

Special Article

The Social Cognitive Theory with Diabetes: Discussion**Somsak Thojampa, PhD, RN**

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Correspondence: Somsak Thojampa, PhD, RN, Assistant Professor, Faculty of Nursing, Naresuan University, 99 Moo 9, Thapho, Muang, Phitsanulok 65000, Thailand E-mail address: somsakth@outlook.com**Abstract**

The Social Cognitive Theory (SCT) has been used often in medical and nursing research. The SCT claims that learning occurs in a social context and also believes that learning takes place when there is a dynamic and reciprocal interaction between the individual, environment, and behavior. Social support also can foster adherence to recommended healthy activities for person with DM. Applying all of the constructs of the SCT to one specific public health problem can be quite difficult, especially during the process of developing focused public health programs. However, Social support also can foster adherence to recommended healthy activities for person with Diabetes. The conclusion of this paper, recommended that the social cognitive theory can be used for changing health behavior related to other health problems as well.

Keyword: Social Cognitive Theory, Diabetes, Social support**Introduction**

The Social Cognitive Theory (SCT) was developed from the Social Learning Theory (SLT) in 1986 (Bandura, 1989). The essence of SCT is reciprocal interaction between the individual, behavior and environment. SCT considers the unique social aspects for an individual with any medical condition and how the individual acquires knowledge and maintains his or her behavior, while also considering the social environment in which individual's exhibit behavior. The theory of SLT takes into account a person's past experiences, which influences reinforcements, expectations, and expectancies. All of these will help determine if a person will engage in a specific behavioral change and the reasons of doing so (Bandura, 1989).

Many theories on behavior used in health care focus on initiating certain behaviors, but do not consider the maintenance of that behavior. This is rather unfortunate as the true goal in public health is to maintain healthy behavior instead of merely the initiation of the behavior. The aim of

SCT is to explain how people change their behavior through self-control and reinforcement in order to start goal-directed behavior which can be maintained over time.

There are five constructs which were developed for SLT; the construct of self-efficacy was added when the SLT theory evolved into the SCT (Bandura, 1989) as discussed below.

1. Reciprocal determinism - This refers to the dynamic and reciprocal nature of the interaction between a person (individual with a set of learned experiences), his or her behavior (responses to stimuli to achieve goals) and the environment (external social context). This is the most important concept of SCT.

2. Behavioral capability - This refers to a person's ability to change a specific behavior by learning essential skills and relevant knowledge. This certainly depends on the person's educational background and his or her determination to learn. In order to successfully change a behavior to achieve a set goal, a person

must know his/her goal clearly and how to achieve it. People learn from the consequences of their behavior, which in turn affects the community or the environment in which they live.

3. **Observational learning** - This refers to the notion that a person with a chronic disease can observe and learn a behavior from other people who live in the same community, and then the individual with a chronic disease can reproduce those actions. This is often called "modeling" of behaviors. If an individual with DM sees a good demonstration of a certain behavior, he or she may also want to perform this behavior successfully if he or she makes a decision to do so.

4. **Reinforcements** - This refers to the internal as well as external responses to a person's behavior which affects the possible continuing or discontinuing of certain behaviors. Reinforcements can be self-initiated or be initiated by the environment. Reinforcements can be positive or negative.

5. **Expectations** - This refers to the anticipated consequences of behavior by an individual who initiates the behavioral change. Most adults anticipate the consequences of their actions before engaging in the behavior. So these anticipated consequences can influence successful completion of the behavior. While expectancies largely derive from previous experience, people tend to focus on the value that is placed on the outcome of this behavioral change.

6. **Self-efficacy** - This refers to one's confidence in his or her ability to successfully perform a specific behavior. Self-efficacy is influenced by a person's capabilities and other personal factors, as well as by environmental factors including barriers and facilitators to carry out the self-efficacy.

The six constructs mentioned above all reflect the most important essence of the SCT, which is the mutual relationship between people and the environment that they live in. In this study, reciprocal determinism is based on external or environmental factors which are directly related to social support. Behavioral capability and observational learning refers to learning skills and knowledge from other people either by observation or participate in the community which is also related to social support.

Reinforcement has to come from the environment he or she lives in, which is also in the context of social support. Expectation is related to people's beliefs. Self-efficacy is also related to social support by considering the environment that the person lives in.

Limitation of Social Cognitive Theory

Bandura (1989) mentioned that there are several limitations of the SCT. One should be aware of these limitations when applying SCT in health promotion. There are several limitations of the SCT as mentioned below:

- SCT hypothesizes that changes in the environment will automatically lead to changes in person's behavior, which may not always be true.
- SCT a loosely organized theory which is mostly based on the dynamic interaction the between a person with a medical condition, his or her behavior or lifestyle, and the environment in which the person lives in. It is unclear what the real impact each of these factors is on actual behavioral change and if one factor has more influence than another.
- As SCT was developed from the social learning theory, it is heavily focused on the process of learning. In doing so, SCT may ignore biological differences and health conditions of the individuals which could certainly influence their behavioral patterns and changes.
- SCT pays minimal attention to emotion or motivation, other than through reference to a person's past experience.
- SCT can be applied broadly to many fields. So it may be difficult to apply in a strategy in its entirety.

Applying the Social Cognitive Theory

The Social Cognitive Theory (SCT) has been used often in medical and nursing research. The SCT claims that learning occurs in a social context. The SCT believes that learning takes place when there is a dynamic and reciprocal interaction between the individual, environment, and behavior (Bandura, 1989). When applied to behavior changed for individuals with DM, the SCT can provide a framework that considers social support as well as self-efficacy based on religious values.

Dewar et al. (2012) developed and evaluated social cognitive measures related to adolescent

dietary behaviors. They found that the results support the reliability and factorial validity of social cognitive measures relating to healthy eating behaviors among adolescents. They recommended that the social cognitive theory can be used for changing health behavior related to other health problems as well.

Whittemore (2005) studied metabolic control and self-management with psychosocial adjustment for women with T2DM. She found that the social support and self-confidence in diabetes self-management in women with T2DM can help persons with the disease determine and set individualized goals as well as develop proper strategies. With enhanced social support and self-confidence in diabetes self-management, persons with DM can improve their metabolic control, self-management achievement as well as psychosocial adjustment to the disease.

Qiu et al. (2012) studied improving patients' adherence to physical activity (PA) in DM. They found that the self-efficacy with social support from family, friends, and HCPs play an important role in starting and maintaining regular PA.

Bai et al.'s study showed that social support and self-care behaviors are positively correlated, which implies that social support has a positive impact on self-care behavior (Bai et al., 2009). A similar study by Barrera et al. illustrated that the network of social support resources including friends, family, and the neighborhood can help behavior changes which include increased physical activity and dietary control for less fat consumption in a two-year period (Barrera et al., 2008). A study by Osborn et al. examined the relationships between health literacy, determinant of DM self-care, and glycemic control in adults with T2DM. The study found that social support is significant to diabetes self-management behavior (Osborn et al., 2010).

The results of the study by Barrera et al. revealed the importance of social support in both theory and in practice. The study offered additional evidence that social support has a direct impact on a person's health behaviors. Social relationships appear to contribute to a person's health through mechanisms involving immune system responses. Social resources can support persons in obtaining a healthy diet and physical activities. It has been suspected for a period of time that the association between social support

and mortality may be explained in part by healthy behaviors. People who have supportive social relationships normally take better care of themselves. This mechanism may be applied in interventions such as the one tested in the study by Barrera and colleagues (Barrera et al., 2008).

In Thailand, Khuwatsamrit et al. (2006), studied the effects of social support and found that support from family members, HCPs, and friends helped adherence greatly to self-care behaviors in Thai people with cardiovascular disease (CAD). Social support has a significant positive influence on being confident in self-care practice.

The results of the study also proved that self-efficacy was an important mediator of the association between social support and adherence to self-care requirements. In their study, social support alone explained only 5% of variance in adherence to self-care requirements. However, combined social support and self-efficacy explained a total of 24% of the variance in adherence to self-care requirements. These findings support the importance of social support and self-efficacy which should be recognized in regards to adherence to self-care requirements. Intervention for behavioral change or adherence to self-care requirement should include family members of the person with DM in their self-management program. (Khuwatsamrit et al., 2006).

Conclusion

The essence of SCT is the inter-relationship between the people, the environment they live in and their behavior, with a focus on the social impact. The theory considers many levels of the social ecological aspects when addressing behavioral change of an individual. SCT has been widely used in health care and medical research given the emphasis on the person with a medical condition and the environment which he or she lives in. The environment and social part have become a major point of focus in recent years for public health promotion and its related research activities. In public health, it is important to realize the environment that a person lives in can impact his or her behavior.

For individuals with DM, it is impossible to change their behavior (life style) without considering the environment they live in. This means that the social support, health beliefs, and self-efficacy all play very important roles for

individuals with DM when implementing any strategies to change his or her behavior for improved health outcome. However, as with any other theories, applying all of the constructs of SCT to one specific public health problem can be quite difficult, especially during the process of developing focused public health programs (Bandura, 2004).

Social support accounted for a significant proportion of the variance in the HbA1c level (Thojampa & Mawn, 2017). Whittemore (2005) reported that social support for women with T2DM can help them determine and set individualized goals as well as develop proper behavioral strategies. With enhanced social support in diabetes self-management, persons with DM can improve their metabolic control, achieve self-management goals and facilitate the psychosocial adjustment to the disease. Social support also can foster adherence to recommended healthy activities for person with T2DM.

Conflict of Interest

There is no conflict of interest to declare in this article and no funding was received during the preparation and submission of this article.

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