

FRAMING AUSTRALIAN CONSUMERS' GREEN ENERGY BUYING BEHAVIOUR: A REVIEW AND THEORETICAL FOUNDATION FOR FUTURE RESEARCH

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ABSTRACT

Consumption of green energy is an important step toward meeting societal demand for reducing the carbon emissions that can help mitigate the climate change. Despite the growing ecological awareness and articulated preferences for green adoption, consumption of green energy into special category face slow rates of diffusion in the consumer market compared to any other green products. Given the need to encourage more green energy choices by consumers, research is needed to understand psychological factors affecting consumers' green energy choice behavior. The study attempted to elucidate the key psychological factors affecting consumers' green energy buying behavior (GEB) where the theory of planned behavior served as a framework for identifying the major determinants of green energy buying behavior and for determining their relative importance. The study sheds light on the conceptual dimensions of green energy consumerism can be viewed as a starting point incorporates a set of research propositions to be tested in the future research in context of a developed nation-Australia; adopting the theoretical framework of the TPB. This study provided value for GEBs that prompting people to exhibit green behaviour pertaining and commitment to GEBs as well as ensuring environmentally sustainable development of GEBs. The implications for theory, practice and scope for the future research discussed at the end.

Keywords: Green Energy, Green Energy Buying Behaviour (GEB), Consumer Behaviour.

INTRODUCTION

Energy consumption produced by fossil resources is one of the most significant contributors to the greenhouse gas emissions and carbon emissions (CO₂) globally (Judge et al., 2019; Santamouris, 2020). Green energy consumption practice is considered as a way to mitigate this emission and thus can contribute to the environmental sustainability (Yazdanpanah et al., 2015; Ahmed et al., 2019; Xu & Buyya, 2020). As a result, green energy programs have become extremely popular worldwide including UK, German, China, Sweden supporting carbon reduction in agreements under the EU 2030 target (Palandino & Pandit, 2019). In the European Union, the market consumption for the green power market was 22.1 per cent in 2010 and is expected to rise to 50 per cent after 2050 (Judge et al., 2019). However, there has not been a comparable emphasis placed on the sunniest countries of the world Australia despite its position as a global leader in the privatization of the electricity market (Paladino & Pandit, 2012, Ahmed et al., 2019).

Although there have been substantial and in-depth researches concerning the psychological factors affecting the green energy buying behavior (GEB) in many countries such as in USA (Bang et al., 2000), UK (Claudy et al., 2000), Finland (Halder et al., 2016), and Iran (Yazdanpanah, 2015). However, considering the context of developed nation research focusing on consumers' GEB is at a nascent stage in the Australian context in comparison to many other nations. Looking at the current scenario, the primary objective of the study is to discuss a theoretical framework of the GEB within the scope of a psychological theory that could be tested and validated in future research encouraging and reinforcing the GEB in the Australian context. In marketing perspective, there is a great importance to investigate the psychological factors that may encourage and discourage consumers' GEB. The investigation on consumers' GEB can help both consumers and energy retailers to drive the growth in the green energy market and can help to promote the adoption of sustainable product green energy at a local level, regarding consumer decision-making in residential contexts. Actually, by using such knowledge, energy marketers, and policymakers can facilitate changes in intention regarding the use of green energy which, in turn, can influence the market share of the green energy.

In order to address the objective, this article is structured in the following manner. In the next section, the study first conducted a brief review of those few past studies relevant to GEB in the Australian perspective to help identify the current research gap. Based on the review in the following section, the study rationalises the application and usefulness of the proposed theory in our study context and thus has unfolded the cognitive factors applying the research framework followed by five research propositions in predicting the GEB of the Australian households. In the final stage, we wrap up with the discussion in theoretical as well as marketing standpoint and given directions for future research.

REVIEW OF THE LITERATURE

A literature review was conducted to understand the current state of research on the GEB in the Australian context, to help identify the current state of knowledge as well as gaps needing to be explored. A review of the literature on the possible links between the psychological factors and the intention to purchase green energy revealed a gap in the Australian context. For example, past studies in Australia primarily dealt with issues like consumers' attitude towards the brand Palandiono & Pandit (2012), willingness to pay for green energy Ivanova (2012), barriers and challenges in green energy consumerism (Hobman & Fredrick, 2014). Notably, the most recent work of Paladino & Pandit (2019) is the only study which attempted to investigate the factors affecting the GEB. Nevertheless, the study (i.e., Paladino & Pandit, 2019) has sought to provide information on the nature of the green energy marketplace and analyses the consumer attitude toward green energy in specific. However, the prevailing lack of knowledge understanding the GEB, a proper explanation thereof and scarcity of research considering the impact of psychological factors affecting the GEB, and dearth of adequate research in the Australian context encouraged the researchers to recognize the key psychological predictors of the GEB. This allows us to discuss a conceptual framework understanding the key determinants impacting the GEB, knowledge which has not previously been synthesized clearly in the Australian context. Therefore, the aim of this study is to explain the formation of conceptual background of psychological factors affecting the GEB. To reach this aim, a well-known socio-psychological classical theory is used to understand the primary factors behind the shift in the consumer choice behavior towards green energy discussed in the following section.

THEORITICAL FRAMEWORK AND PROPOSITIONS

The study primarily theorized on the theory of planned behavior (TPB; Ajzen, 1991) is a widely used theoretical model in the area of social psychology dealing with the determinants of consciously intended behaviors. The study sheds light on the conceptual dimensions of green energy consumerism and establishes a theoretical link between the predictors of consumer psychology and behavioural intention to explain the buying behavior towards green energy. According to TPB, one's attitudinal factors, normative factors, and perceived behavioral control (PBC) determine his/her behavioral intention to engage in it (Ajzen, 1991). The TPB has been used in many studies (sociology, psychology, social psychology) for explaining human behaviour. Many researchers (e.g., Emekci, 2019; Sultan et al., 2020) used this model in their studies for explaining green consumer behaviour. Therefore, we assume that underpinning the TPB framework, the GEB could be explored and predicted from both internal and external perspectives of Australian energy consumer market. Motivations for introducing the psychological factors in explaining Australian household consumer's green energy buying behavior underpinning the TPB model conceptualized under the guideline of several research propositions discussed in following section.

According to the TPB (Ajzen, 1991), a behavior that can be controlled by the volition of the individual affected by three salient elements (attitude, social norm, behavioural control) determine individual's the behavioral intention which is the direct cause of the actual behavior. Research studies (e.g. Halder et al., 2016; Yadev & Pathak, 2017; Emekci, 2019; Sultan et al., 2020) have established that attitude toward behavior, subjective norm and PBC together shape individual's behavioral intentions which in turn affect the behavior. Hence, it is reasonable to assume that consumers who hold positive attitudes towards green energy, who values others opinion and believe that they can easily engage in green energy consumption, are more likely to develop strong intention and ultimately, the ability to buy green energy. Based on this assumption, the following hypotheses are proposed:

Proposition 1: Attitude influences consumers' intention to purchase green energy

Proposition 2: Subjective norm influences the consumer's intention to purchase green energy

Proposition 3: Perceived behavioral control increases consumer intentions to purchase green energy

Proposition 4: Perceived behavioral control effects the buying behaviour of green energy

Proposition 5: Consumer's intention towards the green energy influences their actual buying behaviour

On the basis of the above-discussed propositions the theoretical framework (Figure 1) is presented. Based on the above propositions, the study contributes to and extends our understanding of the green energy purchasing behavior, identifying the rationales for purchasing of green energy.

DISCUSSION

The study presents five research propositions based on the relationships between the constructs of the standard framework of TPB. Although there has been a plethora of literature using the TPB on green consumption, even on green energy, literature on the effectiveness of green energy marketing is still very limited. Considering this lacuna in the literature, the study attempted to contribute to the limited academic literature in the field of green energy consumer research, more so in the Australian context. However, as the nature of this paper is more

focused on marketing approaches, there is a pressing need to discuss the marketing implications of the proposed propositions and their respective relevance for marketing practices.

For example, exploring the relationship between consumer attitude towards the green energy purchase intention (GPI) can help marketers providing specific messages and detailed information about green energy quality, its production process, environmental benefits and any price benefit promotion (Palandino & Pandit, 2012, 2019). In a similar vein, exploring the relationship between subjective norm and GPI, marketers and energy providers can decide what social marketing approaches should be employed targeted exclusively on collectivistic nature of Australian consumers. Aside from consumers' attitude and subjective norm/social reference in adoption of green energy, perceived behavioral control (PBC) is one of the strongest predictors plays a dominant role influencing consumers' green energy purchase decision (Halder et al., 2016; Ahmed et al., 2019). By enhancing the marketer's knowledge about consumers' strong control behaviour (i.e., PBC), marketers and policy makers can make sure that cost, information and access towards green energy is available as consumers may be or not better able with the time, effort and expand more opportunities to buy green energy. In other side, the weaker PBC requires promotional activities to stimulate the market. However, to note that the concept of PBC may be an important barrier to the adoption of green energy and if so, marketers may overcome this by providing consumers with the confidence and required information and strategic support in order to stimulate their buying behaviour.

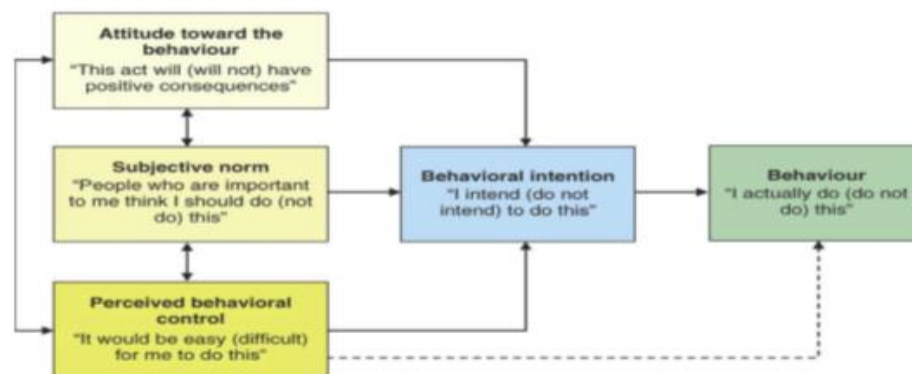


FIGURE 1
THEORY OF PLANNED BEHAVIOR: ADOPTED FROM SARKIS, 2017- P- 531

CONCLUSION

The aim of this study was to explain the formation of conceptual background of psychological factors affecting the green energy buying behaviour within the scope of TPB (Ajzen, 1991). The paper sheds light on the conceptual dimensions of green energy consumerism can be viewed as a starting point incorporates a set of research propositions to be validated in future research is an endeavour targeting the Australian household market in specific. Notably, the study focused on theory construction rather than theory testing. Therefore, the study is not without a limitation and provides suggestions for future research. First, this study did not discuss every possible marketing elements that could affect or influence the buying behavior of green energy. For example, while the study proposes the basic TPB model, there might be other factors such as information, brand, knowledge, moral norms, and other values that could affect individual's decision to purchase green energy, which were not

discussed in the study keeps room for future research. Second, the current research objective was narrowed to a theoretical coverage upon the “green energy” buying behaviour solely in the Australian context. Future research also could be in cross-cultural perspective focusing on two economical perspective, between developing (e.g., emerging country) and developed economy respectively (i.e., Australian market), thus revealing the connectivity of the TPB framework with the “economic and energy appreciation” in numerical terms. Third, this paper is conceptual in nature. Future research should empirically validate the foundations laid in this study. The empirical findings can provide support for investment decisions and for decisions relating to the establishment of Australia as a green hub that address and take the concerns and needs of green business and Australian Government agencies into consideration.

In light of these considerations, it is hoped that building on the TPB model the future research would endeavour strong evidence of the significant relationships between attitude, subjective norm, perceived behavioral control and others possible marketing elements with green energy purchase intention and behavior using data collected with consumers from Australian household.

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