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Theory-to-Practice

Transformative Learning in Healthcare

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Abstract

Changing health behaviors and improving health outcomes are a priority in healthcare. However, the format of healthcare may not resonant with adult learners. Transformative learning theory, as outlined by Mezirow, suggests adult learning is spurred by a disorienting dilemma. Adults then use critical reflection and discourse prior to implementing new learning. Healthcare incited transformative learning has not been explored. This article explores the use of transformative learning principles in healthcare settings. Discourse and critical reflection are often absent from the moment of healthcare but group models show promise in meeting adult learning needs and encouraging positive behaviors.

Introduction

Transformative learning has been described in a diversity of contexts ranging from formal education to mountain-top experiences (Merriam, Cafferella & Baumgartner, 2007). A novel application of transformative learning is in the provision of healthcare. Few studies to date have described the moment of healthcare as a time of transformative learning; however, models of participatory action research and group care show promise as methods of transforming patients into health literate, critical thinkers who make successful health choices.

The purpose of this manuscript is to explore the components of Mezirow's transformative learning theory to explicate the relationship between transformative learning and healthcare. Mezirow was chosen as he balances personal reflection with societal goals of emancipation and includes components of other theorists in his evolving work (Dirkx, Mezirow & Cranton, 2006; Kitchenham, 2008; Mezirow, 1994).

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Health is a national and international priority. While the U.S. spends more per capita on healthcare than any other developed country (Kaiser Family Foundation, 2007), it has far from the best health outcomes (World Health Organization, 2008). Health is an indicator affected by a multitude of variables including genetics, socioeconomic status, diet, exercise, and access to healthcare (Warnecke, et al., 2008). The intersection of behavior and health is often the focus of medical care, which educates patients on behaviors to increase the likelihood of good health. Topics of education include healthy eating patterns, safe exercise, safer sexual practices, blood glucose monitoring, and self cancer screening. The goal of much health education is to assist patients in making appropriate choices for their health, however the format of U.S. healthcare may not be structured to appeal to adult learners.

Adults must wade through advice and decide what medications or behaviors are beneficial in light of their personal histories. For instance, is drinking red wine for heart health appropriate even with a family history of alcoholism? Is it worth buying fresh vegetables when they are more expensive than prepared foods? Is an herbal supplement a safe way to lose weight? During the past month, 20% of all adults, and 60% of adults over 65, took three or more prescription medications (National Center for Health Statistics, 2009), which often have interactions with alcohol, over-the-counter medications, or commonly eaten foods. Ideally, patients would have evidence-based information from qualified sources to assist in making health–related decisions; but, with so many decisions, ranging from what type of cooking oil to use to when to perform the Heimlich maneuver, this is not realistically feasible.

The current healthcare system in the U.S. is based on one-to-one interactions with a qualified provider. This system of care reflects American values of individualism and autonomy but may be poorly designed to address patients' larger health and developmental needs. Many national organizations have called for a revision of the U.S. healthcare system to include a greater focus on preventative care and anticipatory guidance (Institute of Medicine, 2001).

Adults must know about their health to effect changes in their behaviors and health status. Many calls for evidence-based healthcare have been made (Institute of Medicine, 2001), but consumers are often left to decide what constitutes good evidence among competing voices from media, advertising, peers, and healthcare practitioners. Health literacy, as defined by HealthyPeople 2010, includes the ability to make informed

decisions (U.S. Department of Health and Human Services, 2008; U.S. Department of Health and Human Services, 2005); however, much debate occurs about how to assist people in making decisions about their health (Gillis, 2004; Greenberg, 2001; Hill, 2004; Kutner et al., 2006).

Transformational Learning: Definition and Connection to Healthcare

Transformational learning involves changing existing beliefs and thought patterns through the use of discourse and critical reflection (Mezirow, 1991, 2000). Ideally, the learner develops an open and accommodating view of the topic or the world. Beyond transmitting content, transformative learning develops skills for ongoing autonomous thinking (Mezirow, 1997). Transformative learning can involve any combination of spiritual, political, emancipatory, or developmental components (Daloz, 1999; Dirkx, 1998; Dirkx et al., 2006; Esperat et al., 2008; Merriam et al., 2007). Transformational learning occurs in formal or informal learning environments and is facilitated by educators or is self-directed (Cranton, 2000; Daloz, 2000). Transformational education, like other types of education, seeks to transmit new knowledge, skills, and ways of thinking, but beyond transmission of instrumental knowledge, it serves to awaken the learner to a new manner of viewing and examining the world (Dirkx, 1998; Kitchenham, 2008).

Transformative learning allows participants to engage in knowledge construction, acting with the facilitators to apply new information and broaden existing schemes of meaning (Dirkx, 1998). According to Mezirow (1991), this is accomplished through an eleven-phase process: a disorienting dilemma, self-examination, critical assessment of assumptions, recognition of discontent and identification with similar others, exploration of new options, planning, acquiring knowledge for plans, experimenting with new roles, building confidence, reintegration, and renegotiation of relationships (Kitchenham, 2008, p. 105; Mezirow, 1991). During these stages the learner uses critical reflection and discourse to evaluate information, skills, roles, and perspectives (Mezirow, 1991). Key components of Mezirow's theories, including the disorienting dilemma, critical reflection, and discourse, will be explored in relation to transformative healthcare. All of Mezirow's transformative learning process can be associated with healthcare-sparked transformation, but, for the sake of brevity, only these key concepts will be explored in depth.

Liminality and the Disorienting Dilemma

Mezirow states that transformative learning begins with a "disorienting dilemma," which places the person in a "liminal space" (Mezirow, 2000). Within the liminal space roles, meanings and knowledge are renegotiated until the person arrives at a new equilibrium (Mezirow, 2000). Transformative experiences can be linked with adult development or rapid change. Often the movement from one developmental stage to another triggers transformational learning experiences (Merriam, 2005; Merriam et al., 2007). For instance, becoming a parent may trigger drastic changes in worldview and educational needs. Sometimes developmental changes are enmeshed with health, such as with pregnancy or aging. Changes in health status are a frequent trigger for adult learning and increase the potential for a transformational learning experience as they necessitate large adjustment (Merriam, 2005). Cancer and HIV diagnosis have been linked to transformational learning (Courtenay, Merriam & Reeves, 1998; Merriam et al., 2007; Rager, 2003). Even less threatening diagnoses, such as diabetes or pregnancy, have the potential for perspective transformation (Merriam et al., 2007). Change in health status as a spark for transformational learning has been well-explored within the adult education literature; however, how healthcare itself, not health status, can begin transformational learning has been less explored.

Healthcare often presents a disorienting dilemma in the form of a diagnosis. Changes in health status and the desire for health open up adults to learning. Yet, healthcare often stops prompting transformation at this point. Information given to patients is often didactic and either explanatory or prescriptive. Patients are often given information about their condition through brief oral instruction or written information (Greenberg, 2001). Short visits allow for little discussion with the provider about causes, treatments, options, and the influence of behaviors. Patients may leave the healthcare center before they have time to reflect on this new information and adjust. The lack of dialogue and time for critical reflection means that most healthcare, by itself, cannot be transformative. Nevertheless, a few models of care allow for critical reflection and discourse within the healthcare encounter.

Group models of care may be compatible with transformative learning within the healthcare setting as they are interactive and acknowledge that participants are experiencing a drastic change and are open to new learning on multiple levels. Support and health education groups have long been used to aid in health transitions. New models of care

merge components of support groups with the provision of healthcare. Group care has been used for prenatal care, diabetes management, well-child care, and other applications (Osborn, 1985; Rising, Kennedy & Klima, 2004; Trento et al., 2004). In these models, both health education and routine medical care occur within the group space. Participants are placed in groups with similar health needs. For instance, group prenatal care involves 8-12 women with similar due dates, and well-child groups have infants of similar ages (Osborn, 1985; Rising et al., 2004). The participants are at similar points in their "disorienting dilemma" and all bring related questions and experiences to the groups.

Transformative learning may also be used on a community level. Esperat et al. (2008) used transformative learning theory, as described by Freire (1993), to develop a framework for participatory action research on childhood obesity (Esperat et al., 2008; Esperat, Feng, Owen & Green, 2005). Within participatory action research, subjects participate in research design to produce and implement interventions appropriate to their culture or local environment (Baum, MacDougall & Smith, 2006; Young, 2006). This approach allows participants to identify their own disorienting dilemma, or, in Freire's terms, to achieve critical consciousness through interactions with the facilitator (Esperat et al., 2008).

The Transformation for Health framework proposed by Esperat et al. (2008) appears to be effective in working with motivated groups of people on community-health related projects but may have limited applicability with typical individualized healthcare. Esperat (personal communication, March 2009) believes the model will work with individualized care, but has not been validated at this level. I believe Transformation for Health has great merit, but due to its reliance on the work of Freire (Freire, 1993), it does not acknowledge the role of development or normal transition in care. Thus, it has limited usefulness for routine and preventative care. In these cases, it is not critical consciousness that must be achieved, but an acknowledgement of the need for new roles and knowledge.

Critical Reflection

> Our meaning structures are transformed through reflection defined here as attending to the grounds (justification) of one's beliefs. We reflect on the unexamined assumptions of our beliefs when the beliefs are not working well for us, or where old ways of thinking are no longer functional. We are confronted with a disorienting dilem-

> ma which serves as a trigger for reflection. Reflection involves critique of assumptions to determine whether the belief, often acquired through cultural assimilation in childhood, remains functional for us as adults. We do this by critically examining its origins, nature, and consequences. (Mezirow, 1994, p. 223)

Critical reflection is an integral part of shaping health behaviors. Adults who cannot critically reflect are dependent on others to create change. In these instances, health becomes a commodity provided by the practitioner or drug. When people critically reflect on their health, they evaluate their current behaviors and make decisions about changes.

Mezirow's stages of transformative learning include an iterative process of critical reflection, adjustment, and continued reflection. It is through this reflection that adults make decisions about how they interact with their environment. Mezirow (1997) states that all adults should be prepared to "think as an autonomous agent in a collaborative context rather than to uncritically act on the received ideas and judgments of others" (p. 8). He believes the goal of transformative learning should include skills for assessment of the validity and applicability of knowledge or ideas (Mezirow, 1997). Critical reflection and the ability to critically assess incoming information and develop priorities are important actions for adults striving for health (Nutbeam, 1999).

Adults need to learn how to critically think about health in order to weigh competing priorities (Hill, 2004; Rudd, 2004). Yet, the moment of healthcare is rushed with patients given little time for deep thought and discussion (Greenberg, 2001). Discussion and dialogue help to stimulate critical reflection and aid learners in assessing the validity of competing information (Mezirow, 1997).

Long-term care may assist in fostering critical reflection in healthcare participants. Models where the patient is seen on a regular basis with plans for incremental implementation of new behaviors and skills may allow the patient time to critically reflect on information and use the provider or health learning community as a source of feedback in this process.

Models of group care incorporate time for critical reflection within the healthcare encounter. In group care for diabetes and prenatal care, the participants meet repeatedly (Rising et al., 2004; Trento et al., 2004); this allows for a topic to be discussed one week and clarified the next. Participants can report how suggested behaviors fit within their life and dialogue with others on pitfalls and solutions. Allowing for the interplay

of critical reflection and dialogue are crucial in transformative learning and can be incorporated into healthcare if the format is adjusted (Hartrick, 1998).

Discourse

Mezirow's (2003) definition of discourse varies in his several publications but is succinctly stated as, "dialogue involving the assessment of beliefs, feelings, and values" (p. 59). He further states, "discourse is learner-centered, participatory, and interactive, and it involves group deliberation and group problem solving" (Mezirow, 1997, p. 6). Open, non-threatening discourse assists learners in reframing their assumptions through critical reflection and discussion as learners can comment, critique, and support new ideas, behaviors, and frames-of-reference (Mezirow, 1994). While critical reflection occurs within the individual, discourse is used to assess and present the validity of evidence to support new ways of thinking (Mezirow, 2003). Thus, learning is both individual and social (Mezirow, 1994). Discourse can be formal, such as within a seminar group; or informal, like that shared between mothers at the playground. Informal discourse may be more important than formal discourse to learners undergoing transformative learning brought on by developmental or personal change (Rager, 2003). Belenky, Clinchy, Goldberger, and Tarule (1986) found that informal discourse was a main method of learning for women and may resonate with women more than didactic methods of learning.

Informal discourse can be hard to develop in an official setting (Cranton, 2006). The facilitator must act to decrease hierarchical relationships and increase horizontal dialogue, which equally values all participants (Cranton, 2006; Esperat et al., 2008). This can be difficult in healthcare as the provider has legitimate and extensive knowledge. Yet, if the provider does not allow for open, equal discourse the patient cannot develop health literacy. Freire's (1993) concept of knowledge banking is especially relevant here. If the patient is involved only in banking knowledge, critical thought and decision skills cannot develop. The provider should allow the patient to be active in the creation of the healthcare plan. While all power inequalities within the provider-patient interaction cannot be eliminated (for instance socioeconomic, educational, and racial inequalities) the provider should strive to create a collegial sharing of healthcare power and knowledge within the healthcare visit (Esperat et al., 2008; Esperat et al., 2005; Mezirow, 2003). Allowing the

patient control over healthcare is a way to increase compliance, self-efficacy, and empowerment (Esperat et al., 2005; Hartrick, 1998; Kirkham, Baumbusch, Schultz & Anderson, 2007; Rising, 1998). It can be difficult to create dynamic, equal discourse within a one-to-one provider-patient visit. Vibrant discourse for transformation may be best accomplished in a group care setting where more patients are present and a peer-to-peer conversation can develop. In these settings, the provider can become a facilitator (Rising et al., 2004). Group care can transmit information, facilitate problem-solving, and support the implementation of new knowledge and behavior (Trento et al., 2004). Participants in group care have been shown to have superior knowledge about their conditions and to report higher satisfaction than patients in traditional care in randomized controlled trials of both diabetes care and group prenatal care (Ickovics et al., 2007; Trento et al., 2004).

Through discourse, learners develop relationships (Cranton, 2006; Massey, Rising & Ickovics, 2006). These relationships can strengthen the learner and increase the likelihood that the content and paradigm shift will remain with the learner (Mezirow, 1991; Taylor, 2007). Learning group and peer group influence may be a greater factor in health behavior than practitioner advice (Greenberg, 2001).

Action

Debate exists about whether transformative learning should lead to action. Freire, who influenced Mezirow's theories, believed that transformational learning will naturally lead learners to realize the presence of inequities and work to fix or overthrow unjust structures (Freire, 1993; Merriam et al., 2007; Mezirow, 1991). However, Mezirow does not agree that transformative learning always leads to visible action. While he does agree that action is usually the last step in transformational learning, the action may be a decision rather than a measurable change in behavior (Mezirow, 1994).

Ideally, transformative learning in healthcare will lead to action. Transformative healthcare goes beyond providing information; rather, it should help patients realize that the power for many health outcomes resides in themselves and not in their relationship with their provider.

Implications for Practice

Incorporation of transformative learning principles in healthcare can be subtle or involve major revision. Group models of healthcare in-

corporate the trio of learning, discourse, and critical reflection. In these models, patients receive medical care together in a group setting. Often, the care provider uses facilitation instead of teaching to allow patients to learn from one another while being present to dispel any incorrect information (Massey, 2006). Peer-to-peer sharing may encourage implementation of positive behaviors and could explain why group prenatal and diabetes care has shown superior satisfaction, knowledge, and outcomes when compared with traditional care models in randomized, controlled trials (Ickovics et al., 2003; Trento et al., 2004). Some patients may be reluctant to enter group care based on cultural norms of individualism and privacy. With the current focus on healthcare reform, group models deserve more attention as they fit the requirements for quality and transparency in healthcare as outlined by the Institute of Medicine (Institute of Medicine, 2001) and have shown to be superior to individual care for some diagnoses.

If group care is not possible, practitioners can still include components of transformative learning in health care. Patients need time to learn the material and a place to discuss their learning and critically reflect on how the information can be applied to their life. Ideally, practitioners would have time and patience for mutual discussion with their patients to provide factual information and discuss implementation of new knowledge and behaviors. Greater time for discourse may be achieved by seeing the same practitioner for multiple visits and this may be more feasible with preventative or chronic care (Mayor, 2006). Many patients want more time with their practitioners to discuss the plan of care (Wheatley, Kelley, Peacock & Delgado, 2008). Integration of discussion time within the moment of healthcare might greatly enhance patient acceptance and implementation of the plan of care. The time allotted for discussion may vary by diagnosis, clinic, or provider type (Wheatley et al., 2008).

Telephone calls for follow-up may allow the patient time to reflect and be able to engage in dialogue. Telephone follow-up by a peer counselor has been shown to improve implementation of healthcare advice (Dale, Caramlau, Lindenmeyer & Williams, 2008), but nurse-initiated calls show mixed effects depending on the health condition or outcome studied (Mistiaen & Poot, 2006; Wong, Wong & Chan, 2005). The prevalence of open, non-didactic discourse varies between the studies and may affect outcomes.

Support groups can give patients a forum for discourse and critical reflection (Moos, 2008). Health-focused groups have been shown to improve outcomes in several types of patient populations (Garrett et

al., 2005; Moos, 2008; Pick, 2008). Support groups differ from health classes in their focus on conversation and personal stories. The narrative nature of these groups fits the format of transformative learning. Groups have even been shown to be effective in improving health outcomes when the participants do not all speak the same language. Greenhalgh, Collard, and Begum (2005) found that even though participants in their diabetes support groups had trouble communicating with words, they often used gestures or their blood glucose monitors to convey information. Groups may overcome some barriers to discourse within the healthcare setting by encouraging peer-to-peer sharing and decreasing knowledge hierarchies, especially where there are culture or power differentials between patient and provider. There are still many drawbacks to groups, including time and cost commitments and access issues for those with physical disabilities.

Technology and internet resources can increase options for transformative learning for those who struggle to participate in other avenues of discourse and learning. Interactive web content can link patients with factual information along with areas for communication. Online interactive discourse with similar people helps patients in health-related decision-making and real-life application of medical knowledge (Straughan, 2007). The online format allows patients access at any location or time of day. This may be especially beneficial for those struggling with restricted mobility due to physical problems or risk of infection, and those who struggle with speech problems or autism.

Online learning also has its share of difficulties. Sites have very little way of verifying posted information. Patients may receive inaccurate or unsafe advice from online peers (Cline & Haynes, 2001). The cost of a computer and online access may deter some lower income patients from online participation. However, Liszka, Steyer, and Hueston (2006) found that computer assisted health learning was even more prevalent in low income, low educational, and minority populations.

If healthcare practitioners want patients to implement health information, they should apply effective adult learning principles to patient education. Changes in health status act as a disorienting dilemma for many adults (Courtenay et al. 1998; Merriam, 2005; Rager, 2003). Healthcare practitioners should allow time for patients to reflect on health information and then provide opportunities for patients to engage in open, egalitarian discourse about how to apply the information to their lives. The format of this discourse could take many forms, including within the healthcare moment, a support group, or online.

Conclusion

Health is a critical concern in the U.S. (U.S. Department of Health and Human Services, 2005). Even with high expenditures, the U.S. lags behind other developed countries in health outcomes (Anderson, Frogner & Reinhardt, 2007; World Health Organization, 2007). Group models of healthcare have been shown to surpass traditional care in many outcome measures. Further research should investigate the effective mechanisms within group models. Patients' perspectives of transformative care need further exploration. Both quantitative measures of health behaviors and qualitative experiences of care would be useful in exploring these new models.

Even if practitioners are not able to implement group medical care, they can refer patients to in-person or online support groups. Telephone follow-up with time for open conversation can also offer time for patients to engage in critical reflection and discourse about their conditions.

These models differ markedly from traditional care within the U.S., which values individualism and privacy. However, they incorporate principles of adult learning and can help move patients from receivers of information to active participants in their care. Increasing health literacy and health outcomes are priorities for the U.S., and practitioners should use all effective strategies to achieve these goals.

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