

# Analyzing the Attitude-Action Gap in Sustainable Consumption and Production

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**Abstract:** The concept of SCP had a lot of definitions over time; it was first introduced at the RIO 20+ summit in 1992 as one of the most highlighted elements to reach sustainable development through the 10-year framework programs. The most common definition was introduced by the Oslo Symposium in 1994 as "the use of goods and services that respond to basic needs and bring a better quality of life, while minimizing the use of natural resources, toxic materials and emissions of waste and pollutants over the life cycle, so as not to jeopardize the needs of future generations". It was later on defined by the UNEP as the act of reducing and minimizing the negative environmental radiations of production and consumption, with the maintenance of a better quality of life as a priority. As people often tend to say something and do another, in psychology, the lack of correspondence between what is being said and the action following it, lead the researchers to state that attitude and behavior are inconsistent with one another therefore there is a gap between the two. To study more about the gap between attitude and action, and determinants behind behaviors, we will discuss furthermore the infamous Theory of Planned Behavior by Icek Ajzen and Perceived Consumer Effectiveness and apply this theory on the concept of SCP to see whether a gap exists indeed between Attitude and Action when it comes to a sustainable consumption and production.

**Keywords:** Information Integration Theory, Life Cycle Thinking, Perceived Consumer Effectiveness, Policy Development, Sustainable Consumption and Production, Theory of Planned Behaviour, Theory of Reasoned Action.

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## I. INTRODUCTION

The concept of SCP had a lot of definitions over time; it was first introduced at the RIO 20+ summit in 1992 as one of the most highlighted elements to reach sustainable development through the 10-year framework programmes (Akenji, et al., 2015). The most common definition was introduced by the Oslo Symposium in 1994 as "the use of goods and services that respond to basic needs and bring a better quality of life, while minimising the use of natural resources, toxic materials and emissions of waste and pollutants over the life cycle, so as not to jeopardise the needs of future generations" (IISD, 2012). It was later on defined by the UNEP as the act of reducing and minimizing the negative environmental radiations of production and consumption, with the maintenance of a better quality of life as a priority (UNEP, 2013). UNEP also went ahead to say that SCP is a systemic change that should be based on three major objectives, and they are:

- Decoupling environmental degradation from economic growth. This means more delivery in terms of goods and services with less impact in terms of resources use, environmental degradation, waste, and pollution. In other words, it is about increasing the quality of life by increasing welfare gains from economic activities and at the same time reducing resource use in the whole life cycle of the product/service.
- Applying life cycle thinking. It's about including sustainable management throughout the phases of the lifecycle in both consumption and production by achieving resource efficiency.

- Sizing opportunities for developing countries and “leapfrogging”. Adopting SCP in developing countries could mean the creation of new markets, green and decent jobs as well as welfare-generating natural resource management which will contribute to poverty eradication in these countries (UNEP, 2013).

And so, to sum it up, SCP is a sustainable development concept that preaches on the maintenance of resources for future generations while meeting the needs of the present ones by adopting a resource efficiency policy. In the upcoming chapters, we shall define more principles and fundamentals of SCP and its policy development. As for the fundamentals of SCP, they are as follows: As it was mentioned in the previous part, one of the most focused on objectives of SCP is the reduction of poverty –especially in developing countries- and that is by creating new markets, green and decent jobs.

Studies have shown that to achieve sustainable development, poverty alleviation and environmental sustainability play quite the important role (Baloch, Danish, Khan, & Ulucak, 2020). A study done by Xin Cheng has also shown that one of the six clusters related to Poverty is environmental development (Cheng, et al., 2018). Therefore, poverty reduction and environmental sustainability are linked and eradicating one of them will lead to the cease of the other (Marson & Subramaniam, 2019).

Another approach to poverty alleviation would be by reducing pollution through SCP. In 1972, at the conference on the human environment that was held in Stockholm, Sweden, former Indian Minister Indira Gandhi stated that “Poverty was the greater Polluter” (Akenji, et al., 2015). As developed countries transformed developing countries into their production activities ground, this led to enormous energy consumption within these countries which resulted in outflowing discharge that increases GHG emissions and pollution. And this equation by its turn, makes the poor rely even more on their natural resources for their livelihood and needs more than the rich (Akenji, et al., 2015).

The principle of SCP itself relies on practicing sustainability in both production and consumption so needs can be fulfilled without burdening mother. And through the adoption of this concept, new employment generation will rise, and it will stimulate innovation within its lines (Akenji, et al., 2015). Second fundamental concept is the life cycle thinking.

First study Life-cycle oriented was presented in 1963 at the World Energy Conference by Smith (Mazzi, 2020, pp. 1-19). Then later on, “scientists recognized resource consumption and waste production as the main causes of environmental problems and recommended the closure of the cycle with reliability, reparability, and recyclability of products at the end of life” (Mazzi, 2020). 1990s marks the start of construction of Lifecycle Thinking (LCT) and at the World Summit in 2002 held under the theme of Sustainable Development, world leaders showed their commitment towards the implementation of Sustainable Consumption and Production (Mazzi, 2020).

## II. THEORY OF PLANNED BEHAVIOUR

Theory of Planned Behaviour or also known as TPB, is a psychological theory (Wikipedia, 2021) that was proposed by Icek Ajzen in 1991 to deal with the limitation of a previous theory under the name of Theory of Reasoned Action (TRA) which was also developed by Ajzen and Martin Fishben back in 1980 (Ajzen, 1991). The latter was elaborated as an improvement of the Information Integration Theory (IIT) which was developed through hyper testing and experiments (Benoit) by Norman Anderson in late 1950s (Frey & Kinnear, 1980) and the research went on for three decades alongside other colleagues of his. Five books and over 100 articles contained Information Integration Theory were published under Norman H. Anderson during that period (Noble & Shanteau, 1999).

Anderson proposed IIT as a cognitive theory that is mainly focused on the ability of an individual to integrate information from two or several stimuli to come up with a quantitative value, the theory goes on to study and evaluate the unobservable psychological processes that play a role in the making of complex judgments (Foster, 2014). IIT was based on four psychological concepts: cognitive algebra, stimulus integration, functional measurement, and stimulus cognitive (Foster, 2014). But this model was proven inefficient (Benoit) that’s why the theory was developed further more to become the Theory of Reasoned Action.

Theory of Reasoned Action is a theory that was developed by Ajzen and Fishbein in 1975 (Salgues, 2016) out of social-psychological research on the attitude and the attitude-behaviour relationship (Sutton, 2001). TRA suggests that both volitional control and intention predict behaviour (Mimiaga, Reisner, Reilly, Soroudi, & Safren, 2009) . the theory is based of two groups of variables: attitudes and subjective norms.

Attitudes are related to the achievement of an objective whether they are recognized as positive or negative feeling, whereas subjective norms are related to the ability to reach that achievement with the product, with the very

representations of the individual's perception (Salgues, 2016). TRA suggests that if an individual evaluates the suggested behaviour as positive – in this case his attitude- and he believes that others await from him to perform the behaviour – the subjective norm-, this often results in a higher intention -motivation- then the individual is more likely to act that behaviour (Mimiaga, Reisner, Reilly, Soroudi, & Safren, 2009).

### **III. PERCEIVED CONSUMER EFFECTIVENESS**

Perceived Consumer's Effectiveness, or PCE, is defined as a consumer's estimated assessment of his or her ability to contribute to particular sustainability-oriented achievements through specific patterns of behaviour (Daniel Hanss, 2020). PCE also indicates a subjective estimated measurement of an individual's capacity to help solving a certain problem. On the environmental scale, PCE is quantified as the level at which the consumer's personal and individual purchases and actions are deemed sufficient and are bound to make a change towards a specific objective, which is mostly environmental (Claudia Arias, 2020).

The Perceived Consumer's Effectiveness is commonly used in various fields, especially to study the attitudinal and behavioural actions regarding the environment. With the rising concerns regarding the climate changes that get worse day by day, policymakers are desperately making efforts to find solutions in reducing the huge deleterious effects of the climate crisis. To do so, study of individual consumption attitudes and decisions plays an enormous role, which is why the Perceived Consumer's Effectiveness is implemented as a powerful tool to finding solutions. It allows analysts to study and even quantify the consumers' consumption attitudes and therefore, helps policymakers to take decisions that would influence these attitudes and make them more environmentally responsible and aware of the degree of the crisis that they're facing (Ida E. Berger, 1992).

### **IV. LITERATURE REVIEW**

In their unravelling the Attitude-Behaviour Gap Paradox for Sustainable Food Consumption: Insight from the UK Apple market, [1] have presented in their paper their attempt to draw Campbell's paradigm to develop a sustainable product purchase behaviour [1].

The paper states that despite the promising positive attitude towards sustainable products, it has rather a smaller market share. The literature has further explained that a consumer's positive attitude toward sustainable products rarely results in an actual action hence the gap between the two. Using the Campbell paradigm, [1] confirms the said gap and that's through Campbell's purchase inhibitors like the premium pricing, products availability, and variety as what causes the gap, and that the paradox surrounding small markets of the sustainable industry does not contribute to the attitude-behaviour gap [1].

On the other hand, a study done by [2] sheds light on the gap between attitude and action in green consumption, the paper highlighted two key moderators: green product availability and perceived consumer effectiveness [2].

After the collection of a data sample of 416 consumers from Vietnam, it is revealed that the correlation between attitude and behaviour is indeed stronger. The study goes on to study also the inconsistency of consumers' behaviour and therefore explaining more the gap between attitude and action [2].

### **V. DISCUSSIONS & CONCLUSIONS**

As the interest in environment grows and the preservation of natural resources, but so often- as studies have shown-, people's action differ from their attitude.

In a previous study done by Ben Lane and Stephen Potter about the adoption of cleaner vehicle in the UK back in 2006, has shown that the lack of knowledge about cleaner car technologies and the impact that normal vehicles have on environment plays an important role in the enlargement of this gap. The study went on more to identify factors that influence the consumers' action, like the high purchase price of such car, the second factor that was found was the technical requirements that come with cleaner cars and that the consumer is unfamiliar with and has to adapt to, rather than designing cleaner vehicles to be easier and more convenient to use. The next barrier that was pointed out was the absence or rarity of the integration between the systems already existing and the products, as it is hard to adopt an eco-product like a hybrid fuel for these cars without it being too costly and convenient thus the difficulty of a transition in this case. And therefore, these factors cause the gap between the attitude of consumers towards cleaner vehicles and their action to actually purchase them to increase even further [3].

Another study done by Oliver Mairesse on the understanding of the gap between attitude and action when it comes to environmentally friendlier vehicles, has shown that though the individuals show positive attitude towards sustainable behaviours and environment, their behavioural intention to actually purchase the said cars is rather low due to their belief that the use of EFV (environment friendly vehicles) will have minimum to none impact on the environment, and that shows through the theory of planned behaviour, in particular the constraints of behavioural control. In this case, the behavioural control is low while the constraints like the lack of infrastructure for such vehicles, are high [4].

As per our study which was conducted on the residents of Turkey, Istanbul in particular, it shows that the availability of eco-friendly products in the stores that the individuals usually frequent, influence their behaviour/ action towards sustainable products, we came up with this conclusion after analysing the response to the question “eco-friendly product cannot be purchased at my local market” as 72.2% of the respondents agree with the statement, and 66.7% agreeing to the statement “in the store I frequent, there is no shelf for eco-friendly products”. The second variable that influence the attitude action gap is the price of eco-friendly products, as 86.1% of the respondents agreed to the statement “my consumption will convert to sustainable when eco-friendly products share the same price as other products”. On the other hand, perceived consumer effectiveness has shown a correlation between attitude towards sustainable consumption and production and the action toward the latter, as PCE (perceived consumer effectiveness can actually reduce the perceived costs related to the adoption of SCP. The study goes on more to show that PCE and the availability of eco-friendly are two moderating factors that will help close the gap between the attitude and action regarding SCP.

The study also suggests two solutions to close the attitude- action gap towards SCP, and they are the use of green financial instruments and investing in green instruments, both suggestions have shown promising responses. As 75.1% admit to actually invest on green instruments and 83.3% believe that green financial instruments could be a solution to sustainability problems. The study faced many limitations to it, including the pandemic which made data collection a hard task, therefore, future researchers should conduct a more thorough study and find other causes and solution to this gap, as environmental issues keep on growing, sustainable solutions must follow.

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