

# [The independent variable and dependent variable](https://assignbuster.com/the-independent-variable-and-dependent-variable/)

[Business](https://assignbuster.com/essay-subjects/business/)

Business Research The initial step of a research process is identifying a topic in line with the research Polonsky and Waller (3) identify a research as a detailed study undertaken to discover new information and reach a new understanding. The main significance of a research topic is in the defining of e path to assist in pursuing the truth about an idea of the subject on research (Hair et al. 3). The topic we identify in our case is the effect of various activities of British American Tobacco (B. A. T) on the health of Kenyan citizens. These activities could include cigarette manufacturing, advertisement of their products, marketing and promotions. In Kenya, B. A. T is one of the companies with the greatest promotional and advertisement activities for their products. This topic will help us determine whether such undertakings of this company have an effect within the context of the reported cases of lung cancer. The only way to find information and explain a research topic is the use of variables. A variable is any characteristic or property that can change from time to time (Mooney, Knox, and Schacht 1). A good example is poverty level in Kenya that changes from time to time based on the measures undertaken by the Kenyan community with the assistance of the international community. In this case, the variables applicable in explaining our research topic are cancer cases, marketing strategies used to market cigarettes, different brands of cigarettes, cigarettes’ packaging, promotional methods and advertisements. We could categorize these variables as either dependent or independent. According to Turk (9), a dependent variable provides an answer to the research question. On the other hand, an independent variable explains variation within the dependent variable (Wimmer and Dominick 45). In our case, the dependent variable is the increase in cancer cases reported after the experimental manipulation defined by the independent variables. This would comprise the cases reported in health centers we would select for our research. Understanding such a variable would be necessary in choosing a statistical test and for collection of data. The type of statistical test used in a research mainly depends on the nature and type of the dependent variable (Andrew, Pedersen, and McEvoy 61). It could also depend on the nature of the data collected in the research. The statistical test used for string variable is different from that used for categorical or other numerical dependent variable. For the research topic we have designed, the dependent variable is numeric; therefore, we should identify a statistical test suitable for numeric variables. The rest of the variables will be independent variables. These variables will measure a certain aspect of B. A. T activities in Kenya and whether increasing such activities would have a significant impact on our dependent variable. Therefore, in this research, we will be using these variables to explain and support variations in the dependent variable. The best way to achieve this is by the use of the standard error and the coefficient determination (Henderson 63). Not all variables in the research would end up being significant in explaining the dependent variable, and hence we might need to remove some from the analysis. The independent variables are promotions, brand packaging, market positioning, advertisements, and marketing strategies used. In the Kenyan market, we can identify several promotions undertaken by B. A. T like those done for the sportsman cigarettes as one of their products. For our research, we can also identify several brands that are circulating in the Kenyan market. To obtain information of these variables, we would collect data by either designing an experiment or undertaking a survey. Since the Kenyan market covered by B. A. T is large, I would prefer a survey that can collect as much data as possible. To conduct a survey we can use either a self-administered questionnaire or an interview. We will use a self-administered questionnaire since the Kenyan population has a high literacy level. The key advantage of self-administered questionnaire is its ability to allow anonymity and the ease of distributing it to a large number of people (Mitchell and Jolley 286). The data we will collect from the survey can only be measured categorically. Due to this, we will need to use quantitative data analysis methods to draw any kind of conclusion. To analyze the data, coding could be necessary. According to Morley and Parker (60), the data coding is the assigning of numerical values to the data collected in the form of statements. Coding assists in making the process of analysis and interpretation of the data much easier. After analyzing the data, we will be able to identify the way five independent variables influenced our dependent variable. When conducting a business research, the research topic is not as important as the research problem, hypothesis, and objective. It is these points that identify what the research is about and define the approach that would enhance the achievement of the research goals. According to Coldwell (1), a statement of a problem should be comprehensive enough to indicate the importance of the research. The research objects also should be clearly stated and measured to enable the research team to draw conclusions from the information gathered. The statement of the problem in this research is whether the activities of the cigarette manufacturer like B. A. T influence the cases of cancer among Kenyan citizens. This statement of the problem is comprehensive enough since it encompasses all the aspects of our research. From the research topic, we can draw five major research objectives to achieve. These objectives include the following: 1. To determine whether the different marketing strategies adapted by B. A. T increase the smoking cases that result in lung cancer. 2. To identify whether advertisements made by B. A. T on the Kenyan media lead to an increase in the number of people affected by lung cancer. 3. To establish whether the leading brands, which fit all the social classes of the Kenyan population, increase the cases of lung cancer or not. 4. To identify whether the type of packaging chosen by B. A. T influences smoking among the Kenyan people. 5. To determine the effects of cigarette promotions on the cases of lung cancer recorded among the Kenyan population. Works Cited Andrew, Damon P. S., Pedersen, Paul M., and Chad D. McEvoy. Research Method in Sport Management. 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