

A Goal-Setting and Goal-Striving Model to Better Understand and Control the Weight of U.S. Ethnic Group Members

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ABSTRACT:

This conceptual paper develops a refined theoretical goal-setting and goal-striving model regarding U.S. ethnic group members' weight-control motivations and decision-making processes in order to better understand the reasons for their weight and to guide the development of effective health-coping strategies and intervention programmes regarding health disparities in general and weight control in particular. It advances our understanding by proposing how individuals' different types of goals affect behaviour in the goal-striving stage and that the construct of hope can have a moderating effect on both the goal-setting and goal-striving stages. This paper theoretically demonstrates that for some people, keeping their body weight well controlled can be challenging, but nonetheless can aid in the development of effective strategies to control the weight of U.S. ethnic group members.

Key words: goal setting; goal striving; weight control; goal; hope; minority; health disparities

Introduction

The Centres for Disease Control has stated that obesity in the United States is at epidemic proportions, and that the number of obese and overweight people continues to increase across age and gender groupings (e.g., Ogden 2014). Flegal et al. (2004) found that 30 % of adults in the U.S. are obese, while 64 % are overweight. Flegal et al. (2010) reported that the age-adjusted prevalence of obesity among U.S. men was 33.8 %, and 35.5 % for U.S. women in 2007-2008.

Serious physical, health, financial and social consequences result from being overweight or obese and have implications for economic development, public health and public health policy. People who are overweight or obese are more likely to have high blood pressure, diabetes, heart disease, some kinds of cancer, and to die prematurely (e.g., Flegal et al. 2010). In addition, costs for medications increase 77 % due to obesity, whereas the costs for health care increase 36 % (Flegal et al. 2004).

The health of some U.S. ethnic group members compared to that of the U.S. majority white population is startlingly lower (e.g., Williams and Kumanyika 2003). For example, studies found that black women in the U.S. are twice as likely to be obese compared to white women (e.g., Stevens, Kumanyika, and Keil 1994). While genetics may explain weight differences to some degree, in general genetic change is thought to occur far too slowly to account for the increases in excessive weight among U.S. citizens (Anderson, Butcher, and Levine 2003). Therefore researchers argue that social and behavioural sciences along with biomedical science must bring their expertise to bear upon the significant health disparities across ethnic groups within the United States in order to better understand and decrease these evident health disparities (Williams and Kumanyika 2003).

To this end, the overarching purpose of this paper is to investigate the connection between

self-regulation and weight-control behaviour and to develop a refined theoretical model (see Figure 1) regarding the weight-control motivations and decision-making processes of U.S. ethnic group members. Such effort must be taken in order to better understand the reasons for this population's weight issue and to guide the development of effective health strategies and intervention programmes with regard to health disparities in general and weight control in particular.

<<Insert Figure 1 about here>>

Theoretical Background and Proposition Development

Recently social cognition models of health behaviour have gained considerable interest (Bagozzi and Edwards 2000). Bagozzi and Edwards (2000) reviewed the theories and models most commonly used for explaining and predicting health behaviours. These include the health belief model, health locus of control, the theory of planned behaviour, protection motivation theory, and models using self-efficacy and outcome expectancy as health behaviour predictors (for details, see Bagozzi and Edwards 2000; Williams and Kumanyika 2003).

Within the framework of goal-directed behaviour, weight control can be viewed as a means to fulfil certain personal goals. Behaviour that is goal directed is considered to begin with goal setting (Bagozzi and Dholakia 1999). Bagozzi and Edwards (2000) describe goal setting as “the deliberative processes one goes through in weighing reasons for acting, which culminates in a goal intention” (p. 255). Goal intention links goal-setting and goal-striving behaviour and is defined as “the implementation and self-regulation of one's end-state intentions and instrumental

acts linked to goal attainment” (Bagozzi and Edwards 2000, p. 255). Viewing weight control as a goal-directed behaviour overcomes the limitations of previous studies using the theory of reasoned action and the theory of planned behaviour (e.g., Bagozzi 1992). However, failing to adequately consider the motivational processes, studies applying only the theory of reasoned action and the theory of planned behaviour appear insufficient in explaining why and when people control their weight.

Goal-Directed Attitudes and Goal Intention

Because goal setting involves establishing a goal intention, goal-directed attitudes are more complex than action-directed attitudes. Bagozzi and Warshaw (1990) proposed three distinct goal-directed attitudes that correspond to three types of outcomes which affect the establishment of a goal intention: success, failure, and the process of striving to reach a goal. For instance, when considering the outcome of achieving weight loss goals, an individual may form distinct evaluations with regard to pursuing and *successfully* achieving a goal (P1) as opposed to pursuing and *failing* to achieve the goal (P2). Similarly, an individual may form different evaluations with regard to the experience or the process itself that leads to either goal realisation or to goal failure (P3) (e.g., Bagozzi and Warshaw 1990).

P1: An attitude geared toward success positively affects goal intention regarding weight control.

P2: An attitude geared toward failure negatively affects goal intention regarding weight control.

P3: A positive attitude geared toward process positively affects goal intention regarding weight control.

Goal Intention, Action Desire and Action Intention

Goal intention in and of itself does not indicate the precise actions that are necessary in order to achieve a goal (Bagozzi and Dholakia 1999). To achieve a particular goal, an individual needs to transform a goal intention into action intention (or into what is known as behavioural intention, a term used in the theory of planned behaviour) (Xiao and Wu 2008). Next the individual must transform action intention into action, and finally he or she must transform action into goal realisation. Thus the individual must make further decisions and process additional information.

Recent studies suggest that one essential antecedent to intentions in goal-directed and effortful behaviour models is desire (Bagozzi, Dholakia, and Basuroy 2003). Although one tradition perceives desires in a narrow biological sense, another tradition—adopted in this research—sees desires (reflected in goal desires and action desires) in a broader sense (Bagozzi 2010). In this other tradition, desire is defined by Bagozzi as a particular amalgam of emotions or feelings that possess motivation and which occur in forms that are either volitive or appetitive (Bagozzi 2010). Besides motivating goal intentions and action intentions, desires are considered to perform an integrative function (e.g., Bagozzi 2010; Wu 2011). By changing certain reasons to act into the motivation to act, desires generally comprise a decision maker's felt urge to meet a goal or to take action (Bagozzi, 2010). For example, action desires indicate how strongly a decision maker wants to enact specific goal-directed behaviour(s) (to maintain or lose body weight); action desires also target the decisions maker's means to their selected ends, thereby energising the action intentions to perform instrumental acts or goal-directed behaviour(s) (to

exercise three times a week and eat less meat but more vegetables) (e.g., Bagozzi, 2010; Mele 1995).

P4: The greater the individual's goal intention associated with weight control, the greater the individual's action desire to control his or her weight.

P5: The individual's action desire to control his or her weight is positively related to the individual's action intention to control his or her weight.

Action Desire, Attitude, Subjective Norms and Perceived Behavioural Control

The goal-striving stage involves instrumental actions to attain and maintain goals. The accomplishment of a goal is a complex process that requires a variety of efforts with regard to intermediary acts. After the goal intention is established, appraisals are made with respect to the instrumental acts needed for goal achievement (Bagozzi, Baumgartner, and Yi 1992). In the context of weight-control behaviour in the United States, we argue that weight control is seldom habitually or effortlessly implemented, but instead requires the initiation of action desires associated with action-related mental events. For example, among the many options that can fulfil U.S. citizens' weight-control goals (exercise, diet and lifestyle), genetics and a relatively high living standard alone cannot fully account for the increases in excessive weight among U.S. citizens. Also, since most people can rarely control their body weight habitually, in order to control their body weight, individuals are left to choose among different options, form plans, implement the chosen options, overcome obstacles and temptations, and monitor progress. Therefore we identify and examine the theory of planned behaviour in this study as one possible theory that satisfies the particular criteria of initiating action desires by way of action-focused

mental events.

Subjective norms and attitudes in this paper's model differ from the theory of planned behaviour and are posited to positively determine the action desire (as opposed to the action intention) to control body weight. The theory of planned behaviour proposes that subjective norms and attitudes are reasons for acting and are antecedents to action intention; however, they tend to lack motivational import in and of themselves. Therefore attitudes and subjective norms typically do not serve as motivators to act except when a decision maker explicitly acknowledges them as his or her personal motives to act (Bagozzi, Dholakia, and Basuroy 2003). Reasons for acting must increase to a level of emotive significance in order to influence decisions (Bagozzi 1992). Emotive significance emerges from the "integrative, embodied appraisal, and transformative properties of action desires" (Bagozzi 2010, p326), and many studies give credence to the central role of action desires on action intentions (e.g., Bagozzi, Dholakia, and Basuroy, 2003). In short, attitudes and subjective norms toward weight control will influence action intentions to control weight only to the degree that they lead to a desire to act.

P6: The individual's action desire to control weight positively mediates the effect of the individual's attitude toward weight control on the individual's action intention toward weight control.

P7: The individual's action desire to control weight positively mediates the effect of the individual's favourable subjective normative pressure from important others regarding weight control on the individual's action intention toward weight control.

In contrast to the proposed effects of attitudes and subjective norms, this particular model

considers perceived behavioural control as having both a positive as well as a direct effect on action intentions (weight-control intention). Additionally, perceived behavioural control is a reflection of the decision maker's own perception of control in regard to executing the chosen actions in order to actually enact a particular decision; hence action intentions are often governed by perceived behavioural control (Bagozzi, Dholakia, and Basuroy 2003).

P8: The greater the individual's perceived control over his or her weight control, the stronger the individual's action intention to control his or her weight.

Plan Enactment and Goal Realisation

We use plan enactment, the degree to which an individual successfully enacts a chosen plan (Dholakia, Bagozzi, and Gopinath 2007), to represent the actions of the goal-striving process in the proposed model. We include plan enactment for several reasons. Compared with other constructs such as planning and plan completeness, plan enactment is more essential, captures variances better in both explicit and implicit planning among decision makers, and is more feasible when carrying out empirical studies. In terms of the actual effort expended or the steps taken to execute a behaviour, plan enactment is essential in describing what happens in the goal-striving stage. In contrast, the construct of planning seems elusive and unstable, depending on factors such as goal types, individual characteristics and task complexity. In fact planning in the goal-striving stage is implicit, but not required (Dholakia, Bagozzi, and Gopinath 2007). Many goals, particularly those effortful ones like weight-control goals, have various courses of implementation. Decision makers therefore often may not formulate a detailed and explicit action plan; instead, they rely on reacting to opportunities to act, as opportunities arise

(Dholakia, Bagozzi, and Gopinath 2007). Also the actual degree of decision makers' planning varies and exists on a continuum, ranging from a detailed plan with specific actions to a diffuse readiness to act without any reference to specific actions (e.g., Dholakia, Bagozzi, and Gopinath 2007).

Compared with plan enactment, the plan completeness construct is difficult to measure, particularly when associated with implicit planning. Furthermore the plan completeness measurement may differ depending on which specific actions or plan a decision maker refers to, especially if he or she has modified the original plan.

Goal realisation, the successful or unsuccessful attainment of the goal selected by a decision maker, refers to the outcome of the goal-striving process (Dholakia, Bagozzi, and Gopinath 2007). As the final construct in our model, goal realisation is similar to the actual behaviour, the focal dependent variable in the theory of planned behaviour.

However in contrast to the theory of planned behaviour's convention which proposes that actions are a direct function of behaviour intention, we propose that the relationship between action intentions and goal realisation is mediated by plan enactment based on the arguments in the previous section. In certain cases the chosen plan may be modified, or in other cases the decision maker's goal may not be successfully attained. For most effortful decisions however, such as weight-control behaviour in this research, we still anticipate that plan enactment positively relates to goal realisation (Dholakia, Bagozzi and Gopinath 2007), particularly depending on the meaning or interpretation a decision maker gives to plan enactment and goal realisation.

P9: The individual's plan enactment to control his or her weight positively mediates the effect of the individual's action intention on his or her goal realisation regarding weight control.

The Role of Different Individual Goals

Different goals guide people's propensities (Bagozzi, Dholakia, and Basuroy 2003; Wu, Bhappu, Helm, 2011). In this research we assert that different goals can have a broader and more dynamic influence on behaviour by proposing the ways in which individuals' different goals affect behaviour in the goal-striving stage in addition to their impact during the goal-setting stage (Wu, Bhappu, Helm, 2011). This position differs from the more traditional models' views, such as the theory of planned behaviour (Ajzen 1991) and the model of effortful decision-making and enactment (Bagozzi, Dholakia, and Basuroy 2003), which suggest that more proximal determinants mediate the effect of a decision-maker's goals on his or her behaviour. Social-adjustive goals for example, motivate individuals to watch and control their weights for image-related reasons which may help them maximise rewards in their external environment and minimise punishments. As such, individuals guided by social-adjustive goals are more likely to pay attention to important others' opinions (subjective norms) during their weight-control decision-making process thereby making the consistency, clarity and nearness of rewards and penalties important factors (Katz 1960).

On the other hand, individuals are motivated by value-expressive goals to choose lifestyle goals that reflect their self-image (e.g., body image) and positively reinforce their central values. Their primary reward is in validating their views of themselves and establishing their identities as opposed to monetary gain or securing social prestige (Katz 1960). As such, individuals guided

by value-expressive goals are less likely to pay attention to important others' opinions (subjective norms) during their weight-control decision-making process. Thus:

P10: Individual different goals (e.g., social-adjustive vs. value-expressive) moderate the relationship between subjective norms and action desire regarding weight control.

The Role of Hope

The present research offers another theoretical contribution: the role of “hope,” a concept that relates to goal-directed behaviour, but differs from a goal itself. MacInnis' and de Mello's (2005) definition of “hope” is that it has “a positively valenced emotion evoked in response to an uncertain but possible goal-congruent outcome” (p.2). They argue that hope's interactions with variables (such as consumer expectations and involvement) will significantly affect other outcome variables, including consumer brand attitudes and satisfaction. By synthesising the existing literature, this paper examines the approaches taken to restore hope and increase behavioural self-regulation. Regarding job performance, individuals possessing a high degree of hope have a greater number of goal-related strategies and have greater motivation to reach their goals compared to individuals possessing “low hope” (Peterson and Byron 2008). Similarly, this paper proposes that the construct hope (e.g., people with high vs. low hope) can have a moderating effect on both the goal-setting and goal-striving stages. For example, factors that may affect individuals' hope levels include mortality and life expectancy, job security, salary, health insurance coverage, and doctors' perception and treatment of different ethnic groups. These factors as a whole may cause different hope levels among different ethnic groups, which in turn influence the factors and relationships in the goal-setting stage and goal-striving stage,

respectively. Thus:

P11: The individual's low hope level diminishes the relationship between the individual's attitude toward success and goal intention regarding weight control.

P12: The individual's high hope level diminishes the relationship between the individual's attitude toward failure and goal intention regarding weight control.

P13: The individual's low hope level diminishes the relationship between the individual's attitude toward process and goal intention regarding weight control.

P14: The individual's low hope level diminishes the relationship between the individual's goal intention and action desire regarding weight control.

P15: The individual's low hope level diminishes the positive relationship between the individual's action desire toward weight control and action intention toward weight control.

The Role of Ethnicity

In addition to the above propositions, another central purpose of this paper is to better understand and decrease certain evident health disparities (e.g., being overweight, obesity, and weight control) across ethnic groups (i.e., racial identity groups). Specifically, this paper—both as a conceptual paper as well as one from a goal-setting and goal-striving model perspective—aims to establish a refined motivation model with an emphasis on the roles of individuals' different types of goals and the construct of hope.

To illustrate the usefulness of our proposed model as well as the insights it provides, we compare our model and its propositions with related studies. In their study on the impact of

emotional distress (due to weight gain) on the perception of self-efficacy with regard to maintaining self-control (when racial identity is controlled for), Moore and Williams (2011) found that the emotional distress of goal-realisation failure mediated the impact of ethnicity (White vs. Black) on perceived self-efficacy in resisting eating temptations. Different from the approach of Moore and Williams (2011), we argue that a different or potentially better approach is *not* to treat racial identity as an observable independent variable (or at most to treat racial identity as a control variable); instead—similar to studies that use different personalities to study human behaviour—we suggest using other unobservable latent constructs (e.g., different types of goals and levels of hope) that may be theoretically and empirically more meaningful in reflecting differences among ethnic groups.

Different from Moore and Williams' explanations (2011), we also provide additional insights based upon our proposed model and propositions. Moore and Williams (2011) found that white females who reported higher emotional distress about weight gain than black females, showed lower self-regulatory efficacy in resisting eating temptations particularly when negative emotion were involved. However, according to our proposed moderating role of different goal types, their finding might be due to the possibility that black females' individual goals might lean more toward value-expressive ones, causing them to be less concerned about others' opinions (subjective norms), and to have a lower level of action desire and action intention regarding diet. As a result they would have a higher body mass index which in turn would cause them to be less vulnerable to eating temptations (i.e., higher self-regulatory efficacy in resisting eating temptations according to Moore and Williams, 2011). On the other hand, in their study white females' individual goals might lean more toward social-adjustive ones, causing them to be more concerned about others' opinions (subjective norms), to have higher weight reduction activities,

and to have a higher level of action desire and action intention to diet. As a result, they would have lower body mass index, which in turn would cause them to be more vulnerable to eating temptations.

Similar to the reasoning demonstrated above, one can also focus on the construct of hope to offer additional insights and reconceptualise the relationships in the study of Moore and Williams (2011). In fact, our above reasoning and illustrations demonstrated that Moore and Williams (2011) might have overlooked important mediators (e.g., desire to diet and intention to diet) and moderators (e.g., goal types); should use more relevant dependent variables (e.g., intention to diet) rather than the less relevant variable of resisting eating temptations; and might use other more appropriate mediation analysis approaches, rather than the one suggested by Baron and Kenny (1986) (Zhao, Lynch, and Chen 2010).

Because of our proposed approach with regard to the role of ethnic differences (racial identity differences) and to avoid our proposed model from becoming too complex, for the purpose of illustration we propose the following general proposition (P16) and choose not to specify or include it in Figure 1.

P16: Differences exist among certain U.S. ethnic members that tend to be reflected and to become salient through the identified moderators (e.g., types of goals, hope) that serve as latent constructs.

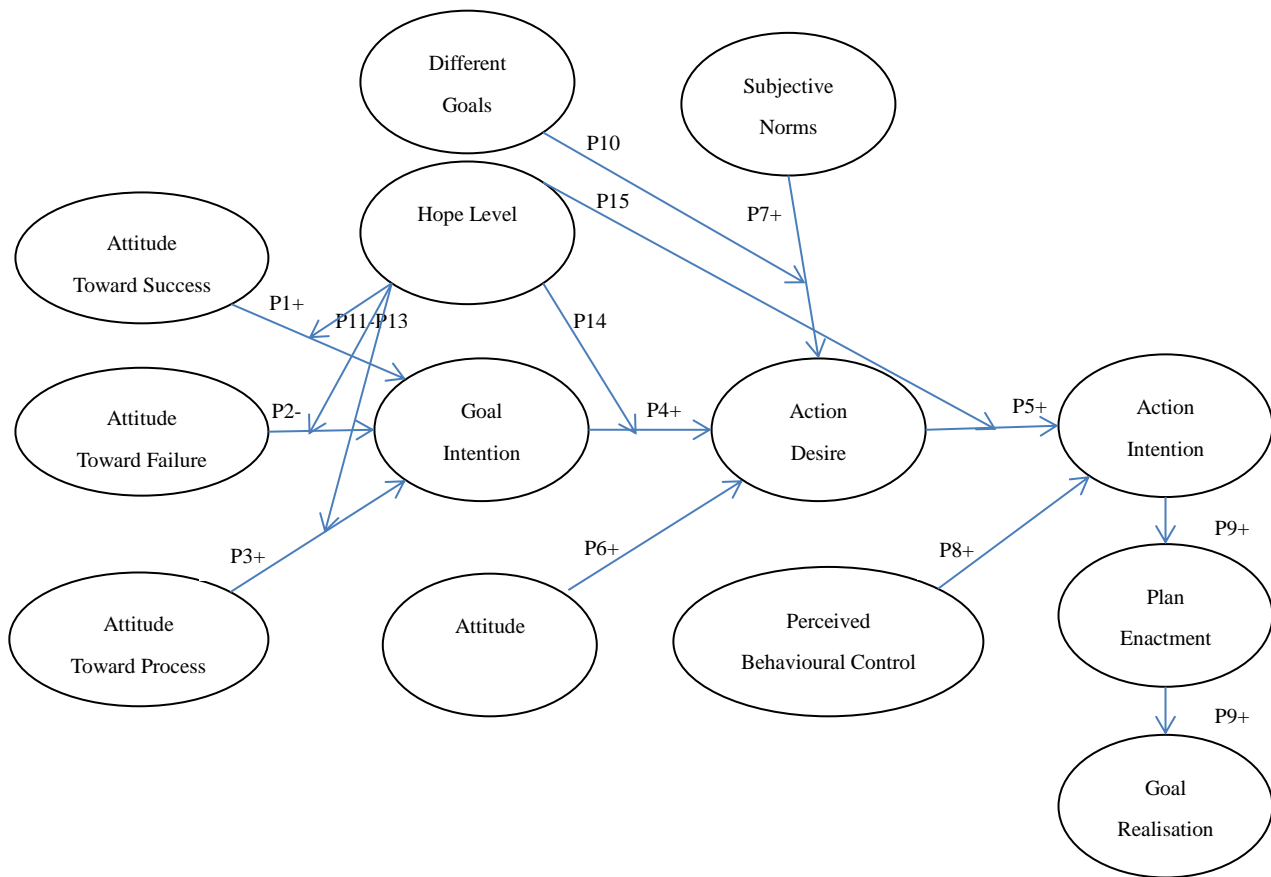


Figure 1. A Goal-Setting and Goal-Striving Model Regarding Weight-Control Motivations and Decision-Making Processes

Note: The general proposition 16 regarding the role of ethnic differences is not displayed in Figure 1.

Discussions

Theoretical Implications

By establishing a refined motivation model this paper emphasises the psychological mechanisms involved in U.S. ethnic group members' goal-setting and goal-striving behaviours regarding

weight control. It theoretically extends and integrates both the model of effortful decision-making and enactment (Bagozzi, Dholakia, and Basuroy 2003) and the theory of planned behaviour (Ajzen 1991) (a) by proposing that individuals' different types of goals affect behaviour in the goal-striving stage; (b) by proposing that the construct "hope" can have a moderating effect on both the goal-setting and goal-striving stages; and (c) by reconceptualising the relationships of constructs which are key to the theory of planned behaviour with the constructs of desire, goal types, and hope. By delineating clearer understanding of both the role of different types of goals and the construct "hope" in regard to goal-directed behaviour in general, as well as the motivations and decision-making processes underlying minorities' weight-control behaviour in particular, this paper provides a powerful theoretical model for future social science studies focusing on health disparities.

Managerial Implications

This paper can also offer important managerial implications. For example, compared with individuals driven by social-adjustive goals, those who are driven by their own value-expressive goals—especially when their goals are incongruent with healthy behaviours—may be less motivated to control their weight. Effective health-coping strategies, health care policy strategies (e.g., the Obama Health Care Plan) and intervention programmes can be developed, promoted, and implemented to potentially change individuals' "undesirable" goals into "desirable" ones and to increase their "hope" level. The strategies suggested in turn will help such individuals form additional weight-control related strategies, motive them further, and enhance their self-efficacy to control their weight.

Aside from the implications derived from the model's individual constructs, perhaps the

most significant implications come from the proposed model as a whole. This paper's refined goal-setting and goal-striving model offers a clearer and keener understanding of general underlying dynamics that drive U.S. ethnic members' weight-control behaviour along with the particular role of hope and of individuals' different goals. Seemingly scattered and elusive weight-control views can be synthesised to form a simple yet relatively comprehensive model to help public policy makers, doctors and their target audience see both the "trees and the forest." In the effort to control weight, individuals can look to the proposed model to easily pinpoint important weight-control factors and also know when and how they play a role in weight control. Additionally these individuals can avoid confusion in different situations (e.g., cultural or ethnic) in which the order of importance of the model's factors vary depending on different weight-control contexts, including different types of goals and hope levels that may be affected by age, income, and gender. Ultimately the proposed model provides more comprehensive guidance for doctors, public policy makers and individuals with regard to health disparities in general and weight control in particular.

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