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### Triggers and Their Influence on Health Behaviors

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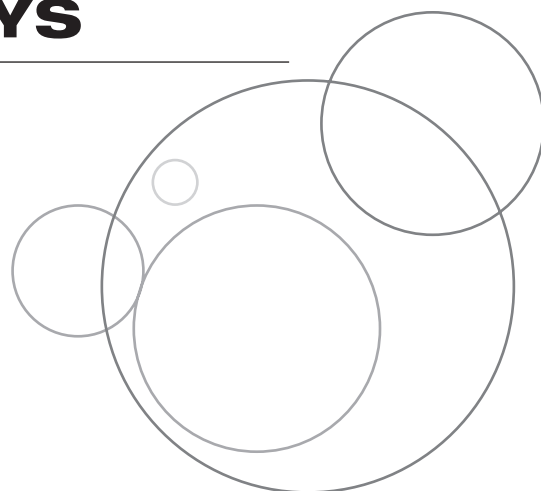
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# ARTICLES AND ESSAYS

## Triggers and Their Influence on Health Behaviors

Christine S. Gipson, PhD, RN, CNE



This article provides a conceptual definition of the concept trigger within the context of health behaviors and applies it to the highly significant health issue of obesity. Healthy behaviors are essential to life and happiness, but they do not just happen. They are triggered, and an inner drive keeps them alive. To help patients gain and retain optimal health, nurses must understand the triggers of healthy behaviors. Walker and Avant's (2011) method of concept analysis is used as the basis for defining the concept of trigger. The antecedents, defining attributes, and consequences of trigger are identified. Findings suggest that nurses can play a role in triggering health behavior change through simple motivational efforts.

**Keywords:** trigger; behavior change; influencing behavior; health behaviors

Once considered to be an age of optimal health, the move from adolescence to young adulthood is now recognized as a critical period for health promotion and prevention of disease (Nelson, Kocos, Lytle, & Perry, 2009). Young adulthood is a time of change that includes multiple stressors. Nelson, Lust, Story, and Ehlinger (2008) described the unique combination of stressors such as financial issues, poor dietary intake, and physical inactivity that greatly impact students' short-term and long-term health. Furthermore, lifestyle factors (Mohindra, Nicklas, O'neil, Yang, & Berenson, 2009), along with social influences and the environment, contribute to the increase in obesity by encouraging or intensifying unhealthy behaviors (Eaton, Kann, Okoro, & Collins, 2007; Jago et al., 2004; Quick, Wall, Larson, Haines, & Neumark-Sztainer, 2013). As students transition from a time of dependence on their parents to a time of independence, there are changes and decisions that must be made on a daily basis.

Obesity is a complex problem with multiple social, environmental, behavioral, and personal factors influencing the behavior of young adults. Weight gain in young adulthood is a multifaceted issue that is not completely understood. Understanding the numerous factors that influence behavior and result in behavior change is necessary to decrease the current obesity epidemic. According to Fogg (2011), there are three elements necessary for behavior change. These elements are motivation, ability, and triggers, and they must all occur at the same time for



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behavior change to occur. The term *trigger* is often interchanged with other words such as prompt, cue, call to action, request, or offer (Fogg, 2011). However, trigger is a concept with unique characteristics that separates it from other terms. This article was written to provide a conceptual definition of the concept trigger and its application, as well as its significance, to the nursing profession.

## SIGNIFICANCE OF THE CONCEPT FOR NURSING

The term *trigger* has been used in the nursing literature to describe events that precipitate medical conditions such as migraines, cardiac events, and asthma. For these conditions, triggers are well defined and have been studied at length. Moreover, in many cases, scales have been developed to measure their presence. However, this concept as it relates to behavior change is not as well defined. Chambers and Swanson (2012), in a study about factors associated with successful and unsuccessful weight maintenance, described the need to define a clear trigger point for action to help counteract the tendencies of individuals to put off making a change. Visram, Crosland, and Cording (2009) described triggers to behavior change with the subthemes of intrinsic motivation and extrinsic factors. Furthermore, concerns about health, loss of function or mobility, and cosmetic factors were listed as triggers to action for weight loss. The stigma attached to those who are overweight can serve as a catalyst for behavior change (Visram et al., 2009).

## CONCEPT IDENTIFICATION

Used as a noun in the *Merriam-Webster's online dictionary*, *trigger* (n.d.) is defined as "something that causes something else to happen." Different uses of the term *trigger* can be found throughout the literature: Asthma triggers, migraine triggers, trigger tool method, trigger points, and pull the trigger are examples. The concept trigger has been used in criminal justice, medicine, academia, and behavioral science.

Criminal justice and the firearm industry use the word *trigger* to describe the lever on a gun which the user pulls to initiate an action (Trigger, n.d.). This overt, conscious, and irrevocable action provides a clear mental image. There are different triggers that can be installed on firearms which enhance this action. When the trigger is engaged, a bullet explodes through the barrel, creating action. The trigger releases the hammer which strikes the bullet causing it to fire. A safety is located on the gun to keep the trigger from firing inadvertently.

In the medical literature, De Wet and Bowie (2011) used a trigger tool to screen medical records for occurrences that alert reviewers to possible adverse events that had previously been undetected. Detection of possible patient harm occurrences led the reviewer to take action to prevent further harm to the patient. Other studies in the medical literature have used trigger tools to alert providers to potential adverse events (Lim, Melucci, Rizer, Prier, & Weber, 2016; Wong et al., 2015). Peterson, Gaeta, Birkhahn, Fernández, and Mancuso (2012) discussed the various triggers that precipitate asthma symptoms, with importance placed on identifying and self-managing asthma triggers as a cornerstone of treatment. Individuals are often aware of specific factors that precipitate asthma symptoms, so accurate identification of asthma triggers is necessary for adequate management (Peterson et al., 2012). Managing asthma involves the use of pharmaceuticals during times of exacerbation and avoiding triggers when possible. The most common trigger

reported in an analysis of migraine triggers by Andress-Rothrock, King, and Rothrock (2010) was emotional stress, followed by lack of or too much sleep, odors, and skipping meals. To be considered a migraine trigger, exposure to the factor must consistently and promptly produce migraine symptoms. Avoiding migraine triggers was the mainstay of treatment (Andress-Rothrock et al., 2010). Studies reviewed in this discipline point to irritants that include internal and external influences that trigger or set off a chain of events in the human body.

A review of the literature in academia was concerned with determining what factors trigger learning or engagement in learning. O'Toole, Solan, Burkhardt, and Klein (2013) examined the use of a video trigger curriculum to increase the frequency of medical residents' screening for social determinants of health (SDH). In the study, residents were shown videos depicting various clinical scenarios that modeled appropriate and inappropriate techniques for screening. Residents who received the trigger curriculum demonstrated a significant change in screening for some SDH and were more likely to report knowledge and comfort to do so (O'Toole et al., 2013). A study on adult lifelong learning conducted by Kungu and Machtmes (2009) argued that understanding the triggers of participation by adults in their learning can provide insight for defining the concept of lifelong learning. In their study, the authors considered circumstances that triggered adult learners to engage in learning. Triggers, when used in the academic setting, have potential to create action in the learner.

Psychology and behavioral management research use the term *trigger* to describe something, whether it be emotional distress or an external stimulus, that *triggers* another behavior (Dalle Grave, Centis, Marzocchi, El Ghoch, & Marchesini, 2013). Furthermore, motivation for change is imperative to modify unhealthy habits, which further necessitate the identification of triggers that lead to behavior change (Dalle Grave et al., 2013). A main point of emphasis found in this discipline was the importance of stimulus control.

Fogg (2009) developed a behavior model that posits that motivation, ability, and trigger are all needed simultaneously to produce behavior change. He describes three types of triggers: spark, facilitator, and signal, in which the motivation and ability of the individual determine the type of trigger needed to produce behavior change. A spark motivates behavior, a facilitator makes the target behaviors easier, and a signal reminds (Fogg, 2009). Each of these triggers spurs an individual into action depending on the level of motivation and ability.

A goal of this review is an exploration of the concept of trigger. After an extensive review of the literature, the working definition of the term *trigger* for the purposes of this article is "an external or internal spark that generates action within an individual."

## DEFINING ATTRIBUTES

Defining attributes are characteristics that are frequently associated with a concept and are found repeatedly in the literature (Walker & Avant, 2011). The following defining attributes of trigger were selected:

- Unique to each individual
- An impulse that results in definitive action
- Internal or external spark

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A defining attribute of trigger is that it is “unique to each individual.” A common theme throughout the literature review was the individuality of stimuli that produced action in different individuals. Another defining attribute of trigger is “an impulse that results in definitive action.” Chambers and Swanson (2012) describe an alarm signal that elicits action in an individual. This trigger signal is that internal or external spark that tells an individual to take action.

## ANTECEDENTS AND CONSEQUENCES

Antecedents are actions that must happen before the concept for it to occur (Walker & Avant, 2011). Throughout the literature, an external or internal stimulant was found to occur repeatedly prior to the development of a certain behavior. In this case, the antecedent, which is the external or internal stimulant, happens as a prerequisite to the trigger. Another antecedent to trigger is the presence of ability and motivation. An individual must have the means and desire to perform a behavior.

Consequences are the result of a trigger taking place. The consequences of a trigger can be positive or negative. For example, an individual with asthma comes into contact with an environmental irritant. The irritant would exacerbate the individual’s asthma symptoms and thus would be negative. On the other hand, when an individual experiences a trigger that results in definitive action toward healthy lifestyle habits, the trigger is considered to be positive. In this case, the consequence is similar to a fight or flight response, or action toward a health outcome. However, the outcomes of trigger alone are inadequate to explain human behavior without some understanding of the individual’s motivation to actually take action.

## EMPIRICAL REFERENTS

According to Walker and Avant (2011), empirical referents are a way to measure the concept under discussion and apply it to the real world. Throughout the literature, methods used to measure the presence of triggers mainly consisted of questionnaires specific to the condition under study (Andress-Rothrock et al., 2010; Chatterjee, Sherwin, & Jain, 2013; Ritz, Steptoe, Bobb, Harris, & Edwards, 2006; Visram et al., 2009). Ritz et al. (2006) developed the Asthma Trigger Inventory (ATI) to measure categories of patients’ self-reported asthma triggers. This questionnaire helped in initial screening of patients to determine the most relevant triggers for each individual, which allowed for evaluation of the impact of such triggers as well as the opportunity to address them in a specific way.

Triggers are unique to each individual. Thus, a questionnaire to determine the main categories of triggers that lead an individual to take action and change her or his behavior would be useful to effect behavior change.

## MODEL CASE

According to Walker and Avant (2011), a model case is one in which all the defining attributes of the concept are exhibited. The following is a model case for trigger:

Janae is a registered nurse who is overweight and has recently been diagnosed with hypertension. One day, she is caring for a patient in the emergency room who has had a heart attack. Janae sees the pain and suffering in the patient’s face

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and begins to think about her recent diagnosis of hypertension. As Janae reflects on this situation, she is determined not to let this happen to her. Once outside the room, she stomps her foot and declares, "That is not going to happen to me!"

After Janae finishes her shift, she drives to the gym to exercise. Instead of drinking alcohol after her shift, something she usually does, Janae chooses to drink water and eat a healthy meal.

This scenario exemplifies a model case because it includes all of the defining attributes of trigger. Caring for a patient experiencing complications of high blood pressure served as a trigger for Janae to take *unique*, definitive *action*. Upon reflection on the situation, Janae decided to change her behavior (*internal spark*).

Triggers can lead to both healthy and unhealthy behaviors. A study conducted by Kempes, Tiggemann, and Hollitt (2014) investigated the impact of exposure to televised food advertising and found that advertisements may activate thoughts about eating, triggering one's motivation to eat. Conversely, a vibration or alarm from wearable technology could be a reminder to stand, exercise, or go to sleep, thus triggering healthy behaviors that may decrease the risk of obesity.

## CONCLUSION

The adoption of healthy behaviors is vital to reduce the burden of chronic illness. An important piece of this conversation must include identifying specific actions or cues that serve as motivational triggers. Despite interest in the obesity epidemic and numerous interventions to decrease its occurrence, overweight and obesity are continuing to increase (Dalle Grave et al., 2013). The increasing trend is detrimental to individuals, families, and the health care system alike. Determining the internal or external stimuli that trigger individuals to make a change and to take action is imperative to decrease the obesity epidemic.

Triggers can change over time (Peterson et al., 2012). According to Fogg (2009), a behavior will not occur without an appropriate trigger. With the increase in obesity, a method for sustained behavior change is necessary. The harmonious blending of motivational currents with positive behavior triggers will be a huge step in the control and treatment of behavior-based health challenges. Nurses should lead the way in this health care revolution based on positive individual changes to ensure that a happy, healthy lifestyle becomes the norm rather than the exception.

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