)* for guiding communication-based prevention efforts. This framework suggests that personal narratives have distinctive capabilities in prevention. The paper discusses the concept of narrative, links narrative to prevention, and discusses the central role of youth in developing narrative interventions. As illustration, the authors describe how the NEF is applied in the *keepin' it REAL* adolescent drug prevention curriculum, pose theoretical directions, and offer suggestions for future work in prevention communication.

> My cousin once took me to a party with her and she told me that I couldn't leave until she left cuz she drove me there and they started like drinking and stuff and I was like "I'm leaving." She said "You can't leave because I drove you here." So I went and walked home. (Female, 7th grade)

This story was shared by an adolescent girl during her health class where she was taking part in a lesson from the *keepin' it REAL* drug prevention curriculum. The lesson for that day focused on teaching strategies for resisting drug offers and what her story—her *narrative*—accomplished was to connect in a consequential manner the actions, characters, and plot with her personal history as well as with the lesson. For those of us communicating prevention messages, this reflects our goal of creating messages so that recipients will see themselves as engaged and connected in a personally relevant and meaningful way (Campbell & Babrow, 2004; Lee, Hecht, Miller-Day, & Elek, 2011). Creating this type of involvement is not as easy as it sounds and it is particularly difficult for health communicators who wish to change the story of adolescent substance use. In universal drug prevention programs, the audience is often youth whose experience with illicit substances ranges from none to significant, thus, providing a challenge for presenting prevention messages in a way that is personally relevant or meaningful to adolescents all along this continuum of experience.

One way to appeal to a range of personal experiences is to employ personal narratives in message design (Hecht & Miller-Day, 2007; Hecht & Miller-Day, 2010; Mann, Hecht, & Valentine, 1988; Miller, 1998; Miller-Day & Hecht, 2012; Miller, Hecht, & Stiff, 1998; Miller-Rassulo, 1992; Miller-Rassulo & Hecht, 1988). This is the foundation of the *keepin' it REAL curriculum*, a drug prevention curriculum implemented in 7th grade classrooms in 45 countries, reaching more than 2 million youth each year (Hecht & Miller-Day, 2010). The curriculum was founded on a "from kids-through kids-to kids approach" that relies on

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the examination of youth narratives to inform implementation design and message development. The underlying assumption is that adolescents make substance use decisions based on the narrative storylines available to them (socially, locally, and personally) and that they embrace stories that cohere and resonate with their experiences (Hecht & Miller-Day, 2009). Thus, the stories kids tell about drugs reveal how they see drugs and drug use, the choices they make, as well as what can be done to influence them to make healthy choices (Alberts, Hecht, Miller-Rassulo, & Krizek, 1992; Hecht & Miller-Day, 2009; Pettigrew, Miller-Day, Hecht, & Krieger, 2011). Exposure to health messages created from these narratives heightens youth identification with the program content, overcomes resistance, and enhances the personal relevance of these messages to the message recipients (Hecht, Corman, & Miller-Rassulo, 1993; Hecht & Miller-Day, 2010; Miller, Alberts, Hecht, Trost, & Krizek, 2000; Miller-Rassulo & Hecht, 1988).

This paper describes the narrative engagement framework (NEF) that has guided much of our work in developing the *keepin' it REAL* prevention curriculum. This is a conceptual framework; that is, a system of concepts, assumptions, and beliefs that has informed and guided our research (Robson, 2002). This framework may be useful to others in developing narrative health interventions. Similar to work done by others more recently such as Kreuter et al. (2007), the basic assumption that drives this framework is that narratives have distinctive capabilities in prevention. To support this assumption, we begin by discussing the concept of narrative, linking this to narrative prevention, describing our specific narrative approach to adolescent substance use prevention, posing theoretical directions for this work, and finally offering suggestions for future work in prevention communication.

What is Narrative?

The appeal of narrative lies in the pervasive nature of this kind of discourse in everyday life. Narrative is a way of thinking as well as a pervasive, transcultural mode of communication through which people organize information and experiences of the world (White, 1981). Most people are familiar with telling and hearing stories because it is a basic mode of human interaction and thought (Kreuter et al., 2007). As Barthes (1975) stated, "nowhere have there been a people without narrative" (p. 79). Individuals engage their social world in a narrative mode and that social worlds are comprised of a set of stories from which we choose, and constantly re-create, our lives (Fisher, 1987; Polkinghorne, 1988, 1995). Narrative and story are terms used interchangeably in this paper.

A narrative approach positions human beings as storytelling animals and narrative as the means by which we make sense of our experiences and ourselves, organize and understand events, and recount experiences (Clandinin & Connelly, 2004; Langellier, 1989) and there are multiple conceptualizations in the research literature of what constitutes a narrative. According to Moen (2008), a narrative is "a story that tells a sequence of events that is significant for the narrator or her or his audience" (p. 60). Polkinghorne (1995) defines narrative as "stories used to describe human action…that include a combined succession of incidents into a unified episode" (p. 7). While Kreuter et al. (2007) define narrative as "a representation of connected events and characters that has an identifiable structure, is bounded in space and time, and contains implicit or explicit messages about the topic being addressed" (p. 222). Our work predates much of this work, but has been informed by it across the years. For our work, dating from 1988 to the present (see for example, Hecht et al., 1993; Miller-Rassulo, 1992; Miller-Rassulo & Hecht, 1988), we have integrated key dimensions of narrative across a number of conceptualizations, defining narrative as talk organized around significant or consequential experiences, with characters undertaking some action (Russell & Lucaruello, 1992), within a context (Connelly & Clandinin, 1990), with implicit or explicit beginning and end points (Gergen & Gergen, 1988), and

significance for the narrator or her or his audience. This definition, we believe, highlights the active role of characters, intentionality, and the contextual nature of narrative.

Based on this definition, narratives may be seen as linguistic constructions of significant experiences. They are internally formulated, but conveyed by telling or writing the storied narrative. It is important to acknowledge that in health prevention, narratives can be fiction such as in educational entertainment efforts (e.g., Bae, 2008) and nonfiction such as in alcoholics anonymous (e.g., Pollner & Stein, 1996) and can be communicated in 1st and 3rd person.

There is evidence that first person narratives might be most effective in impacting health outcomes. In a meta-analysis of narrative interventions conducted by Winterbottom, Bekker, Connera, and Mooney (2008), the authors discovered that studies employing first person narratives (i.e., those told using “I” or “me”) in prevention twice as likely to find an effect as those studies employing no narrative or third person narrative (i.e., those told about other people’s experiences) evidence. First person narrative is sometimes in the form of *testimony*. Testimony documents the first hand experiences of a single individual from that person’s perspective. For example, an account of an individual’s experience that is conveyed in the first person; for example, “I just stood at the party and carrying my red cup. The apple juice I put in it looked like beer to the others.” Felman and Laub (1992) describe testimony as a statement that bears witness to an individual’s experience.

Definitions of testimony differ across academic fields. In the field of rhetorical studies, a testimony is conceptualized as “a person's account of an event or state of affairs “(Crowley & Hawhee, 2008). This is broad definition which can subsume testimony as defined in other fields. For example, legal testimony is defined more specifically as “a form of evidence that is obtained from a witness who makes a solemn statement or declaration of fact” drawing from their own observation, knowledge, and recollection (West Group, 2002). In religious contexts the term "testify" or "to give one's testimony' typically refers to the story of how one entered into a religion or to bear witness to their beliefs in their everyday lives. In advertising, testimonials are accounts from an agreeable or credible person about a specific product or item (Shimp, Wood, & Smarandescu, 2007). Whether defining testimony in the context of the law, religion, or advertising, testimony serves as a form of interpersonal influence where a person accepts information from another person as a form of evidence—testimonial evidence (Burnkrant & Cousineau, 1975).

However, first person narrative messages in interventions do not have to be delivered as testimonials. There are a variety of ways to communicate narrative messages. While narrative may be testimonial (stories illustrating first-hand personal experience), they also may take the form of dramatizations of personal narratives, perhaps reflecting what has happened to the narrator OR to other individuals in their lives such as friends, neighbors, or family members. Additionally, narratives might be reflected in role play scenarios excerpted verbatim from personal experiences or in the form of a composite narrative (summarizing similar experiences into a composite storyline). Personal narratives or first person narratives, then, take many forms. We turn, next, to a discussion of how these narrative forms might be used to develop prevention messages.

Narrative Health Message Strategies

Traditionally, prevention information had been presented in didactic ways to educate and persuade audiences. This message strategy, however, proved ineffective in promoting health in problematic domains such as youth drug use (Tobler et al., 2000). As a result, more recently, narrative forms of communication are being implemented effectively in reducing risk and promoting healthy alternatives for problems such as sexually transmitted infection

prevention (Kiene & Barta, 2003) and cancer (Kreuter et al., 2008; Larkey & Gonzalez, 2007; Larkey, Lopez, Minnal, & Gonzalez, 2009; Larson, Woloshin, & Schwartz, Welch, 2005). For example, Epstein, Thomson, Collins, and Pancella (2009) reported that content regarding drug addiction embedded within a narrative storyline proved to have substantial short term gains in knowledge about drug addiction for African American youth. Kiene and Barta's (2003) study of college students revealed that viewing a narrative video about two individuals living with HIV scored higher on perceived ability to practice safe sex than viewing a slide show alone or receiving no intervention. Hopfer (2012) compared narrative and statistical evidence designed to persuade women to get an HPV vaccine and, after controlling for HPV knowledge and sexual activity, her narrative intervention significantly increased vaccine self-efficacy, intent, and actual inoculation over and above the statistical messages alone. Additionally, a soap opera radio program designed to promote HIV/AIDS awareness in Tanzania and increase contraception was successful in increasing overall approval of contraceptive use in the target population and was the source of referral for twenty-five percent of new patients and health clinics in the country (Rogers et al., 1999). As these studies suggest, narrative approaches to prevention can be consequential.

In contrast to the more experiential and descriptive nature of narrative are traditional non-narrative messages such as expository and didactic styles of communication. While both narrative and non-narrative forms of communication can convey the same prevention message, didactic messages are about logic and argument, and are structured around a move from premises to conclusions, providing empirical "truths." In contrast, a narrative model highlights description, explanation, sensitivity to personal experience, moving from identifying patterns to identifying relationships among patterned events (Bruner, 1986) and does so "by representing a sequence of connected events, characters, and consequences, not by presenting and defending arguments about how and why to achieve or avoid those consequences" (Kreuter et al., 2007, p. 222). In the past few decades researchers have had an increased interest in the stories humans tell. The "narrative turn" in the social sciences (Charon & Montelo, 2002; Herman, Jahn, & Ryan, 2005; Hinyard & Kreuter, 2007) reflects an emphasis on the desire to describe and explain human experience through stories.

Narratives are particularly useful health messages because of the populations they enable us to reach. Hopfer and Clippard (2011) identify five qualities of narrative messages that make them particularly promising for health interventions. Narrative messages can:

- Overcome resistance toward the advocated health behavior
- Engage less involved audiences
- Reach low knowledge audiences
- Render complex information comprehensible
- Ground messages in the cultures and experiences of the target audience.

As articulated by Kreuter et al. (2007), because narratives tend to be concrete presentations of the lived experience of others, it may be more difficult to discount them. People may generalize from narrative testimony even when not typical (Strange & Leung, 1999), perhaps because of its vividness (Taylor & Thompson, 1982).

It is clear, then, that narratives are emerging as a prominent strategy for health message design. Previous theory helps specify a conceptual definition of narrative and demonstrates effects across domains of health promotion. What is less clear, however, is *why* narrative messages are so effective.

A Narrative Engagement Framework for Prevention Message Design

Embracing the narrative turn, we describe the Narrative Engagement Framework that has guided our work for the past thirty years. Reinforcing the theorizing of others such as Krueter et al. (2007), this framework asserts that narratives are central to prevention efforts because they enhance narrative knowledge, promote engagement, and provide mental and behavioral models.

Narrative knowledge

As seen above, narratives are, themselves, one of two general forms of health information knowledge, with the other form being didactic (Kreiswirth, 2000). As we have seen, narrative not only enhances one's ability to identify commonalities among experiences, but enhances one's capacity to link those common patterns with other salient factors to construct holistic mental models. Indeed, the strength of narrative is that it enhances the human capacity to construct mental models (Murphy, Wilde, Ogden, Barnard, & Calder, 2009) and can be a significant site for individual learning (Goodson & Gill, 2010). We call this quality of narrative messages, narrative knowledge.

In designing health messages, we articulate three goals based on the audiences' preexisting narrative knowledge. We start by defining the construct of "mental models" to represent variations in knowledge. A mental model is a representation of the world around us, the relationships between its various parts, and a person's intuitive perception about his or her own acts and their consequences in that world (Byrne, 2005). A mental model can represent a "possibility" and may shape cognition and decision-making (Johnson-Laird, 2006). This mental model approach is, to our knowledge, unique from other theoretical frameworks of narrative but draws on similar ideas. For example, those utilizing a more cognitive perspective might conceptualize these models as scripts (Whitney, Smelser, & Baltes, 2001).

By presenting new narrative knowledge we strive for: (1) *mental model building* to develop new mental models for those with no pre-existing narrative, (2) *mental model change* for those whose narrative runs counter to our prevention goals, and if we believe the audience already holds narratives favorable to our goal, and (3) *mental model maintenance*, in which narrative knowledge fits into and confirms existing mental models. Fortunately, narrative health messages appeal to a range of experiences and thus, can serve to reinforce or "re-story" existing mental models.

In our drug prevention efforts, we define the term *mental model* as the personal, internal representations of reality that adolescents use to generate expectations and guide decision-making as it relates to substances and substance use. Adolescents in our target audience are typically young enough that most have not experimented with illicit substances and are in the process of developing new mental models (scripts) pertaining to substance use. It is our contention that providing new narrative knowledge will assist in instantiating resistance efficacy scripts that may last during their adolescent years.

This viewpoint is supported by exemplification theory's (Zillmann, 1999) suggestion that the formation and modification of beliefs about phenomena are based, at least in part, on exposure to various experiences. Some experiences or amalgams of experiences then serve as exemplars that function as surrogates for other direct personal experiences. In exemplification theory, narrative is conceptualized as a form of an exemplar which serves as a type of evidence distinct from didactic evidence (Hopfer, 2012; Hopfer & Clippard, 2011). Each form may communicate similar information about an issue, but from different perspectives. As Zillmann and Brosius (2000) suggest:

> As segments of pertinent experience that are stored in memory, exemplars provide samplings of information about past occurrences that foster dispositions and ultimately direct behavior toward similar occurrences on later encounter. (p.vii)

Krueter et al. (2007) argue that, unlike statistical evidence, which may be abstract, narratives are grounded in concrete personal experiences that may be seen as more realistic and may be more difficult to discount. Moreover, there is evidence that people tend to generalize from a narrative exemplar even when the narrative is not considered typical (Hamill, Wilson, & Nisbett, 1980; Strange & Leung, 1999). We turn, next, to a discussion a second type of model, behavioral model, to explain the power of narrative messages.

Behavioral modeling

A second explanation for the effects of narratives is their ability to provide behavioral models for health behavior change (Bandura, 1977; Larkey & Hecht, 2010; Robillard & Larkey, 2009). While mental models are people's views of the world and of themselves in it (Johnson-Laird, 2006), behavioral modeling involves learning new behaviors by observation (Bandura, 1982, 2002). These new ways of behaving, like mental models, can then be incorporated into an existing repertoire, change the repertoire, or create a new one. A long history of research supports the efficacy of this strategy (Glik, Nowak, Valente, Sapsis, & Martin, 2002; Smith, Downs, & Witte, 2007).

It appears that narratives are particularly adept at providing these behavioral models. There are many studies that have provided evidence for the use of narrative to enhance modeling of social behavior, including the effective Tanzanian radio soap opera “Twende na Wakati” that included two characters designed to model sexual health practices and family planning. According to Rogers et al. (1999), after listening to the experiences of these characters and their story, listeners reported an increased sense of their own ability to acquire and use contraceptives, an increase in strategies directed at family planning, and increased interspousal communication in regards to family planning. Berkley-Patton, Goggin, Liston, Bradley-Ewing, and Neville (2009) also reported that employing characters to model targeted health behaviors is highly effective in HIV prevention interventions. It is clear, however, that not all narrative models are equally effective. We turn next, to the construct of engagement to account for these variations.

The NEF suggests that the reason narrative messages provide such effective behavioral models and serve to create and modify mental models is that they have the potential to engage audience members more thoroughly than didactic messages. Didactic messages may provide models by talking about them. Stories, however, are intrinsically behavioral models because they demonstrate how characters participate in situations to resolve problems through action and, at the same time, provide mental models (e.g., narrative knowledge) by engaging systematic processing (Moyer-Guse, 2008; Slater & Rouner, 2002). NEF postulates that engagement with these models leads to more substantial and longer lasting change.

It is important to note that while narratives may be useful for modeling efficacious behaviors; a personal narrative may not inherently be a “role model story.” Role-model stories are widely used in prevention, tailoring narratives to depict experiences of an individual modeling health-risk reduction behaviors (Berkley-Patton et al., 2009; Lauby, Smith, Stark, Person, & Adams, 2000). Firsthand experience and personal testimony do not always serve to model efficacious behavior. Narratives can also illustrate what has not worked or, as one student described his narrative in our work, it “gives an example of an epic fail.”

Thus, modeling, by itself, may not be adequate to produce change. The creation of new mental and behavioral models—new possibilities—may not be effective without a receiver being engaged with narrative messages that promote prosocial behaviors. Audiences must connect with the narrative message so that there is motivation to model certain behaviors and adjust mental constructions. We turn next to what we see as the motivational element in the narrative engagement explanation—*engagement*.

Engagement

We believe that the core element of narrative force is the ability to engage an audience (Green, Strange, & Brock, 2002; Hecht et al., 1993; Lee et al., 2011; Miller et al., 1998; Miller-Rassulo & Hecht, 1988). In contrast to more didactic forms, narrative messages have the potential to involve audiences emotionally as well as cognitively, shaping feelings as well as mental models. As a result, engagement with narrative messages is the central concept for understanding message effects (Lee et al., 2011; Roser, 1990; Slater & Rouner, 2002; Vorderer, 1993; Wirth, 2006).

Drama and film theorists suggest that plot and character make up two major components that lead audience members to engage in a narrative and identify with characters and situations in the story (Kinkaid, 2002; Miller et al., 2000; Moyer-Guse, 2008; Smith et al., 2007). In turn, a sense of engagement with plot and character motivates an audience toward insight and action (Klaver, 1995; Miller et al., 2000; Schrank & Engels, 1981; Slater & Rouner, 2002; Slater, Rouner, & Long, 2006). Thus, engagement may play a prominent role in audience members' behavioral change, with these perceptions mediating the effects of health messages on outcomes (Lee et al., 2011).

On the most basic level, one considers engagement the intensity of attention to the message (Green et al., 2002). However, engagement denotes a type of association and connection with the message that goes beyond merely attending to it (Green & Brock, 2000; Green, 2006). An audience member can be involved in the story emotionally, as well, attending to the message in a heightened state of arousal. For further discussion of this distinction see Lee et al. (2011).

In addition to cognitive attention and emotional involvement, an audience may personally connect with health messages delivered in narrative form (Lee et al., 2011). This personal connection with a story refers to the degree to which audience members feel similar to a character presented in narrative health message (Cohen, 2001; Liebes & Katz, 1990; Slater & Rouner, 2002; Slater et al., 2006). Feeling "at one" with both the characters and the action presented in the narrative can lead to the unity of experience indicated by engagement (Miller et al., 1998; Miller-Day, 2008a). Yet, even if an audience member does not have direct personal experience with a phenomenon or feel "at one" with characters, a story may still resonate and create connection if the narrative connects the audience to a larger socio-cultural narrative; that is, if an audience member believes the characters or action in a narrative "rings true" based on their observation of others (Fisher, 1989). Additionally, audience members may connect characters and behaviors to larger socially constructed messages they have recalled from other media messages (e.g., parties are more fun with alcohol). In short, narratives have the potential to be both reflective and constitutive of experience, engender engagement, and guide behavior.

Based on this reasoning we argue that narrative engagement[1] consists of four elements: interest, realism, identification, and transportation (Lee et al., 2011). On the most basic

[1]We focus on informational engagement in this paper. Emotional engagement, while also important, requires a different set of theoretical axioms in our opinion.

level, one must attend to a message for it to have an impact. Audience members will not "engage" a performance that bores them (Miller-Day, 2008a; Roser, 1990; Winstron & Cupchik, 1992). As noted above, attention can vary in intensity, a construct we label *interest*.

At the next level we are concerned with involvement with the message. Beyond capturing our interest, we are concerned with the degree of connection and association to a narrative. According to drama and narrative theories reviewed above, involvement is typically with plot and/or character(s). This suggested to us that there are two types of involvement, *realism* or involvement with plot and *identification* or involvement with characters.

Audiences disengage when they perceive health messages to be unrealistic and engage with those they perceive to be realistic and believable (Slater et al., 2006; Wilson & Busselle, 2004). Realism provides models that lead audiences to mimic the thoughts and actions of characters (plot), with more authentic models leading to more effective vicarious learning (see social cognitive theory, Bandura, 2002; Beltramini, 1988; Miller et al., 1998).

Involvement also includes *identification* or the degree to which audience members feel similar to or feeling at one with characters (Cohen, 2001; Lee et al., 2011; Liebes & Katz, 1990; Miller et al., 1998; Slater & Rouner, 2002; Slater et al., 2006) and includes both cognitive and emotional empathy (Cohen, 2001). Larkey and Hecht (2010) argue that narrative engagement is essentially a "process of developing a sense of self through narratives, about making sense of experience, and about expressing these identities and interpretation through social interaction" (p. 118). In the literature on performance, audience members' identification appears to act as a prerequisite to gaining insight into characters (Schrank & Engels, 1981). Furthermore, identification, in the form of perceived similarity between audience members and characters, plays a significant role in the influence of a narrative message on the audiences' attitudes or behaviors (Bandura, 2002; Slater & Rouner, 2002).

Others have argued that a third level of engagement is possible and label this *transportation* or the degree of absorption into the narrative (Green 2006; Green & Brock, 2000). Elsewhere we argue that transportation denotes a fundamentally different experience because it involves decentering and imagining oneself within the story (Lee et al., 2011). Whereas transportation denotes a cognitive or emotional shift from one's state of consciousness, we conceptualize engagement as attending and attaching to a message. Engagement does not imply projecting oneself into the message or being "transported," emotionally or intellectually, to some other state of consciousness.

When we consider these elements together, we argue that identification, interest, and realism are positively, perhaps even monotonically, related to effects (the greater each element, the greater the effect) while transportation may be curvilinearly related. We believe that there is an ideal or maximal level of transportation, with too little meaning a disconnect from the message and too much resulting in immersion in the story but not the health message. Thus, we argue that transportation is not only conceptually distinct, but, like Green, Garst, and Brock (2004) contend, transportation should not prove as crucial to educational health messages since audiences may not reach adequately deep levels of narrative transportation due to their short-length and overtly persuasive nature. Indeed, in the scholarly literature in general, there is considerable debate about the relationship between identification and transportation (Busselle & Bilandzic, 2008; Tal-Or & Cohen, 2010). As a result, we focused on interest, realism, and identification and use the Lee et al. (2011) definitions of these terms:

- An interested message recipient is paying attention to the message.

- An involved message recipient sees themselves as connecting to the plot (realism) and characters (identification) in the message.
- A transported message recipient sees themselves as paying attention and actively immersed or absorbed into the message or moved to some other reality or mind state.

Finally, we argue that narrative engagement causes social proliferation (Larkey & Hecht, 2010; Southwell & Yzer, 2007). Effective narratives will be discussed with peers, family and others. Rather than conceptualizing these discussions as "contagion," as it is by some in prevention science, we argue that proliferation is inherently part of the successful narrative process (i.e., if they are engaged they are likely to talk about the messages) and such interpersonal communication about the narrative messages may reinforce desirable behavior changes (Galavotti, Pappas-DeLuca, & Lansky, 2001; Hutchinson & Wheeler, 2006; Salmon, 2001). The processes of social proliferation would differ depending on what content is discussed, the valence of the discussion, and with whom it is discussed. This suggests, to us, examination of diffusion of narratives through social networks, research we hope to conduct in the near future.

The Narrative Engagement Framework for prevention has guided the development of the *keepin' it REAL* (kiR) drug prevention curriculum. kiR is now the most widely disseminated program of its kind in the work with evaluations of this curriculum providing preliminary support for the utility of this framework and suggesting theoretical directions. Specifically, this approach has led us to certain beliefs.

We believe that the larger socio-cultural narrative of drugs and adolescent drug use in the United States is pervasive, but can be altered with effective narrative intervention. We believe youth should have agency in shaping this intervention, "re-storying" drugs and drug use for themselves and for their peers. We also believe that youth involvement with narratives can take two forms. First, by involving youth in developing prevention messages we believe those messages are more engaging and, as a result, more effective in imparting knowledge and behavior models that promote healthy choices. In this sense, youth are involved in developing the narrative content to engage a broader youth audience. Second, we believe that involving youth in the process of creating their own narratives is, in itself, a prevention strategy. Here, narrative creation is a form of action that promotes healthy choices. While the first sense of narrative involvement is focused on the *content of the messages* that youth create for other youth, the second focuses more on effects the *process of creating narratives* has on the youth who create the messages. We will discuss each of these forms of narrative involvement.

Youth Creating *keepin' it REAL*'s Narrative Messages

A large segment of our narrative work has been devoted to a culturally grounded (Hecht & Krieger, 2006) or culture-centric approach (Larkey & Hecht, 2010) to health message design. The foundation of this approach is that narratives expressed by members of a target group regarding their personal experiences (with drug offers, refusals, use, and drugs in their communities) ground health promotion messages so that they are more fully culturally representative and meaningful to the broader target audience. We define culture as code, conversation, and community (Hecht, Jackson, & Ribeau, 2003; Philipsen, 1987). Code denotes the aspect of culture that carries a system of rules and meanings. Conversation describes culture as a way of interacting, while community denotes membership, each of which can be represented in shared narratives of a cultural group (Larkey & Hecht, 2010). The term *cultural grounding* refers to the process of identifying cultural texts and developing culture-centric messages by and for a cultural group (Hecht & Krieger, 2006).

Cultural grounding is accomplished through an iterative process (see Figure 1) by which we: (1) collect and analyze adolescent narratives of drug resistance and drug use experiences, (2) translate those narratives into culturally grounded health prevention messages that are incorporated into the keepin' it REAL curriculum by integrating them into role-play scenarios, student produced DVDs, and narrative discussions, and (3) involve youth and other community members in the design and creation of messages for their peers (see Colby et al., in press; Miller et al., 2000). Beyond being the source of narratives, actively involving students has included a youth advisory panel, production of curriculum videos, and development of booster media messages. We should note that when we first started it was our goal to develop a *method* for creating health messages rather than a specific health message. The success of *keepin' it REAL*, however, focused attention on the specific health message (i.e., the curriculum), rather than the process.

Collecting and analyzing narratives

The first step in developing our narrative intervention was collecting and analyzing adolescent narratives about drugs, drug offers, drug refusals, drug use, and the perceptions of the "culture of drugs" in adolescents' communities. From this process, in both urban and rural communities, we learned directly from adolescents about their lives and the everyday experiences that influenced their drug use decisions. When evaluating these accounts, we examined within and across narratives to identify linked stories (common plotlines and patterned experiences) (Burck, 2005). Across developmental age, race, and urban, suburban, and rural contexts, our work has found surprising consistency in the resistance strategy stories of adolescents (Alberts, Miller-Rassulo, & Hecht, 1991; Alberts et al., 1992; Hecht, Alberts, & Miller-Rassulo, 1992; Pettigrew, Miller-Day, Krieger, & Hecht, 2011), reflecting the refuse, explain, avoid, and leave (REAL) strategies central to the curriculum. These narratives have also been valuable for understanding the broader socio-cultural stories of drugs and drug use (Krizek, Hecht, & Miller-Rassulo, 1993), adolescents' motivations to use or not use alcohol or other drugs (Barnett & Miller, 2001), linkages among personal identity and normative beliefs about substance use (Miller, 1999; Miller-Day & Barnett, 2004; Pettigrew et al., 2011), and gaining insight into the role of parental communication in adolescent drug resistance (Miller-Day, 2002; Miller-Day, 2005; Miller-Day, 2008b; Miller-Day & Dodd, 2004).

From this process we have learned that narratives bring to the fore the interpretive dimension of knowledge (Bruner, 1986, 1990, 2004; Polkinghorne, 1988, 1995). By assessing adolescents' narrative accounts of drugs and drug use in their social contexts, it has been possible to obtain information not only about adolescents' experiences with substances, but also about the specific ways in which they constructed and interpreted those experiences. Hence, we then endeavored to represent the vast range of experiences while addressing common and exemplar accounts within our narrative set as the basis for designing our intervention.

Translating and designing narrative health messages

The next step is to translate this narrative research into health promotion messages. The translational process we employ starts with a focus on the personal narratives of youth regarding their experiences with substances and then employs advisory teams of adolescents (youth advisory council; youth video development teams), educators (educator focus group participants), and others stakeholders (e.g., school district prevention coordinators) who help us form messages to invoke personal meanings for the adolescent audience and to maximize engagement (e.g., making it as realistic, interesting, and identifiable as possible). The resulting messages tend to highlight first person testimony, dramatizations of first person

accounts, and reflect nonfictional characters. Then we "center" these messages within individual lessons of a substance abuse prevention curriculum.

There are three primary ways in which we weave narrative messages into our lessons: (1) student-produced videos, (2) classroom-based discussions, and (3) role play scenarios. Student-produced videos use personal narratives to explain the main constructs by illustrating and identifying characters (who is in the scene), setting (where and when is it occurring), action (what is happening), and conflict (what is the tension in the scene), and what skill will be practiced and reinforced. These narrative messages provide knowledge and behavior models that frame the lesson. Discussions are then used to amplify the information and provide personal relevance to students. During discussion, teacher and student personal narratives are exchanged. Finally, role play scenarios serve to provide students with the opportunity to practice the skills they are learning such as refusal efficacy and are particularly effective for reinforcing prosocial behavioral skills (Alfano et al., 2009; Cormier & Nurius, 2008).

Student produced narrative videos

To ensure that students have agency in "storying" the youth experience, high school students conceptualize, script, produce, and edit videos to introduce the overall curriculum and model the four resistance strategies emphasized in the curriculum. The narrative framework serves to assist youth in creating more intentional practice and move beyond problematic identity stories (demonizing drug users and drug offers) to preferred ways of being as agentic and competent communicators. These videos are intended to teach norms, impart narrative knowledge, and enhance general socio-emotional competence through providing knowledge and behavioral models. High school students are chosen to create messages for the middle school audience as "near peers." It is clear that involving peers in prevention is an effective strategy (Lockspeiser, O'Sullivan, Teherani, & Muller, 2006; McDonald & Grove, 2001; Pettigrew, Miller-Day, Krieger, & Hecht, 2012; Rashid, Sobowale, & Gore, 2011; Tobler et al., 2000; Valente, Hoffman, Ritt-Olson, Lichtman, & Johnson, 2003). The use of peers in delivery enhances identification with the health message and reinforces the message through continued contact. Peer educators also serve as positive role models, potentially embodying the health messages communicated. This is congruent with a variety of theories including social learning theory, social inoculation theory, role theory, differential association theory, subcultural theories, and dissemination of innovations theory (Turner & Shepherd 2000). Near-peers are defined as highly similar to a target social group but may be a few years older and may be particularly effective peer educators (McDonald & Grove, 2001). Owing to the need for messenger-based credibility, near peers may be seen as more credible because they have previously been through a drug education program or have had more exposure to substance use (McDonald & Grove, 2001). Near peers or those similar but of slightly older/higher status may be seen as more credible than either peers or teachers because they have recently lived the experience of the target group (Lockspeiser et al., 2006; Rashid et al., 2011).

During the process of message development, the high school student producers received training in *keepin' it REAL*, including prototypical or possible settings, characters, actions, conflicts, activities, and resolutions that were reflected in the larger corpus of the adolescent narratives from formative research. They are coached by teachers and video consultants. From these, four different narrative videos are conceptualized, scripted, and produced. The videos investigate and represent prototypical narratives, but are also testaments to the students' urge to construct novel scenarios from what might be considered typical in everyday substance-related encounters. Sample videos can be accessed through www.kir.psu.edu.

Class discussions

To facilitate the processing of the narrative messages, classroom-based discussions are designed to permit youth to have agency in telling *their own personal and locally-based stories*. We have found that sharing and listening to personal and locally-based narratives of drugs heighten youth's engagement in the message, provide exemplars for modeling and increase narrative knowledge. The classroom-based discussions highlight the role of human agency in the struggle for the creation of new norms and new ways of interacting which may, over time create new understanding of the ways youth might think about and make decisions regarding substance use. For example, in the excerpt reported at the beginning of this paper, this 7th grade student participated in a classroom-based discussion of the refusal strategy "leave." Her account illustrated a possible scenario others her age might encounter (no ride home when in an uncomfortable situation) along with an agentic solution offered by the youth narrator (walked home). This is not to say that solutions are always generalizable across contexts and for all students, but these stories offer possible outcomes and allow listeners to envision different possible levels of agency, constructing new mental models and new possibilities (Marcus, 1996; Oyserman & Marcus, 1990). The narrative accounts youth share in the classroom are not only summations of the past; they also implicate interpretations and evaluations of the past as well as future prescriptions and commitments. This may be particularly so in the retelling of transgressive events, such as someone using illicit substances and breaking the law, because these events require justification and tend to initiate a search for meaning (Bruner, 1990).

Finally, role play scenarios are written from our narrative research to provide practice and public commitment (Trapp, Peel, & Ward, 1995) for the newly acquired skills. Prior studies show that role play has been used as an effective teaching method (DeNeve & Heppener, 1997; Lane & Rollnik, 2005; Nestel & Tierney, 2007). Role play allows time to practice communication skills prior to the actual communication setting, and as a consequence, rehearsals of role play scenarios may build students' efficacy (Washbush & Gosenpud, 1995) to perform desirable behaviors that they learned from the role play.

Does it work?

The narrative engagement approach predicts that the *keepin' it REAL* narrative messages work through enhancing identification, realism, and interest, and moderately transporting participants. Our hypothesized effects are presented in Figure 2. Unfortunately, to-date we have only partially been able to test this model. But, what do we currently know?

First, we have learned that viewing a "full dose" of the curriculum videos, by itself, appears adequate to reduce drug use. We reasoned that students viewing at least four videos received a full dose. Since the introductory video taught all four skills, viewing that and at least three others of the refuse, explain, avoid, and leave sequence (REAL lessons 4, 5, 6, and 7 of the full set of 10) exposed them to all refusal skills, norms, and other socio-emotional competencies. A quasi-experimental design was utilized to test this hypothesis since, to date, we have not been able to conduct an experiment varying video dosage. Our analyses indicate that, consistent with our hypothesis, exposure to a full dose of narrative messages reduces substance use among middle school (12–14 year old) youth (Warren et al., 2006). Second, we developed an instrument to measure the identification, realism, and interest dimensions of engagement (Lee et al., 2011). Space limitations and questions about the compatibility of transportation measures (Green & Brock, 2000) have precluded a full test of the model. However, in two separate analyses we have found that identification appears to be the key dimension (Lee et al. 2011; Shin, Miller-Day, Hecht, Graham, & Raup-Krieger, 2012). It may be, however, that identification works through or because the videos are interesting and realistic. Future research is needed to test this assumption and the hypothesized curvilinear

relationship to transportation. We turn next to the effects of the process of developing narrative messages on youth.

Booster messages designed by youth

Our approach leads us to predict that youth who create narrative messages will likely be influenced by that development process. We argue that the process of creating narratives is transformative. Our logic follows the same path described above. We believe that in creating narratives, developers are engaged in knowledge and behavioral models that are transformative. While we switch from a message reception to message creation process, the argument remains the same. Creating narratives enhances existing mental models of prosocial behaviors and/or creates new mental models. The process also provides behavioral models that teach skills and enhance self and response efficacy. And, this process works by engaging the youth developers – they identify with the narratives they create, they are interested in the process of development, and they find their own narratives (i.e., the ones they are creating) realistic.

It is less clear, however, how transportation functions. One would first have to identify the maximal or ideal level of transportation given the presumed curvilinear relationship with outcomes (i.e., too much or too little detracts from effects). Writers, directors, videographers, graphic artists, sound designers (depending on the modality), should be able to achieve the maximal level of transportation as they retain a distance from the work. One might see the actors, for example, more completely transporting themselves in a full dramatic presentation. This may be problematic if they focus on the character or role so fully (e.g., transport themselves INTO the role) that they lose sight or focus on the message. Indeed, this is exactly what we found in some of our earlier research. In Hecht et al. (1993) we examined the effects of live presentations of narrative messages and video-based presentations of the same messages and learned that, in the live presentations, adolescents' heightened identification with the actors decreased the effectiveness of the program. When a post-performance discussion of key information was added, however, to the live performance, the effectiveness of the intervention was increased.

While there are other theories that provide cognitive models of some of the underlying processes involved in message production (see for example, Bem 1972), they do not fully tap the construct of "agency" these activities provide. Agency refers to a conscious belief in one's own capacity to control the world and make a difference (Ginwright, Noguera, & Cammarota, 2006; White & Wyn, 1998) and is one of the core elements of actively engaging youth in a democratic culture (Ginwright et al., 2006; Watts & Flanagan, 2007). Agency as a result of involvement in message production is best illustrated in the following story about one of the student *keepin' it REAL* message producers. Unknown to us, the youth evidently had a severe drinking problem. After producing the *keepin' it REAL* video messages, this youth started to be recognized in his community by younger program participants. He consequently reported feeling an obligation to these younger children and quit drinking alcohol and remained sober for the four years we were able to track him. Similarly, it is believed that youth who are engaged in narrative message creation develop a sense of personal agency that, we argue, should translate into enhanced efficacy and socio-emotional competence, increased normative force, and, ultimately, healthier choices.

Again, we have not been afforded the opportunity to test this hypothesis. The current symposium (Krieger et al., this volume) begins this process by examining the types of messages produced by youth participating in *keepin' it REAL*. As part of an eighth grade "booster" component, designed to reinforce and enhance effects obtained in the seventh grade curriculum, youth create *REAL* messages in posters and/or radio and TV PSA formats.

Conclusions

This narrative engagement framework for developing prevention interventions has guided our research studying personal narratives (Alberts et al., 1991; 1992; Hecht et al., 1992, 1993; Lee et al., 2011; Miller, 1998, 1999; Miller et al., 2000; Miller-Day, 2002; Miller-Day & Barnett, 2004; Pettigrew et al., 2011; 2012) and utilizing them to develop health messages (Hecht , Marsiglia et al., 2003; Hecht & Miller-Day, 2007; 2010; Miller-Day, 2008a; Miller-Day & Hecht, 2012). Our experiences and those of others have influenced our thinking and suggest that narratives, indeed, provide an effective health message design strategy. There is solid evidence to suggest that the NEF for adolescence substance use prevention might be transferred to other health topics. What is less clear, however, is why these messages are so powerful.

A narrative engagement framework is useful to guide prevention efforts, but also synthesizes and extends previous narrative research to provide a theoretical model of narrative effects. We posit that engaging narratives provide mental and behavioral models that have the ability to connect with hard-to-reach audiences and both strengthen existing prosocial beliefs and behaviors as well as counteract unhealthy ones. Cultural grounding is articulated as a means of developing engaging narratives and identifying narrative knowledge, cognitive and behavioral modeling, engagement (interest, realism, identification), and social proliferation as the causal mechanisms for narrative effects. As a result, this framework provides a coherent approach to narrative message development and evaluation that, we hope, will advance health message design.

In terms of future directions, while grounded in practices as well as theory and research, much of this approach remains untested. As *keepin it REAL* moves into its dissemination phase, we hope to be afforded the opportunity to investigate more of these theoretical assumptions. There has never been an experimental test of narrative and non-narrative versions of the curriculum. We do not have a clear understanding of the narrative influence of peer testimonials over other forms of evidence. Moreover, we have not yet formally investigated the effects of creating testimonial messages on the youth themselves. This is, of course, one of the advantages of large scale, community-based research. As the story unfolds, we invite other actors to participate in the narrative.

References

Alberts JK, Hecht ML, Miller-Rassulo M, Krizek RL. The communicative process of drug resistance among high school students. Adolescence. 1992; 27:203–226. [PubMed: 1539497]

Alberts JK, Miller-Rassulo M, Hecht ML. A typology of drug resistance strategies. Journal of Applied Communication Research. 1991; 19:129–151.

Alfano CA, Pina AA, Villalta IK, Beidel DC, Ammerman RT, Crosby LE. Mediators and moderators of outcome in the behavioral treatment of childhood social phobia. Journal of the American Academy of Child & Adolescent Psychiatry. 2009; 48:945–953. [PubMed: 19625981]

Bae H. Entertainment-education and recruitment of cornea donors: The role of emotion and issue involvement. Journal of Health Communication. 2008; 13:20–36. [PubMed: 18307134]

Bandura A. Self-efficacy: Toward a unifying theory of behavioral change. Psychological Review. 1977; 84:191–215. [PubMed: 847061]

Bandura A. The assessment and predictive generality of self-percepts of efficacy. Journal of Behavior Therapy and Experimental Psychiatry. 1982; 13:195–199. [PubMed: 7142408]

Bandura A. Social cognitive theory of mass communication. Media Psychology. 2002; 3:265–299.

Barnett JM, Miller M. Adolescents' reported motivations to use or not use alcohol or other drugs. The Social Studies. 2001; 92:209–212.

Barthes, R. The pleasure of the text. New York, NY: Hill & Wang; 1975.

Bem, DJ. Self-perception theory. In: Berkowitz, L., editor. Advances in experimental social psychology. Vol. Vol 6. New York, NY: Academic Press; 1972. p. 1-62.

Berkley-Patton J, Goggin K, Liston R, Bradley-Ewing A, Neville S. Adapting effective narrative-based HIV-prevention interventions to increase minorities' engagement in HIV/AIDS services. Health Communication. 2009; 24:199–209. [PubMed: 19415552]

Beltramini RF. Perceived believability of warning label information presented in cigarette advertising. Journal of Advertising. 1988; 17:26–32.

Bruner, J. Actual minds, possible worlds. Cambridge, MA: Harvard University Press; 1986.

Bruner, J. Acts of meaning. Cambridge, MA: Harvard University Press; 1990.

Bruner, J. The narrative creation of self. In: Angus, LE.; McLeod, J., editors. The handbook of narrative and psychotherapy: practice, theory, and research. Thousand Oaks, CA: Sage; 2004. p. 3-14.

Burck C. Comparing qualitative research methodologies for systemic research: the use of grounded theory, discourse analysis and narrative analysis. Journal of Family Therapy. 2005; 27:237–262.

Burnkrant RE, Cousineau A. Informational and normative social influence on buyer behavior. Journal of Consumer Research. 1975; 2(3):206–215.

Busselle R, Bilandzic H. Fictionality and perceived realism in experiencing stories: A model of narrative comprehension and engagement. Communication Theory. 2008; 18(2):255–280.

Byrne, RMJ. The rational imagination: How people create counterfactual alternatives to reality. Cambridge, MA: MIT Press; 2005.

Campbell RG, Babrow AS. The role of empathy in responses to persuasive risk communication: Overcoming resistance to HIV prevention messages. Health Communication. 2004; 16:159–182. [PubMed: 15090283]

Charon, R.; Montello, M. Stories matter: The role of narrative in medical ethics. New York, NY: Psychology Press; 2002.

Connelly FM, Clandinin DJ. Stories of experience and narrative inquiry. Educational Researcher. 1990; 19(5):2–14.

Clandinin, DJ.; Connelly, FM. Narrative inquiry: Experience and story in qualitative research. San Francisco, CA: Jossey-Bass; 2004.

Cohen J. Defining identification: a theoretical look at the identification of audiences with media characters. Mass Communication and Society. 2001; 4:245–264.

Colby M, Hecht ML, Miller-Day M, Krieger JR, Syvertsen AK, Graham JW, Pettigrew J. Adapting school-based substance use prevention curriculum through cultural grounding: A review and exemplar of adaptation processes for rural schools. American Journal of Community Psychology. in press

Cormier, S.; Nurius, P.; Osborn, CJ. Interviewing and change strategies for helpers: fundamental skills and cognitive-behavioral interventions. Belmont, CA: Cengage Learning; 2008.

Crowley, S.; Hawhee, D. Ancient rhetorics for contemporary students. 4th ed.. White Plains, NY: Longman Publisher; 2008.

DeNeve KM, Heppner MJ. Role play simulations: The assessment of an active learning technique and comparisons with traditional lectures. Innovative Higher Education. 1997; 21:231–246.

Epstein J, Thomson NR, Collins KK, Pancella T. A longitudinal comparison of two versions of an interactive multimedia substance abuse education program. Journal of Child & Adolescent Substance Abuse. 2009; 18:302–321.

Felman, S.; Laub, D. Testimony: Crisis of witnessing in literature, psychoanalysis, and history. New York: Routledge; 1992.

Fisher, WR. Human communication as narration: Toward a philosophy of reason, value, and action. Columbia, SC: University of South Carolina Press; 1987.

Fisher WR. Clarifying the narrative paradigm. Communication Monographs. 1989; 56:55–58.

Galavotti C, Pappas-DeLuca KA, Lansky A. Modeling and reinforcement to combat HIV: The MARCH approach to behavior change. American Journal of Public Health. 2001; 91:1602–1607. [PubMed: 11574317]

Gergen KJ, Gergen MM. Narrative and the self as relationship. Advances in Experimental Social Psychology. 1988; 21:17–56.

Ginwright, SA.; Noguera, P.; Cammarota, J., editors. Beyond resistance! Youth activism and community change. New York, NY: Routledge; 2006.

Glik D, Nowak G, Valente T, Sapsis K, Martin C. Youth performing arts entertainment-education for HIV/AIDS prevention and health promotion: Practice and research. Journal of Health Communication. 2002; 3:263–282. [PubMed: 10977258]

Goodson, IF.; Gill, SR. Narrative pedagogy: Life history and learning. New York, NY: Peter Lang; 2010.

Green MC. Narratives and cancer communication. Journal of Communication. 2006; 56:163–183.

Green MC, Brock TC. The role of transportation in the persuasiveness of public narratives. Journal of Personality and Social Psychology. 2000; 79:701–721. [PubMed: 11079236]

Green, MC.; Garst, J.; Brock, TC. The power of fiction: Determinants and boundaries. In: Shrum, LJ., editor. The psychology of entertainment media: Blurring the lines between entertainment and persuasion. Mahwah, NJ: Lawrence Erlbaum Associates; 2004.

Green, M.; Strange, J.; Brock, T. Narrative impact: Social and cognitive foundations. Mahwah, NJ: Lawrence Erlbaum Associates; 2002.

Hamill R, Wilson TD, Nisbett RE. Insensitivity to sample bias: Generalizing from atypical cases. Journal of Personality and Social Psychology. 1980; 39:578–589.

Hecht ML, Alberts JK, Miller-Rassulo M. A resistance to drug offers by college students. International Journal of Addictions. 1992; 27:997–1019.

Hecht ML, Corman SR, Miller-Rassulo M. An evaluation of the drug resistance project: A comparison of film versus live performance media. Health Communication. 1993; 5:75–88.

Hecht, ML.; Jackson, RL.; Ribeau, S. African American communication: Exploring identity and culture. 2nd ed.. Mahwah, NJ: Lawrence Erlbaum Associates; 2003.

Hecht ML, Krieger JL. The principle of cultural grounding in school-based substance abuse prevention. Journal of Language and Social Psychology. 2006; 25:301–319.

Hecht ML, Marsiglia FF, Elek E, Wagstaff DA, Kulis S, Dustman P, Miller-Day M. Culturally-grounded substance use prevention: An evaluation of the *keepin' it R.E.A.L.* curriculum. Prevention Science. 2003; 4:233–249. [PubMed: 14598996]

Hecht ML, Miller-Day M. The Drug Resistance Strategies Project as translational research. Journal of Applied Communication Research. 2007; 35:343–349.

Hecht, ML.; Miller-Day, M. The Drug Resistance Strategies Project: Using narrative theory to enhance adolescents' communication competence. In: Frey, L.; Cissna, K., editors. Routledge Handbook of Applied Communication. New York, NY: Routledge; 2009. p. 535-557.

Hecht ML, Miller-Day MA. "Applied" aspects of the drug resistance strategies project. Journal of Applied Communication Research. 2010; 38:215–229. [PubMed: 20711485]

Herman, D.; Jahn, M.; Ryan, ML. Routledge encyclopedia of narrative theory. New York, NY: Taylor & Francis; 2005.

Hinyard LJ, Kreuter MW. Using narrative communication as a tool for health behavior change: A conceptual, theoretical, and empirical overview. Health Education & Behavior. 2007; 34:777–792. [PubMed: 17200094]

Hopfer S. Effects of a narrative HPV vaccination intervention aimed at reaching college women: A randomized controlled trial. Prevention Science. 2012; 13:173–182. [PubMed: 21993613]

Hopfer S, Clippard JR. College women's HPV vaccine decision narratives. Qualitative Health Research. 2011; 21:262–277. [PubMed: 20841433]

Hutchinson P, Wheeler J. The cost-effectiveness of health communication programs: What do we know? Journal of Health Communication. 2006; 11:7–45. [PubMed: 17148098]

Johnson-Laird P. Models and heterogeneous reasoning. Journal of Experimental & Theoretical Artificial Intelligence. 2006; 18:121–148.

Kiene SM, Barta WD. Personal narrative as a medium for STD/HIV intervention: A preliminary study. Journal of Applied Social Psychology. 2003; 33:2327–2340.

Kincaid DL. Drama, emotion, and cultural convergence. Communication Theory. 2002; 12:136–152.

Klaver E. Spectatorial theory in the age of media culture. New Theatre Quarterly. 1995; 11:309–321.

Kreiswirth M. Merely telling stories? Narrative and knowledge in the human sciences. Poetics Today. 2000; 21:293–318.

Krizek RL, Hecht ML, Miller-Rassulo M. Language as an indicator of risk in the prevention of drug use. Journal of Applied Communication Research. 1993; 21:245–262.

Kreuter MW, Buskirk TD, Holmes K, Clark EM, Robinson L, Si X, Mathews K. What makes cancer survivor stories work? An empirical study among African American women. Journal of Cancer Survivorship. 2008; 2(1):33–44. [PubMed: 18648985]

Kreuter MW, Green MC, Cappella JN, Slater MD, Wise ME, Storey D, Woolley S. Narrative communication in cancer prevention and control: A framework to guide research and application. Annals of Behavioral Medicine. 2007; 33:221–235. [PubMed: 17600449]

Krieger JL, Coveleski S, Hecht ML, Miller-Day M, Graham J, Pettigrew J, Kootsikas A. From kids, through kids, to kids: Examining the social influence strategies used by adolescents to promote prevention among peers. Health Communication. (current issue).

Langellier KM. Personal narratives: Perspectives on theory and research. Text and Performance Quarterly. 1989; 9:243–276.

Lane C, Rollnick S. The use of simulated patients and role-play in communication skills training: A review of the literature to August 2005. Patient Education and Counseling. 2005; 67:13–20. [PubMed: 17493780]

Larkey LK, Lopez AM, Minnal A, Gonzalez J. Storytelling for promoting colorectal cancer screening among underserved Latina women: A randomized pilot study. Cancer, Culture, and Literacy. 2009; 16:79–87.

Larkey LK, Gonzalez JA. Storytelling for promoting colorectal cancer prevention and early detection among Latinos. Patient Education and Counseling. 2007; 67:272–278. [PubMed: 17524595]

Larkey L, Hecht ML. A model of effects of narrative as culture-centric health promotion. Journal of Health Communication. 2010; 15:114–135. [PubMed: 20390982]

Larson RJ, Woloshin S, Schwartz LM, Welch HG. Celebrity endorsements of cancer screening. Journal of the National Cancer Institute. 2005; 97:693–695. [PubMed: 15870440]

Lauby JL, Smith PJ, Stark M, Person B, Adams J. A community-level HIV prevention intervention for inner-city women: Results of the women and infants demonstration projects. American Journal of Public Health. 2000; 90:216–222. [PubMed: 10667182]

Lee JK, Hecht ML, Miller-Day M, Elek E. Evaluating mediated perception of narrative health messages: The perception of narrative performance scale. Communication Methods and Measures. 2011; 5:126–145. [PubMed: 21822459]

Liebes, T.; Katz, E. The export of meaning: Cross-cultural readings of Dallas. New York, NY: Oxford University Press; 1990.

Lockspeiser TM, O'Sullivan P, Teherani A, Muller J. Understanding the experience of being taught by peers: The value of social and cognitive congruence. Advances in Health Sciences Education. 2006; 13:361–372. [PubMed: 17124627]

Mann C, Hecht ML, Valentine KB. Performance in a social context: Date rape versus date right. Central States Speech Journal. 1988; 39:269–280.

Marcus RF. The friendships of delinquents. Adolescence. 1996; 31:145–158. [PubMed: 9173780]

McDonald, J.; Grove, J. Youth for youth: Piecing together the peer education jigsaw; Paper presented at the 2nd International Conference on Drugs and Young People, Exploring the Bigger Picture; Melbourne, Australia. 2001 Apr. Retrieved from http://www.peer.ca/mcdonald.pdf

Miller, M. (Re)presenting voices in dramatically scripted research. In: Banks, A.; Banks, S., editors. Fiction in social research: By ice or fire. Newbury Park, CA: AltaMira Press/Sage; 1998. p. 67-78.

Miller M, Hecht M, Stiff J. An exploratory measurement of engagement with live and film media. Journal of the Illinois Speech and Theatre Association. 1998; 49:69–83.

Miller, M.; Alberts, JK.; Hecht, ML.; Trost, M.; Krizek, RL. Adolescent relationships and drug use. Mahwah, NJ: Lawrence Erlbaum Associates; 2000.

Miller MA. The social process of drug resistance in a relational context. Communication Studies. 1999; 49:358–375.

Miller-Day M. Parent-adolescent communication about alcohol, tobacco, and other drug use. Journal of Adolescent Research. 2002; 17:604–616.

Miller-Day M. U.S. parent-offspring discourse about alcohol and other drugs. Language and Communication Journal. 2005; 10:10–18.

Miller-Day M. Translational performances: Toward relevant, engaging, and empowering social science. Forum: Qualitative Social Research. 2008a; 9 Article 54.

Miller-Day M. Talking to youth about drugs: What do youth say about parental strategies? Family Relations. 2008b; 57:1–12.

Miller-Day M, Barnett J. "I'm not a druggie": Adolescents' ethnicity and (erroneous) beliefs about drug use norms. Health Communication. 2004; 16:207–231.

Miller-Day M, Dodd A. Toward a descriptive model of parent-offspring communication about alcohol and other drugs. Journal of Social and Personal Relationships. 2004; 21:73–95.

Miller-Day, M.; Hecht, ML. *Keepin' it REAL* when developing narrative health messages. In: Goodboy, AK.; Shultz, K., editors. Introduction to communication studies: Translating scholarship into meaningful practice. Dubuque, IA: Kendall Hunt; 2012.

Miller-Rassulo M. The mother-daughter relationship: Narrative as a path to understanding. Women's Studies in Communication. 1992; 15(2):1–21.

Miller-Rassulo M, Hecht ML. Performance as persuasion: Trigger-scripting as a tool for education and persuasion. Literature in Performance. 1988; 2:40–55.

Moen T. Reflections on the narrative research approach. International Journal of Qualitative Methods. 2008; 5:56–69.

Moyer-Guse E. Towards a theory of entertainment persuasion: Explaining the persuasive effects of entertainment-education messages. Communication Theory. 2008; 18:407–425.

Murphy FC, Wilde G, Ogden N, Barnard PJ, Calder AJ. Assessing the automaticity of moral processing: Efficient coding of moral information during narrative comprehension. The Quarterly Journal of Experimental Psychology. 2009; 62:41–49. [PubMed: 18720279]

Nestel D, Tierney T. Role-play for medical students learning about communication: Guidelines for maximizing benefits. BMC Medical Education. 2007; 7:3–11. [PubMed: 17335561]

Oyserman D, Markus HR. Possible selves in balance: Implications for delinquency. Journal of Social Issues. 1990; 46:141–157.

Pettigrew J, Miller-Day M, Krieger J, Hecht ML. Alcohol and other drug resistance strategies employed by rural adolescents. Journal of Applied Communication Research. 2011; 39:103–122. [PubMed: 21552345]

Pettigrew J, Miller-Day M, Krieger J, Hecht ML. The rural context of illicit substance offers: A study of Appalachian rural adolescents. Journal of Adolescent Research. 2012

Philipsen, G. The prospect for cultural communication. In: Kincaid, DL., editor. Communication theory: Eastern and Western perspectives. San Diego, CA: Academic Press; 1987. p. 245-254.

Polkinghorne, DE. Narrative knowing and the human sciences. Albany, NY: SUNY Press; 1988.

Polkinghorne DE. Narrative configuration in qualitative analysis. International Journal of Qualitative Studies in Education. 1995; 8:5–23.

Pollner M, Stein J. Narrative mapping of social worlds: The voice of experience in Alcoholics Anonymous. Symbolic Interaction. 1996; 19:203–223.

Rashid MS, Sobowale O, Gore D. A near-peer teaching program designed, developed and delivered exclusively by recent medical graduates for final year medical students sitting the final objective structured clinical examination (OSCE). BMC Medical Education. 2011; 11(11):1–7. [PubMed: 21219639]

Robillard AG, Larkey L. Health disadvantages in colorectal cancer screening among African Americans: Considering the cultural context of narrative health promotion. Journal of Health Care for the Poor and Underserved. 2009; 20:102–119. [PubMed: 19711496]

Robson, C. Real world research. 2nd ed.. Oxford: Blackwell Publishing; 2002.

Rogers EM, Vaughan PW, Swalehe RMA, Rao N, Svenkerud P, Sood S. Effects of an entertainment education radio soap opera on family planning behavior in Tanzania. Studies in Family Planning. 1999; 30:193–211. [PubMed: 10546311]

Roser C. Involvement, attention, and perceptions of message relevance in the response to persuasive appeals. Communication Research. 1990; 17:571–600.

Russell RL, Lucariello J. Narrative, yes: Narrative ad infinitum, no! American Psychologist. 1992; 47:671–672.

Salmon, CT. Summary report: Setting a research agenda for entertainment-education; A conference sponsored by Centers for Disease Control and Prevention Office of Communication; 2001. Retrieved October 24, 2010 from http://www.cdc.gov/HealthMarketing/PDF/eersrcha.pdf

Schrank F, Engels D. Bibliotherapy as a counseling adjunct: Research findings. The Personnel and Guidance Journal. 1981; 50:143–147.

Shimp TA, Wood SL, Smarandescu L. Self-generated advertisements: Testimonials and the perils of consumer exaggeration. Journal of Advertising Research. 2007; 47(4):453–461.

Shin, Y.; Miller-Day, M.; Hecht, ML.; Graham, JW.; Raup-Krieger, J. Entertainment-education as prevention tools for school-based substance use intervention; Presented at the meeting of the Society of Prevention Research; Washington D.C., U.S. Jun. 2012

Slater MD, Rouner D. Entertainment-education and elaboration likelihood: Understating the processing of narrative persuasion. Communication Theory. 2002; 12:173–191.

Slater MD, Rouner D, Long M. Television dramas and support for controversial public policies: Effects and mechanisms. Journal of Communication. 2006; 56:235–252.

Smith RA, Downs E, Witte K. Drama theory and entertainment education: Exploring the effects of a radio drama on behavioral intentions to limit HIV transmission in Ethiopia. Communication Monographs. 2007; 74:133–153.

Southwell, BG.; Yzer, MC. The roles of interpersonal communication in mass media campaigns. In: Beck, C., editor. Communication yearbook. Vol. 31. New York: Lawrence Erlbaum Associates; 2007. p. 420-462.

Strange JJ, Leung CC. How anecdotal accounts in news and in fiction can influence judgments of a social problem's urgency, causes, and cures. Personality and Social Psychology Bulletin. 1999; 25:436–449.

Tal-Or N, Cohen J. Understanding audience involvement: Conceptualization and manipulation of identification and transportation. Poetics. 2010; 38:402–418.

Taylor SE, Thompson SC. Stalking the elusive "vividness" effect. Psychological Review. 1982; 89:155–181.

Tobler NS, Roona MR, Ochshorn P, Marshall DG, Streke AV, Stackpole KM. School-based adolescent drug prevention programs: 1998 metaanalysis. Journal of Primary Prevention. 2000; 20:275–336.

Trapp JN, Peel DS, Ward CE. Evaluating the effectiveness of role playing simulation and other methods in teaching management skills. Developments in Business Simulation and Experiential Exercise. 1995; 22:116–123.

Turner G, Shepherd J. A method in search of a theory: Peer education and health promotion. Health Education Research. 1999; 14:235–247. [PubMed: 10387503]

Valente TW, Hoffman BR, Ritt-Olson A, Lichtman K, Johnson CA. Effects of a social-network method for group assignment strategies on peer-led tobacco prevention programs in schools. American Journal of Public Health. 2003; 93:1837–1843. [PubMed: 14600050]

Vorderer P. Audience involvement and program loyalty. Poetics. 1993; 22:89–98.

Warren JR, Hecht ML, Wagstaff DA, Elek E, Ndiaye K, Dustman P, Marsiglia FF. Communicating prevention: The effects of the *keepin' it REAL* classroom videotapes and televised PSAs on middle-school students' substance use. Journal of Applied Communication Research. 2006; 34:209–227.

Washbush J, Gosenpud J. Simulation performance, learning, and struggle. Developments in Business Simulation and Experiential Exercises. 1995; 22:1–4.

Watts R, Flanagan C. Pushing the envelope on youth civic engagement: A developmental and liberation psychology approach. Journal of Community Psychology. 2007; 35:779–792.

West Group. Corpus Juris Secundum. St. Paul, Minnesota: West Group; 2002.

White, H. The value of narrativity in the representation of reality. In: Mitchell, WJT., editor. On narrative. Chicago, IL: The University of Chicago Press; 1981. p. 1-24.

White R, Wyn J. Youth agency and social context. Journal of Sociology. 1998; 34:314–327.

Whitney, P.; Smelser, NJ.; Baltes, PB. International encyclopedia of social behavioral sciences. Oxford, England: Pergamon; 2001. Schemas, frames, and scripts in cognitive psychology.

Wilson, B.; Busselle, RW. Transportation into the narrative and perceptions of media realism; Paper presented at the Annual Conference of the International Communication Association; New Orleans, LA. May. 2004

Winstron AS, Cupchik GC. The evaluation of high art and popular art. Visual Arts Research. 1992; 18:1–14.

Winterbottom A, Bekker HL, Connera M, Mooney A. Does narrative information bias individual's decision making? A systematic review. Social Science & Medicine. 2008; 67:2079–2088. [PubMed: 18951673]

Wirth, W. Involvement. In: Bryant, J.; Vorderer, P., editors. Psychology of entertainment. Mahwah, NJ: Lawrence Erlbaum Associates; 2006. p. 199-212.

Zillmann D. Exemplification theory: Judging the whole by some of its parts. Media Psychology. 1999; 1:69–94.

Zillmann, D.; Brosius, HB. Exemplification in communication: The influence of case reports on the perception of issues. Mahwah, NJ: Lawrence Erlbaum Associates; 2000.

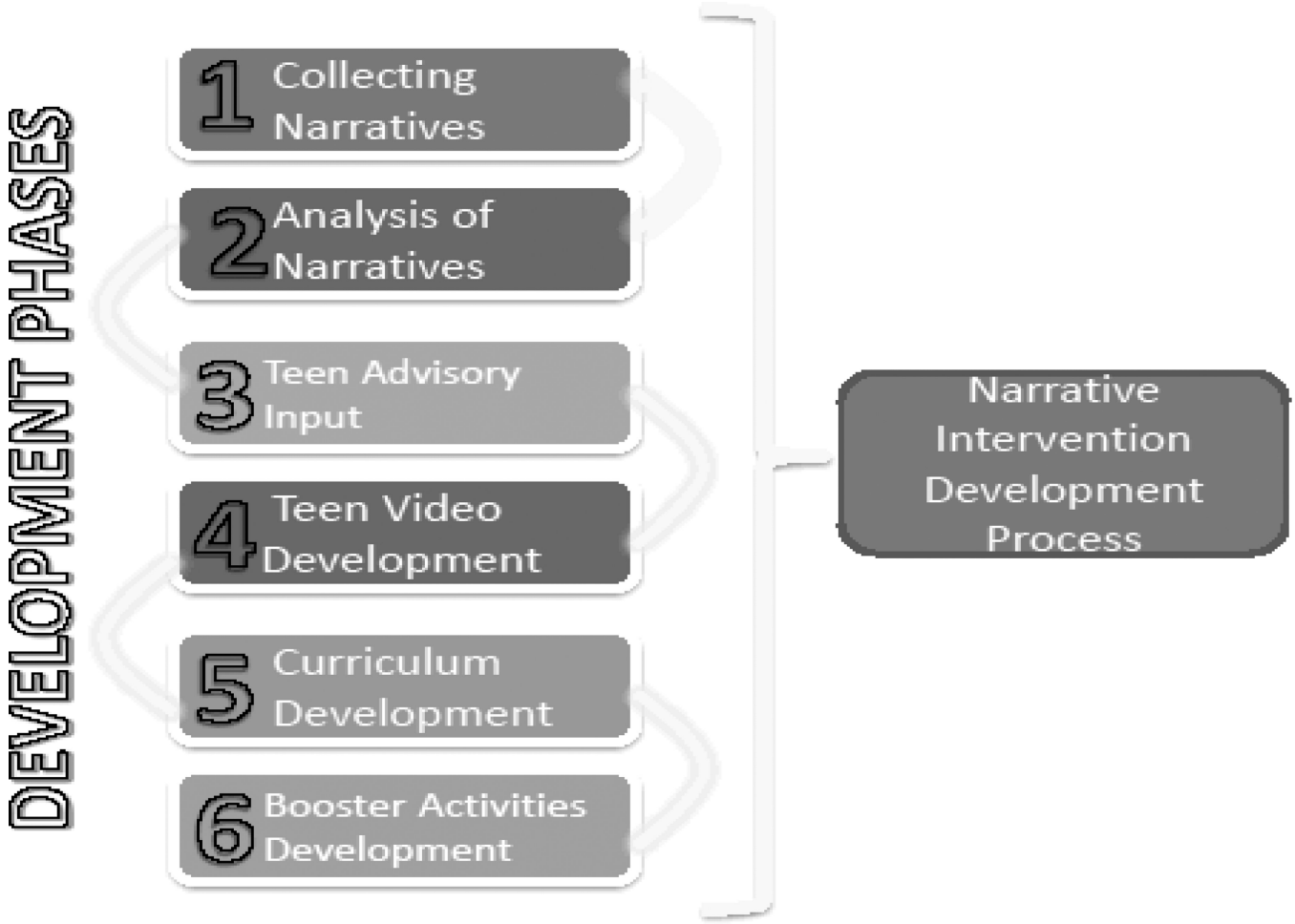

Figure 1.
Narrative intervention development process

Figure 2.
Narrative Engagement Model