

# [Smoking behavior in different smoking stages psychology essay](https://assignbuster.com/smoking-behavior-in-different-smoking-stages-psychology-essay/)

This research used the Extended Model of Goal Directed Behaviour to examine how social and personal factors affect the difference between the desire to smoke and smoking behavior of young adults during the stages of development of smoking behavior. This study explores the effect of the exogenous constructs positive and negative anticipated emotions, subjective norm, behavioral control on the endogenous construct behavioral desires. This study examines the predictions that these exogenous constructs have different effect on the endogenous construct for the different smoking stages. Based on a sample of 129 participants the analyses demonstrate that positive anticipated emotions only have effect on behavioral desires for regular smoking young adults and that negative anticipated emotions have no effect for any smoking stage. Subjective norm, however, has a larger effect for experimenters than for regular smoking young adults, whereas perceived behavioral control only has effect for the latter group. The findings and implications are discussed to increase the effectiveness of existing prevention programs for young adults to quit smoking.

## Summary

The young adulthood period characterizes with a decrease in the oversight of parents and other adults. Young adults take more responsibility for actions that will affect their current and future health status, e. g. cigarette smoking. There are several theories and models that explain the smoking behavior of young adults. The Extended Model of Goal-Directed Behavior (EMGB) is one of these models which seeks to explain behaviors when the behavioral act in itself is not an end i. e. conduct of a given behavior is part of an overarching goal. The key construct introduced by the EMGB is behavioral desire. Behavioral desires represent the motivational state of mind wherein appraisals and reasons to act are transformed into a motivation to do so. This motivation or desire is hypothesized as the most proximal determinant of intentions in the EMGB. Behavioral desires therefore have an integrative function of exogenous constructs: goal desires, positive and negative anticipated emotions, subjective norms, perceived behavioral control and past behavior.

Researches in this thesis show that social and personal factors influence the smoking behavior of young adults. Every day young adults are affected by different persons who smoke, in particular those who are close to this age group. Moreover, each young adult has an unique combination of personal characteristics which largely determine who he or she is and how he or she behaves, e. g. personality traits such as emotions and behavioral control. However, these theoretical insights only partly explain or predict the likelihood of this influence. Smoking behavior is complex behavior that evolves through different stages. These five smoking stages have been summarized as never smoker, experimentation, intermittent, regular and ex-smoker. It is therefore difficult to indicate which of these factors are most important in which stage, since the influence of these factors depends on the degree to which a young adult has already started experimenting with cigarettes.

The proposed conceptual model of motivated behavior and predictions are deducted based on the stages and EMGB. Since the problem statement assessed in this thesis especially focuses on social and personal factors, it is more relevant to focus on anticipated emotions, subjective norm and perceived behavioral control in the EMGB to understand how these constructs affect the difference between goal desires and volitions in young adults’ experimentation and intermittent/regular smoking behavior.

Given the results of the correlations and path coefficients of each construct, my application of the EMGB provides insights about how social and personal factors affect the difference between the desire to smoke and smoking behavior of young adults during the stages of development of smoking behavior to increase the effectiveness of existing prevention campaigns.

Regular smoking young adults will have great desire to use a tool as an aid to quit smoking if thesis young adults perceive high levels of positive emotions associated with the anticipated success to quit smoking. Therefore, prevention programs should communicate to regular smoking young adults that smoking cessation is associated with positive anticipated emotions like excitement, delightful, happiness, satisfaction, proud and self-assurance.

However, prevention campaigns should not use negative anticipated emotions such as angriness, frustration, guilt, sadness, disappointment, depression, worrisome, discommode and fear in the communication to young adults to quit smoking, because young adults who perceive higher levels of negative emotions associated with the anticipated success to quit smoking will have no desire to use a tool as an aid to quit smoking.

Furthermore, experimenters and regular smoking young adults who perceive great normative pressures to use a tool as an aid to quit smoking will have the great desire to do so. Therefore, people (e. g. parents and peers) who are important to these adults should be encouraged to participate in prevention programs to address the smoking behavior of these young adults. These programs should make parents of these adults aware that they play an important role in their child’s smoking development and should give advice and information to parents on how they can prevent their children from smoking. Moreover, peers should also be included in prevention programs. These programs should teach experimenters and regular smoking young adults to resist peer pressure to smoke.

My findings also show that behavioral control does contribute to the behavior of regular smoking young adults. These adults have great desire to use a tool as an aid to quit smoking, if these young adults perceive a great level of control and fewer barriers. It is important that prevention programs help these young adults in stopping smoking by convincing them that they have the ability to quit smoking.

Furthermore, positive and negative anticipated emotions are positively correlated for all groups and the effect of subjective norms on behavioral desires might be affected by positive anticipated emotions. According to social scientists, young adults are born with certain personal characteristics but the social environment may mediate or moderate these characteristics to a certain extent. In order to determine that this statement is true, further deeper research is necessary.

The results should be interpreted with care due to the limitations of this research. The first limitation is the consideration of actual behaviors. The construct actual behaviors should also be implemented in the EMGB in future research. The second limitation is the small sample size due to the limited time for this research. The third limitation is the validity of the participants´ reports about the prevalence of cigarette smoking, because smokers are likely to underestimate the amount smoked or to deny smoking at all.

Contents

## Introduction

A young adult is generally a person aging from 18 to 29. Young adults differ from adolescents or older adults through a typical phase of major changes. It is a generation that postpones the traditional family pattern. Instead, they live with friends, follow trends in clothing, carefully follow decorations or music, alternate between studies, jobs and sexual partners. Young adults learn to take initiative, obtain legal, emotional and financial independence, marry and get children (Arnett, 2000; Furstenberg et al., 2004). Any financial or other support services previously are decreased or terminated. As oversight of parents and other adults decreases, young adults take responsibility for actions that will affect their current and future health status, e. g. cigarette smoking.

Trends in cigarette smoking among adults have changed little over the past decade despite of public and school education campaigns showing the consequences of smoking. In 2011 34. 3% of the young adults in the Netherlands, including 13. 8% heavy smokers, smoked each on average 8. 5 cigarettes per day (CBS, 2012). Cigarette smoking is addictive and harmful (e. g. De Vries, Engels, Kremers, Wetzels & Mudde, 2003) and is linked with an increased risk of heart diseases, stroke, lung and other types of cancer, and chronic lung diseases (U. S. Department of Health and Human Services, 2004). Furthermore, smoking during pregnancy contributes to an increased risk of miscarriage, premature delivery, and having a low birth weight infant (Mathews, 2001).

There are several theories and models that explain the smoking behavior of young adults. Fishbein and Ajzen’s Theory of Planned Behavior (TPB) and the Theory of Reasoned Action (TRA) reasoned that the fundamental factors attitude, subjective norm, perceived personal control and intent related to the behavior influence a young adult’s behavior (Montano & Kaspryzk, 2008). Theoretically, a young adult is most likely to take over a behavior if he or she perceives the behavior as normally accepted (i. e., family members, peers, and the media claim that the everyday activity may be normal), has a positive attitude toward the behavior and control over whether or not he or she takes part in the behavior and if it is his or her intention to take over this behavior in the future. Another model that is part of these general behavior models is the Extended Model of Goal-Directed Behavior (EMGB; Perugini & Conner, 2000). The EMGB is a decision making model which seeks to explain behaviors when the behavioral act in itself is not an end i. e. conduct of a given behavior is part of an overarching goal. The key construct in the EMGB is behavioral desire (Bagozzi, 1992; Gollwitzer, 1999), which is influenced by social and personal factors.

These social and personal factors play an important role in the explanation of smoking behavior of young adults (Pieterse & Willemsen, 2005). Every day young adults are affected by different persons who smoke. Famous people like movie stars who smoke on TV, at home where the parents smoke and by classmates or by groups of friends. The social environment plays an important role in the development of smoking behavior among young adults, in particular those who are close to this age group. Moreover, each young adult has an unique combination of personal characteristics which largely determine who he or she is and how he or she behaves (e. g., Robins, John, Caspi, Mofitt, & Stouthamer-Loeber, 1996). Personal factors are for example socio-demographics (gender, age, and income level), self-esteem, risky, rebellious and deviant behavior, emotions, have a tendency to take risks, be sensitive to the influence of peers, the personality traits and skills such as behavioral control.

However, smoking behavior of young adults is complex, because it evolves through different stages (Leventhal and Cleary, 1980). These smoking stages have been summarized as never smoker, experimentation, intermittent, regular and ex-smoker (Flay, 1993; Flay, Ockene, & Tager, 1992). Since the influence of social and personal factors depends on the degree to which young adults have already started experimenting with cigarettes, it is difficult to predict to what extent which of these factors affect the smoking behavior of young adults in each smoking stage (Pieterse & Willemsen, 2005).

## Problem Statement and Research Questions

The problem statement assessed in this thesis is therefore as follows:

How do social and personal factors affect the difference between the desire to smoke and smoking behavior of young adults during the stages of development of smoking behavior?

The formulated and investigated research questions are using data from other studies and surveys. The four main questions examined in this thesis are as follows:

Which stages of the development of smoking behavior can be distinguished?

Which cognitive behavior models can be distinguished?

Which social and personal factors play a role in smoking behavior?

How do the stages of development affect the influence of social and personal factors in smoking behavior?

## Academic Relevance

As previously discussed, there are fundamental factors that influence a young adult’s smoking behavior, like social and personal factors (Montano & Kaspryzk, 2008). In 2005 researchers studied whether young adults’ transition from trying smoking to daily smoking could be predicted by family smoking behaviors (Bricker et al., 2005). What they found was that young adults, who were initiating or trying smoking the first time, were influenced by family smoking behaviors. These young adults transitioned from trying to monthly smoking and from monthly to daily smoking. Other researchers found that subjective norm and perceived availability were strongly correlated and there were strong inverse correlations between perceived parental sanctions and smoking (Ma et al., 2003). Other research supports that smoking behavior is influenced by subjective norm (Seo et al., 2005; Larsen et al., 2009; Rosendahl et al., 2005; Book et al., 2005).

Researchers studied positive and negative attitudes toward smoking to determine if attitudes predicted smoking behaviors (Larsen & Cohen, 2009). They found that there were more negative feelings about smoking than positive feelings. How much a young adult smoked in the past was predicted by a positive attitude toward smoking. However, past or current smoking behavior wasn’t predicted by a negative attitude. Furthermore, they also studied to determine if intent and future behaviors could be predicted by positivity and negativity. The results of this study supported the first that ambivalence may be a strong predictor of smoking behavior over time. They also found that individual’s active smoking behavior in the past and in the future were predicted by a positive attitude. Other researchers also found that smoking behavior and attitudes were strongly correlated (Ma et al., 2003). Examining the Bagozzi and Lee (2000) study on body weight regulation positive emotion alone was found to have a significant effect. Furthermore, in a test of studying effort (Leone, et al. 1999) negative anticipated emotion alone have a significant effect.

Above researches showed that social and personal factors influence the smoking behavior of young adults. However, these theoretical insights only partly explain or predict the likelihood of this influence. Smoking behavior is complex behavior that evolves through different stages. Therefore it is difficult to indicate which of these factors are most important in which stage, since the influence of these factors depends on the degree to which a young adult has already started experimenting with cigarettes (Pieterse & Willemsen, 2005; Leventhal & Cleary 1980; Mayhew, Flay, & Mott, 2000; Colby et al., 2000; Flay, 1993; Flay, Ockene, & Tager, 1992).

In conclusion, empirical evidence shows that social and personal factors play a role in explaining young adults’ smoking behavior. However, their smoking behavior arises step by step and in each stage other factors have a different influence on their smoking behavior. Furthermore, new attempts are still needed to address their smoking behavior besides existing actions and prevention programs. Therefore, the contribution of this paper is to provide insights about how social and personal factors affect the difference between the desire to smoke and smoking behavior of young adults during the stages of development of smoking behavior to increase the effectiveness of existing prevention programs.

## Structure of the Thesis

This current study sought to examine smoking behavior among young adults in the Netherlands, with four specific objectives. The first objective is to distinguish stages of smoking behavior. The second objective is to distinguish cognitive behavior models such as The Extended Model of Goal-Directed Behavior. The third objective is to determine which social and personal factors play a role in smoking behavior. These first three objectives are discussed in the theoretical framework. The fourth objective is to determine how the stages of development affect the influence of social and personal factors in smoking behavior. This objective is discussed in the remaining of the thesis.

## Theoretical Background

## Stages in the Development of Smoking Behavior

Smoking is described as a complex behavior which develops through five different stages (Leventhal & Cleary, 1980). Smoking in adolescence is commonly conceptualized as progressing through a sequence of developmental stages characterized by different stages of smoking frequency and intensity (Mayhew, Flay, & Mott, 2000), often leading to dependence of nicotine (Colby et al., 2000). These five smoking stages have been summarized as never smoker, experimentation, intermittent, regular and ex-smoker (Flay, 1993; Flay, Ockene, & Tager, 1992). Experimenter endorses trying cigarettes, although denied smoking within the past 30 days or ever smoking regularly (i. e., daily smoking). Intermittent smokes between 1 and 29 out of the past 30 days and regular refers to smoking which emerges on a daily basis and is driven by high dependency of nicotine and experience of withdrawal symptoms (Colby et al., 2000). Ex-smoker stopped smoking, endorsed regular smoking and denied smoking within the past 30 days.

## Behavioral Change Models

Behavioral change theories and models try to explain the motives behind changes in behavioral patterns of individuals. According to these theories and models, environmental, personal, and behavioral characteristics are the major factors in behavioral determination. Each behavioral change theory or model emphasizes on different factors trying to explain behavioral change. The most prevalent are the Social Cognitive Theory, Theories of Reasoned Action and Planned Behavior and Extended Model of Direct-Goal Behavior. Research has also been conducted regarding specific elements of these theories, especially elements like self-efficacy that are common to several of the theories (Ajzen, 1985).

Social Cognitive Theory (Bandura, 1989) suggests that behavioral change is determined by environmental, personal, and behavioral elements. Each element affects each of the others. According to this theory the main requirement for the behavioral change is the conception of the self-efficacy of a person or the belief that one is able to successfully lead the behavior to the desired result or outcome. E. g. when a young adult feels vulnerable to a disease and he expects a positive change if he changes his behavior and perceives encouragements of his social environment to change, then his efforts may not succeed if he does not believe that he can actually change. Substantial empirical evidence suggests that beliefs about self-efficacy (and the related concept of ‘ optimism’) are reliable predictors of behavior and that they have an indirect effect on behavioral intervention (e. g., Bandura et al., 1989; Ewart, 1995; Kaplan et al., 1994). Despite the fact that a lot of research supports the use of Cognitive Social Learning Theory, this theory has the limitation that some behavior is the result of emotion responses (e. g. jealousy can drive a young adult to behave in a way that is not consistent with his normal behavior) (Stephen Pinker, 2007).

The Theory of Reasoned Action predicts an individual’s intention to perform a behavior at a specific time and place (Fishbein, 1967). The theory was intended to explain all behavior about which people have the ability to display self-control. Factors that influence behavior choices are joined together through the variable behavioral intention. To maximize the predictive value of intention to a specific behavior it is crucial that measures of intention are very similar to the measurement of behavior as regards the terms of action, target, context and time. The behavioral intentions are a function of attitude and subjective standards (indicate what relevant people in the environment find good or bad behavior).

Fishbein and Ajzen’s Theory of Planned Behavior is one of the most widespread theories of human behavior. The theory was first described in 1988 and is a continuation of the Fishbein’s TRA. Many years and studies later Fishbein and Ajzen realized that there was something missing in the TRA model. The TRA model only worked in situations where surveyed people also reported to have full control over the situation. Where this is not the case, or less, the model was found not to work. This led to the development of the TPB. The big difference between TRA and TPB is the addition of the determinant perceived behavioral control. The TPB suggests that intention again is the best predictor of behavior. Intention depends on three underlying determinants: attitude towards behavior, subjective norms and perceived behavioral control. Attitude towards behavior is a composite of beliefs about the behavior (perceived outcomes of the behavior and an evaluation of that outcome), the subjective norm is a composition of normative beliefs (the perceived approval or disapproval of significant others and motivation to comply), and perceived control behavior is a composite of beliefs about control (evaluations of the presence or absence of factors that enable and factors that stand in the way and the strength of their influence). Background variables, such as demographic factors, are supposed to influence behavior only through the three determinants and behavior.

However, the TPB is mute concerning the role of goals (Eagly and Chaiken, 1993; Perugini & Conner, 2000). They are implicitly viewed simply as a distal predictor that may influence behavior in a way such that its effects are subsumed by more proximal determinants such as one’s attitudes (e. g. their beliefs about whether their smoking is good or bad), subjective norms (e. g. whether the individual feels that important others want them to stop smoking) and perceived behavioral control (e. g. their perceptions regarding the ease at which they can stop smoking or their ability to quit). These three influences, in turn, jointly affect one’s behavioral intention that is seen as the direct precursor to behavior. In other words, the underlying assumption is that regardless of the goals (e. g., being healthy) for which behaviors (e. g., stop smoking) may be pursued, the analysis of the determinants of this latter level is sufficient to predict specific actions.

Moreover, goal theory rejects this notion that perceived behavioral control provides the motivational impetus to form a behavioral intention. Goal theory posits that those antecedents alone do in fact provide insufficient impetus to fully understand and explain one’s volitions (Armitage & Conner, 2001). This view of a single-level processing of information from goals to behavioral intentions is also at odds with more recent models of goal-directed behavior including the Extended Model of Goal-Directed Behavior (EMGB; Perugini & Conner, 2000). The Extended Model of Goal Directed Behavior is a decision making model which seeks to explain behaviors when the behavioral act in itself is not an end, i. e., conduct of a given behavior is part of an overarching goal. Within the EMGB the interplay between goal and behavioral levels is brought into the forefront by considering behaviors in terms of the goals for which they are functional. The EMGB in respect to the TPB uses a broader class of volition, as suggested by recent contributions (Bagozzi, 1992; Bagozzi & Edwards, 1998; Conner & Sparks, 1996), rather than the narrower construct of intention. The EMGB taps additional areas such as behavioral desire, anticipated emotions, past behavior, goal desirability and perceived goal feasibility.

The key construct introduced by the EMGB is behavioral desire (Bagozzi, 1992; Gollwitzer, 1999). Behavioral desires represent the motivational state of mind wherein appraisals and reasons to act are transformed into a motivation to do so. This motivation or desire is hypothesized as the most proximal determinant of intentions in the EMGB. Behavioral desires therefore have an integrative function of the antecedents, including subjective norms, and perceived behavioral control, and provide impetus for intention formation. This form of desires (Davis, 1984; Perugini & Bagozzi, in press) is further qualified in the EMGB as an extrinsic desire, that is ` …a desire for something for its believed conduciveness to something else that one desires’ (Mele, 1995, p. 391).

Anticipated emotions represent a specific form of counterfactuals[1], called prefactuals (Gleicher, Boninger, Strathman, Armor, Hetts, & Ahn, 1995), which are hypothesized to influence the desire to perform a given action. Anticipated emotions of goal achievement or failure have a motivational role in goal setting and initiation of behavior-related processes. The process behind the functioning of anticipated emotions are posited to be dynamic, contingent on one’s mental appraisal of goal achievement and goal failure, and entailing self-regulatory processes (Bagozzi, 1992; Carver & Scheier, 1990, 1998).

Past behavior is a proxy of habit (Triandis, 1977) and is hypothesized to have a direct impact on behavior. Goal desirability, or goal desires, and goal perceived feasibility are added to the variables specified in the Model of Goal-directed behavior (MGB) and the model is called Extended Model of Goal-directed behavior (EMGB) for expository purposes. Goal desirability has been repeatedly proposed by several authors as key construct (Atkinson, 1964; Dholakia & Bagozzi, 2002; Liberman & Trope, 1998; Gollwitzer, 1990). A widely accepted definition in the social psychological literature for this concept would define goal desirability as ` … the valence of an action’s end state. Goal perceived feasibility refers to the ease or difficulty of reaching the end state’ (Liberman & Trope, 1998, p. 7). This definition emphasizes the personal value which is attached to a certain goal outcome. However, it also de-emphasizes the key feature of the personal motivation to achieve that goal outcome, which is central in philosophical analyses (Davis, 1984; Mele, 1995). From the perspective of the agent who is appraising the goal outcome, the desire to achieve that outcome is the key motivational construct. In fact, the desirability of an end state implies by definition that the agent has a desire to achieve that end state. As argued by Perugini and Bagozzi (2001) (the distinction between desires and volitions), this form of desire has a central role in goal-directed behaviors, in particular at the stage of goal setting, and it should be distinguished from the desire to perform a given behavior.

## Conceptual Framework and Predictions

## The Proposed Conceptual Model

Accepting that the smoking stages and EMGB are valid in this context, the development of a two-step model of motivated behavior (figure 6. 1) and predictions are deducted based on past research (Flay, 1993; Perugini and Conner 2000; Perugini and Bagozzi 2001; Shui et al., 2008). The model is represented in a square-and-arrow figure in which causation is indicated by single-headed arrows. In the model the stages in the development of smoking behavior affect the EMGB. The first step is in consistent with previous literature the smoking stages were defined on the basis of smoking frequency and recency. The second step contains the EMGB-constructs goal desires, anticipated emotions, subjective norms, perceived behavioral control and past behavior, which are proximal determinants of behavioral desires. Perceived behavioral control is influenced by goal perceived feasibility and behavioral volitions are influenced by past behavior and behavioral desires. These endogenous constructs are also influenced by factors outside the conceptual model (including measurement error). The effects of such factors are represented by the error terms (e). These terms are much more than random fluctuations in the endogenous constructs due to measurement error.

Figure 6. 1 The Proposed Conceptual Model

Every path in the proposed conceptual model represents a prediction.

P1 Smokers with a greater desire to quit smoking will have a greater desire to use a tool as an aid to quit smoking.

P2 Smokers who perceive higher levels of positive anticipated emotions associated with the success to quit smoking will have greater desire to use a tool as an aid to quit smoking.

P3 Smokers who perceive higher levels of negative anticipated emotions associated with the success to quit smoking will have less desire to use a tool as an aid to quit smoking.

P4 Smokers who perceive greater normative pressure to use a tool as an aid to quit smoking will have a greater desire to do so.

P5 Smokers who have a stronger belief in their ability to quit smoking will perceive a greater level of control and fewer barriers in the use of a tool to aid to quit smoking.

P6 Smokers who perceive a greater level of control and fewer barriers in the use a tool as an aid to quit smoking will have a greater desire to do so.

P7 Smokers with a greater desire to use a tool as an aid to quit smoking will have a stronger volition to do so.

P8 Smokers who have used a tool as an aid to quit smoking in the past will have a stronger volition to do so again.

## Predictions

Given the results of past research, the exogenous constructs impact behavioral desires which in turn make a contribution to the endogenous construct of volitions (Shui et al., 2008). However, I do not know how the exogenous constructs play a role on behavioral desires in young adults’ experimentation and intermittent/regular smoking behavior. Moreover, the problem statement assessed in this thesis especially focuses on social and personal factors. Therefore it is more relevant to focus on subjective norm (P2), anticipated emotions (P3 and P4) and perceived behavioral control (P6). The predictions of these constructs on behavioral desires in the context of young adults’ experimentation and intermittent/regular smoking behavior are implemented as refinements (a) of the predictions of past research.

Each young adult has an unique combination of personal characteristics which largely determine who he or she is and how he or she behaves (Robins, John, Caspi, Mofitt, & Stouthamer-Loeber, 1996). Behavioral genetic studies showed that personal characteristics such as individual’s emotions and behavioral control also affect the individual’s smoking behavior (Hiroi & Agatsuma, 2005; Terracciano & Costa, 2004; Boomsma et al., 1994; Madden et al., 2004). Furthermore, most of these characteristics have been shown to be generalizable across cultures (McCrae, 2001b; McCrae & Costa, 1997; Paunonen et al., 2000; Terraciano, 2003). Although the literature remains unanswered about the effect of positive and negative anticipated emotions on behavioral desires of the three groups my predictions are:

P2a Regular smoking young adults who perceive higher levels of positive anticipated emotions associated with the success to quit smoking will have greater desire to use a tool as an aid to quit smoking than experimenters and intermittent smoking young adults.

P3a Regular smoking young adults who perceive higher levels of negative anticipated emotions associated with the success to quit smoking will have less desire to use a tool as an aid to quit smoking than experimenters and intermittent smoking young adults.

Perceived behavioral control refers to young adults’ perceptions of their ability to perform a given behavior: quit smoking. However, I predict that experimenters are more convinced that they