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**The Analysis and Evaluation of Nudge Theory in Various Contexts  
in Today's World**

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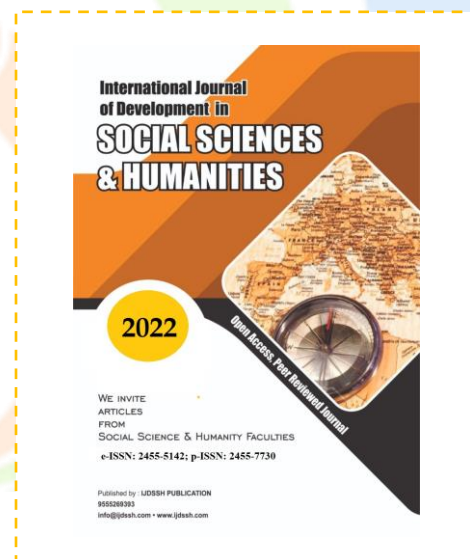
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The standard economic theory states that all stakeholders are rational individuals who make decisions in their best interest. Rational behaviour includes two components, rational consumer choice and rational producer choice.

Assumptions of rational consumer choice include consumer rationality, which states that consumers are able to rank goods based on their preferences, and consumers always prefer more of a good to less. Moreover, it is also assumed that consumers have perfect information about goods and services in the market, and that they aim to maximize the utility they derive from a good or service that they consume.

On the other hand, rational producer behaviour assumes that all producers aim to maximise profits. Producers maximise profits in two ways. Firstly, they aim to maximise the difference between total costs and total revenue. Producers also attempt to maximise profit by producing at the quantity where marginal cost is equal to marginal benefit.

This, however, is not the case in a real-world scenario, since producers and consumers do not always make rational choices. Thus, the concept of behavioural economics emerged in the 1970s and 80s. Behavioural economics is a sub part in economics which studies how different stakeholders make decisions. Behavioural economists argue that humans

do not always make rational choices and that human behaviour can be influenced by a variety of factors such as cognitive biases, emotions and heuristics.

Behavioural economists believe that consumers have bounded rationality, bounded self-control and bounded selfishness as well as imperfect information about goods and services in the market. Moreover, they believe that producers may not always aim to maximise their profits, but have other aims such as engaging in socially beneficial activities to increase their popularity, increase their market share, maximise their growth and maximise their revenues.

One component of behavioural economics is nudge theory. In essence, a nudge means poking someone gently in order to get their attention, however, in the field of behavioural economics, nudge theory has come to become a method which is designed to influence consumer choices in a predictable way, without providing any financial incentive. Many times, the government aims to influence consumer behaviour in a way they find desirable. One example of this is to encourage consumers to consume more merit goods and less demerit goods. Merit goods are goods that are believed to be desirable for consumers, but are underprovided in the market, for example, healthy foods. Demerit goods on

the other hand are goods that are believed to be undesirable for consumers but are overproduced in the market, for example, tobacco and alcoholic beverages.

According to the standard economic theory, one way that the government encourages the production and consumption of merit goods is by providing a subsidy to firms producing that good. Subsidies are sums of money paid to firms by the government, which allows firms to produce goods and services at lower costs of production.

According to behavioural economics, however, the government can introduce nudges in order to influence consumers to consume more merit goods and less demerit goods. One way that this can be accomplished is by placing merit goods in accessible places in shops, and placing demerit goods in less accessible places.

While behavioural economics is a relatively new concept, there have been a few instances of its implementation and the implementation of nudge theory in the world. This research paper aims to analyse the applications of nudge theory, analyse the applications and compare and contrast them with the standard economic theory.

Nudges have been applied in various countries by their government in order to intervene in the economy. One example of a

government intervention through nudges was in the UK, wherein the government intervened to reduce the number of late taxpayers. Within the UK government, there is a special unit known as the “nudge unit” specifically designed to intervene in the economy and influence decisions of individuals through nudges. The government of UK ordinarily sends a standard letter to individuals who do not pay their taxes on time, reminding them to do so. This letter influenced 33% of the population to pay their taxes on time. This, however, not a good amount of people, and thus, the nudge unit of the UK modified these letters in an attempt to influence more people. These modified letters involved a comparison between the receiver of the letter and their peers. Both a positive and negative nudge letters were created. For example, a positive nudge stated that “More than 65% of people around you pay their taxes on time” while a negative nudge stated that “Did you know that you are part of the 35% of people who didn’t pay their taxes?”. They experimented by sending a letter stating that “If you pay your taxes, we are able to build a new park near your house for your kids to play in, so please help us in doing so”. This statement was a personal nudge towards the population of UK, as it addressed them on a personal level.

The purpose of the government behind the positive and negative nudge letters was that the positive letter displayed a role model in front of the late taxpayers, which would allow them to exercise good habits such as paying their taxes on time. Moreover, since the positive letter stated that the majority of people pay their taxes on time, late taxpayers feel that it is the right thing to do as most people do it, hence, influencing them to do the same. The negative nudge letter, however, implicitly made late taxpayers feel insecure about their taxpaying habits when they learn that they are in the minority, which would cause them to pay their taxes on time. The nudge unit conducted experiments to test whether positive framing would influence late taxpayers more or negative framing. With the personal nudge letter, the nudge unit aimed to invoke a sense of individuality and friendliness between the late taxpayers and them, by addressing them on a personal level. This tends to invoke emotions in the brain of the late taxpayers, which would cause them to pay their taxes early. These personal nudges had the greatest impact in reducing the number of late taxpayers.

Results of this experiment showed that the letters involving positive and negative nudges worked in favour on the government, reducing the number of late taxpayers. In an

experiment done by comparing the results of the standard letter and the positive and negative nudge letter before sending it, it was seen that 39% of the late taxpayers paid their taxes early, as compared to the 33% of taxpayers who changed their habits when received the standard letter. While the difference was only 6%, these letters were going to millions of households, and this trial along with some others allowed the government to receive over 200 million pounds in the first year of the execution of these modified letters. It can also be seen from evidence that such nudge letters tend to work on people with different cultural backgrounds as well, since a similar Canadian experiment showed that a negative nudge letter worked better in reducing the number of late taxpayers, as compared to a positive nudge or standard letter, thus exemplifying cross cultural validity for nudge theory. It has been observed that nudges work well in order to tackle the issue of late tax payments, as there have been other instances where nudges have been successfully implemented in the case of tax payments, as the number of tax payers doubled when non payers of vehicle taxes received personalised messages, instructing them to pay their tax, rather than sending them warning messages. Moreover, when a photo of the vehicle in question was attached as well, the number of payers tripled. This

example shows how forming a personalized connection with the population on whom the nudge is being implemented instigates a sense of importance for them, which causes their self esteem to boost, thus making them more likely to adopt the behaviour that the government implementing the nudge wants them to adopt, which in this case, is paying their vehicle taxes on time. Another instance of a personalized nudge working effectively is when taxpayers received messages from the tax authorities in handwritten notes than typed messages. This caused a 16% rise in the number of taxpayers. Letters were also given in white envelopes, instead of the previously used brown envelopes, which invokes a sense of friendliness in the minds of non-taxpayers, making them feel that paying their taxes on time is the right thing to do.

Nudge theory has also been implemented by the Danish government and Pierre-Elouan Rethore, senior researcher at the wind energy department in the Technical University of Denmark in an attempt to influence people to be more aware of their electricity consumption. One Danish municipality known as the Svalin community have solar panels over the roofs of all the houses, and the entire municipality is sustained by solar power. While this is an environmentally suitable alternative to the provision of

energy, there is often a shortage of energy experienced by the Svalin community due to this, as solar panels do not generate energy at night. In order to tackle this, the government implemented a nudge by ensuring that the streetlights automatically turn red when solar panels are no longer sufficient to provide power. This allowed the population of Svalin to notice that there is currently a power shortage in the town, and the government believed that this would influence them to consume less energy. This was a prevalent issue for the government to work towards since energy production is reduced in the evenings, and this is also the time when energy consumption is maximum, as most people are at home during this time and using electricity.

Through this project, it was seen that individuals in the town are indeed more mindful about their energy consumption when they see the red colour of the streetlights. Due to the success of this project, it is being planned to be incorporated in other Danish municipalities as well. The change in colour of streetlights is a way of influencing people to consume less energy by creating a minute difference in their environment.

It has been noticed that people often consume unhealthy foods in grocery stores. According to the standard economic theory,

increasing the supply of healthy foods and putting more healthy foods in aisles of supermarkets will cause the demand of such foods to rise. However, this may not always be the case since just by putting more healthy food choices in aisles of supermarkets will not lead to a rise in consumption of such foods, as consumers will only consume what they want to consume. Thus, a nudge scheme wherein healthy foods were put in more accessible and visible places in stores was implemented. Natural light was also directed towards the healthy foods in order to highlight customers towards them. Wegman's, a grocery store chain located in the mid-Atlantic region used this nudge, and opinions of certain people claim that it worked.

One such person who claimed that this nudge influenced their behaviour was Terri Williams of Bladenburg, Md. Williams struggled with eating healthy foods, and wanted to incorporate healthy foods into her diet. After visiting the new Wegman's store which incorporated the nudge, Williams claimed that this nudge influenced her behaviour in a positive way, allowing her to achieve her goal of consuming healthier foods. While interviews of some people showed that this nudge worked effectively, it may not be enough evidence to claim that this nudge has influenced the consumption

patterns of consumers on a large scale, as interviews do not involve a very large sample. In order to properly find out whether this nudge influenced consumers, a different research method should be used, such as a questionnaire, as it allows results to be acquired from a large sample. Moreover, Terri Williams was an individual who was actively trying to improve her consumption habits, which could have also been a factor that caused her to be attracted towards the healthier foods which were highlighted in the store and displayed in accessible places.

Another application of nudge theory is by providing a particular set of choices to individuals in an economy in order to influence their behaviour in a way that is desirable by the government. This is known as *choice architecture*, designs of particular ways or environments in which people make choices, and is based on the idea that consumers make decisions based on a particular context and how choices are presented to them. There are several types of choices under choice architecture, one of them being default choice, which is the choice that is made when the individual making the choice does not choose any option.

It has been observed that when provided with some options to choose from, individuals often procrastinate or do not choose any

option. This allows the government to nudge people into making a choice they find desirable, by making it the default choice.

One example of the government implementing choice architecture and default choice as a nudge is in the field of organ donation. It was noticed that it is difficult to promote the donation of organs in many countries, which was something the government wanted to change. The designs of the ways in which the choice of whether an individual wants to be an organ donor or not was analysed, and it was seen that in countries like Denmark, Germany and the United States, the default choice was to be a non-organ donor, and people had to manually choose the organ donor option if they wanted to be one. In countries like France, Belgium and Poland, however, the default choice was to be an organ donor, and individuals were supposed to manually choose to not be an organ donor.

It was noticed that countries in which the default choice was to be an organ donor, there were a greater number of people who decided to be organ donors, as compared to countries who had their default choice as a non-organ donor, thus showing how default choice has been used as a nudge by the government to influence choices of people. While this nudge, implementing default choice, has been effective in many countries,

there have also been instances of the implemented nudges being ineffective, as in the case of Netherlands. The option of being an organ donor was made the default choice from a law in 2016, in the Netherlands, in the hope of experiencing an increase in the number of organ donors. However, a consensus showed that there were 6 times as many non-donors compared to the number of donors, after the implementation of the nudge.

The example of nudge implementation in the area of organ donation shows how, while nudges have an effect in influencing people's choices in a way the government wants, there may be instances when the nudge does not have the desired impact, as in the case of Netherlands. This may be due to the population understanding the true intentions of the government when they made organ donor a default choice. This incident had been heavily covered by the press, which brought extra attention to it, causing the Dutch people to feel that their choices were being made by the government, which made them rebel.

(Talk about how nudge theory influences consumption but may not directly influence production)

**BIBLIOGRAPHY**

1. <https://frankvandeven.medium.com/nudging-making-tax-payers-actually-pay-af36fda7e434#:~:text=Within%20the%20UK%20government%2C%20there,save%20the%20UK%20government%20money.%E2%80%9D>
2. <https://www.bqprime.com/politics/uk-the-nudge-unit-uses-behavioural-science-to-influence-policy-outcomes-such-as-improved-tax-collections-and-pension-enrolment>
3. <https://stateofgreen.com/en/news/coloured-street-light-shows-residents-when-the-power-is-climate-friendly/>
4. <https://www.npr.org/2010/11/08/131074210/nudging-grocery-shoppers-toward-healthy-food>
5. Economics textbook

