

# TIME HORIZON AND GREEN CONSUMPTION

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## **Abstract**

This study investigates the effect of time horizon in patterns of green consumption. Previous studies have shown that consumer behavior is influenced by an individual's willingness to delay or expedite receiving gains and losses (i.e., take a time horizon orientation). This paper describes the effect of short-term or long-term conditions in complying with green and not-green consumption. The paper also reports the results of an experimental study showing that time horizon plays an important role in driving consumer behavior, especially when green consumption is expected.

*Keywords:* consumer behavior, green consumption, green products, time horizon, car-sharing, experimental design.

## **Introduction**

Over the years marketing research paid increasing attention to individual time horizon, as the time a consumer believes will elapse before he/she will experience outcomes caused by his/her choices (Wright and Weitz, 1977) mainly because of its role in the consumer decision-making

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process (Graham, 1981; Robinson and Nicosia, 1991; Claycomb, Porter and Martin, 2000). According to Graham (1981), time perception is a part of a person's culture influencing people's "worldview and subsequent behavior" (p. 338). Moreover, the individual perception of the future influences not only his or her general attitudes (Keough, Zimbardo and Boyd, 1999; Fung and Carstensen, 2003), but also the urgency a person brings to activities (Lowenstein, 1988).

Even though many theoretical frameworks – such as the socio-emotional selectivity theory – consolidated the idea that time perceptions determine social goals and regulate human behavior (Carstensen, Isaacowitz and Charles, 1999), till today few studies investigated the effect of individual time horizon on green consumption (Miniero et al., 2014).

In evaluating an environmentally friendly products, indeed, consumers often feel duty bound to their community and environment as they do to themselves and their families (Gebauer et al., 2008; McDonald and Aalborg, 2009) and some of these duties may conflict (Macnaghten, 2003; Connolly and Prothero, 2008; Prothero et al., 2011). Therefore, in many cases people may perceive a long term action rather than a short term one as being preferable. This delay may give people the time to solve or reduce any perceived conflicts, especially in the case of green consumption.

Furthermore, the purchase of ethical consumption is an example of self-regulation where consumers need to balance short-term and long-term goals (Baumeister, 2002; Vohs, Baumeister and Tice, 2008) as well as moral questions associated with the outcome of purchasing decisions (Caruana, 2007). In a recent study, Gregory-Smith, Smith and Winklhofer (2013) investigated the role of emotions and the prevalence of dissonant/incongruent choice behavior within the context of ethical consumption. Their findings demonstrate that consumers consciously indulge in both 'ethical' and 'unethical' behavior (as defined by the respondents themselves), often within a short time frame, and that they often compensate for unethical choices by making ethical choices later on (and vice-versa).

Based on these findings, this paper investigates the effect of time horizon on green consumption. In section one, there is a review of the literature concerning time horizon. Section two describes the methodology we have used; in sections three we discuss the empirical study, and, finally, we report our conclusions.

## **1. Review of the Literature**

A time horizon is the individual difference which takes into consideration the future consequences of a particular choice (Kees, 2011).

Time horizon is a multi-dimensional construct (Klineberg, 1968) consisting of one's capacity to anticipate, structure and see the future more clearly (Gjesme, 1983). Moreover, time horizon is the customer's willingness to delay or expedite receiving gains (i.e., obtaining a reward or something of value) and losses (i.e., giving up something of value) (Wright and Weitz, 1977).

Because of the importance of time in consumer behavior (Graham, 1981) and in marketing decision-making (Meyers-Levy and Maheswaran, 1992), research on sales patterns has looked at this variable in great detail. These studies show that the ability to provide a product or service at a point in time based on the customer's preference was a critical factor in making a sale. Many researchers suggest how sales-personnel should adjust their approach based on customer time horizon in order to optimize the opportunity to conclude a sale (Weiz, Sujan and Sujan, 1986; Dwyer, Schurr and Oh, 1987; Sujan, Sujan and Bettman, 1988; Szymanski and Churchill, 1990; Doyle and Roth, 1992). The attempt by sales-personnel to adapt to time horizon preferences of customers in buyer-seller exchanges shows that there are individual differences in time orientation among consumers and that such differences can influence purchase decisions.

Wright and Weitz (1977) varied women's time horizons experimentally, in order to evaluate the effect of time horizon variations on product evaluation. This study supported the idea that variation in time horizons produces changes in the linearity and in the complexity of evaluation strategies and in the emphasis given to specific factors. Furthermore, when processing time was brief, subjects tended to adopt more one-dimensional evaluation strategies, replicating an earlier finding. When the commitment/outcome horizons were distant, subjects also tended to use a simple one-dimensional strategy even though processing time was abundant.

We can say that the time horizon a consumer has in mind when evaluating a risky alternative can bias his or her evaluation strategy. The strength of the manipulated effects of the processing horizon and the outcome horizon suggest that these may be important moderators of product evaluation and choice strategies.

Other researchers (Loewenstein, 1988; Meyers-Levy and Maheswaran, 1992; Simonson, 1992) posited that the relation between the timing of an outcome and the time a consumer's decisions are made, influences consumer decision making. Simonson (1992) examined the influence of anticipating decision errors and the associated feelings of regret and responsibility on consumer purchase decisions when the option considered is the default choice. According to this study, consumers' choices could be systematically influenced by asking them to anticipate the regret and responsibility they felt if they had made the wrong decision. Firstly,

Simonson (1992) suggests that consumers who considered how they felt if they made the wrong decision would be more likely to purchase an available item on sale rather than waiting for a better sale. Secondly they would prefer a higher price, well-known brand rather than a less-expensive and lesser known brand.

The findings of these three studies also support the notion that decisions about purchase timing and brand choice would be systematically influenced by asking consumers to consider possible decision errors. Referring to purchasing time, the study suggested that if the buyers considered how they felt if they made the wrong choice, they would be more likely to purchase earlier. With regard to choices between brand name and price, the study suggested that manufacturers of known brands competing with less-expensive alternatives could increase their market share only by inducing consumers to anticipate how they felt if they made the wrong decision.

Loewenstein (1988) investigated how time impacts consumer perception of losses and gains and consequently, consumer choice. This study aimed to demonstrate the applicability of the reference point concept to inter-temporal choice. It reported three experiments demonstrating that when people choose between immediate and delayed consumption, the reference point used to evaluate alternatives can significantly influence choice. The experimental study presented in the paper focused on the effect of reference point manipulation on inter-temporal choice. Specifically, the findings revealed that when a temporal shift of consumption is framed as a delay, it had greater significance than when framed in terms of speed-up. Furthermore, the significance of the delay was minimized when the consumer was simply asked to state the present value of consumption at the two points in time.

Meyers-Levy and Maheswaran (1992) studied the influence of temporal distance manipulations on consumers' responses. The results of the two experiments in this study clarified how variations in temporal distance could influence the affective and persuasive impact of an advertisement's appeal. The findings of the studies suggested that variations in temporal distance could differentially affect consumers' responses only when consumers are not motivated by other factors, such as high involvement. This implies that temporal distance manipulations may influence consumers' motivation to process and intensively scrutinize a message. These findings have important implications for consumer research. Indeed, according to this study, temporal distance manipulations should be added to the list of devices that can influence consumers' motivation to engage in extensive message claim scrutiny.

The literature concerning time horizon supports the idea that when gains and losses occur in the future, this causes general optimism (Mowen and Mowen, 1991). This may be consistent with a trend towards meeting

duties and obligations, the sensitivity to negative outcomes and relative pain from losses and consequently, related to green consumption.

The role that personal time orientation assumes in influencing consumer environmentally friendly attitudes is emphasized in many studies. Based on the Hofstede (1980) definition of long term oriented person – as someone who preserves social traditions, adheres to family values, and considers reliability, responsiveness and empathy to be extremely important – recent research has shown that long-term people tend to develop attitudes pertaining to the protection of the natural environment (Joreiman et al., 2004; Sarigöllü, 2009; Leonidou, Leonidou and Kvasova, 2010). Indeed, since the long-term person preserves tradition and history, s/he is also likely to respect and preserve the environment, in order to reap benefits for family and friends at a later stage and maintain sustainable conditions for future generations to prosper (Furrer, Liu and Sudharshan, 2000). However, temporal concerns have received increasing attention in the more general pro-environmental literature. For example, several recent studies have demonstrated that individuals who score high when considering future consequences (CFC) (Strathman et al., 1994), and explicit temporal concerns, are more likely to engage in consumer behavior (Lindsay and Strathman, 1997; Strathman et al., 1994) and political activity (Joireman et al., 2001a) and are more inclined to commute by public transportation (Joireman et al., 2004)

Based on this research, this study reports an experimental design in order to investigate the role of time horizons for green consumption. We look at how different time horizon orientations can influence people in complying with green consumption choices. We also attempt to understand whether promoting electric car sharing and emphasizing the immediate availability of this service and its related benefits can positively affect its use rather than delaying it. Furthermore, we have looked at the rationale that submitting a message proposing an electric car sharing service as a delayed option and claiming its benefits in the future could positively influence green consumption. As a consequence of this study we have tested the following hypothesis:

*H1: Individuals under long time conditions show higher compliance with green products than individuals under short time conditions.*

## **2. Methods**

Two hundred fifteen students (133 female, age 22.58, standard deviation [SD] 2.135) from an international business school were involved in the experiment in return for course credits. In the past, many studies examining consumer ethics used student samples as representative of an

important segment of consumers (Chan, Wong and Leung, 1998; Higgs-Kleyn, 1998; Muncy and Eastman, 1998; Rallapalli et al., 1994). Even though some recent studies (Kanchanapibul et al., 2014) evidenced how the young generation appears to be more active than other groups to the environmental issues, the contradictory findings about young generations' green consumption (Autio and Heinonen, 2004; Sheahan, 2009; Hume, 2010) indicate the need to study this topic furthermore.

The study aimed to test H1, specifically that product type affects the relationship between the time horizon and compliance with green consumption. Therefore, the experimental study was a two (time horizon: short vs. long) by two (green vs. not-green consumption) between subject design.

In order to manipulate the time horizon, we employed the procedure used by Wright and Weitz (1977). We prepared a leaflet to advertise a new car sharing service that was about to start in the city. We emphasized the fact that the service was already available (short time condition) or would be ready in 6 months (long-term condition).

Immediately after the time horizon manipulation, participants saw other advertisements of different products (e.g., restaurants) as a filler task and then rated the time horizon of the leaflet by responding to the item 'When does the leaflet invite you to start using the car sharing service' (1 = now; 7 = in 6 months). Participants under the short time condition correctly reported that the leaflet invited them to start using the service soon (Mean (M) = 3.06, Standard Deviation (SD) = 2.6) unlike those under the long-term condition (M = 6.65, SD = 1.09,  $F [1, 214] = 195.284, p < .000$ ). In order to manipulate the green condition (whether the car service is perceived as being 'green' vs. 'not-green'), we added some information to the leaflets. Under the green condition, the leaflet emphasized the electrical car service, illustrating how green the service was and how good it would be for the environment. Under the not-green condition, the leaflet illustrated just a car service without emphasizing any positive externalities for the environment.

Immediately following this, participants responded to the dependent variable, namely 'compliance with the behavior' articulated in four items as in Kronrod, Grinstein and Wathieu (2012). We used a 7-point scale consisting of four items ('How plausible is it that you will adopt the behavior/how certain is it/how sure are you/what are the chances that you will adopt car sharing').

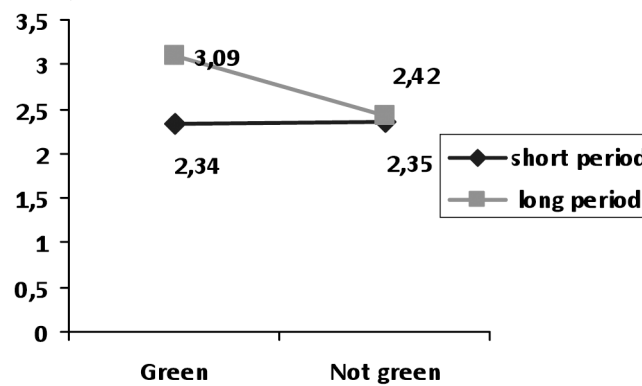
### 3. Results

The reliability of the compliance measure was  $\alpha = .917$ ; therefore an index averaging the four items of the compliance scale was created. A two-

way analysis of variance of time horizon and green condition on the compliance index was performed. We found the two main effects were significant both for time horizon ( $F [1, 214] = 6.755, p = .01$ ) and green product ( $F (1, 214) = 4.378, p = .03$ ). The interaction term was also significant ( $F (1, 214) = 4.645, p = .03$ ).

Under the green condition, participants showed higher compliance in the long term situation ( $M_{long} = 3.09, SD = 1.3$ ) compared to the short term ( $M_{short} = 2.34, SD = .72$ ). ( $F(1,214) = 11.968, p = .001$ ), as shown in Figure 1.

Figure 1 – Study results



The same pattern of results applied to the not-green condition where participants under the long horizon showed higher compliance compared to participants in the short horizon ( $M_{long} = 2.42, SD = 1.21; M_{short} = 2.35, SD = 1.12$ ),  $F(1,214) = .09, p:NS$ ). The findings revealed that while a long term orientation positively affected compliance under both conditions, the difference between short and long term orientation was higher with the green condition compared to the not-green condition.

So, our findings showed that the time horizon of behavior played an important role in driving consumers' choice, especially when green consumption is expected. This confirmed our hypothesis – that individuals under the long term condition showed higher compliance with green products than individuals under the short time condition. Indeed, while consumers under the long term condition showed higher compliance towards green consumption, consumers under the short time condition reported a lower intention to engage in the electric car sharing service. Our findings confirmed that consumers do not perceive the need to modify their actual behavior towards caring for the environment as being urgent. As a result, they are only willing to do so in the long term. In contrast, consumers comply immediately with the advertised service if the environmental issue are not mentioned.



## Conclusions

This study contributes to the debate about the role of time horizon in consumer behavior, particularly in a context of green consumption.

Our study revealed that under green conditions, consumers under the long term condition show a higher compliance with electric car sharing than consumers under the short time condition, supporting our hypothesis.

Because our study revealed that the gap between the mean values associated with the electric car sharing service is higher than the gap associated with no electric car sharing service, we can also state that time significantly affects green consumption.

So, our study confirms that time perception changes can cause changes to people attitude's towards product attributes, coherently with the theoretical framework of socio-emotional selectivity (Carstensen, Isaacowitz and Charles, 1999). Moreover, according to recent studies (Wei, Donthu and Bernhardt, 2013) consumers exposed to a limited time manipulation evaluate hedonic attributes more positively than those exposed to an expansive time manipulation. The nature of the product we used – as to say an utilitaristic product such as car sharing rather than an hedonic product – maybe one of the reasons for our tested hypothesis.

Indeed, the interaction between long-term conditions and green consumption is consistent with those reported in past studies, specifically involving green consumer behavior, showing that individuals with high consideration of future consequences (CFC) are more sensitive to the long-term consequences of actions that can affect the environment (Joireman et al., 2001a; Joireman et al., 2001b; Strathman et al., 1994).

This study, although still in its first stages, contributes to the debate about how to convince people to engage in green consumption. The general approach of governments, policy makers and firms is to increase attention and compliance with behavior that respect environmental resources, but at a micro level, persuading consumers of the importance of adapting their everyday activity seems to be a priority (Assadourian, 2010). As Pastore (2012) says talking about green marketing and sustainable transports, moving people towards sustainable transports involves three levels of actions: a commercial level, a cultural level and a behavioral level. Indeed, the behavioral level aims at influencing the consumer behavior, trying to change the way they act when they choose and even more when they use a product.

Here we show, through an experimental study, that by the leverage of an individual's time horizon, it is possible to modify their behavior. Specifically, the present work contributes to the literature in this subject.

Furthermore, the paper suggests some key managerial implications for moving towards more effective green consumption. Indeed, our study



draws some conclusions about the effects of advertisement on compliance with green consumption and reveals the effectiveness of a long-term message under not-green conditions as well as under green conditions. The leaflet, proposed as a manipulation, acted as an advertisement that had to push consumers to engage immediately in the behavioral act. Under the green condition, consumers did not consider the leaflet as an advertisement that pushed them to act as they postponed (long term) the environmental friendly behavior.

In this way, a company's marketing communication could be effectively used to change consumers' attitudes and buying intentions towards environmentally friendly products (Jackson, 2005). In particular, our study revealed that consumers under the not-green condition would adopt the behavior in the long term rather than in the short term. In this case, the leaflet did not act as an advertisement that pushed consumers to engage immediately in car sharing. Under the green condition, the same stimulus had the same effect. Under the green condition, consumers decided to postpone the environmental friendly behavior, so they did not consider the leaflet as an advertisement that pushed them to act.

However, the results of our experiment support the use of time perception manipulation to promote green product to the target market. While the marketing communication pushing consumers to engage immediately in car sharing we used in our study was not effective in order to induce the car sharing adoption, the long-term communication was. Indeed, when the advantages of car sharing were described as occurring in the future the compliance with green-consumption increased.

Although this study contributes to the scarce literature on the role of time horizon in green consumption (Miniero et al., 2014), it has certain limitations.

The first limitation relates to the sample: the experimental design involved a limited number of people, and all these were students. Therefore, we cannot say that the sample of our empirical research was representative of pro-environmental people in general. However studying the young generation green purchasing behavior – in particular manipulating time orientation – maybe interesting not only because the young generation represents the future of our society (Smola and Sutton, 2002; Heany, 2007; Hume, 2010), but also because the young generations are concerned about the future effects of their present actions (Kanchanapibul et al., 2014). Furthermore, previous studies found that the young generations are more ready than other generations to accept innovative ideas, and they are conscious socially, environmentally and culturally (Shehan, 2005; Ottman, Stafford and Hartman, 2006; Sullivan and Heitmeyer, 2008; Hume, 2010). Indeed, understanding of young consumers' green buying behaviors and factors affecting them, may give

interesting suggestions to companies developing sustainable marketing strategies targeting this important consumers group.

Secondly, our study focused on a single context variable – time horizon – without considering the effect of other context variables and of other individual differences, such as personal traits or demographic characteristics influencing green consumption. Even though, research on the intention-behavior gap (Boulstridge e Carrigan, 2000; Carrigan e Attala, 2001; Auger e Devinney, 2007) identified a large number of variables affecting this gap, specifically personal values (Schwartz, 1977; Hines et al., 1986, 1987; Bamberg e Möser, 2007; Bray et al., 2010; Griskevicious et al., 2010; Carrington et al., 2010, 2014), in our study we deliberately decided to focus only on time horizon. This procedure was considered to be more coherent with the aim of our analysis – as to say investigating the role assumed by time horizon in influencing green consumption.

Finally, there were some limitations relating to the car sharing we selected as the green product for the first step of our research. Although electrical cars do stress the environmental dimension of the option, the concept of car sharing already has a ‘green halo’ surrounding it, which could have influenced the results of our study. In addition, in this first step, we did not consider factors underpinning the adoption of car sharing services (for example, strength of the culture of car sharing in the country/region/city and among citizens and so on). Throughout, the idea of investigating the effect of time horizon involving car sharing aims at filling a gap in the literature about consumer behavior for sustainable transport. Indeed, this literature mainly focused on the functional barriers against sustainable transport rather than on the psychological ones (Hartmann and Özdemir, 2010), even though some studies evidenced the role assumed by emotions in the adoption, for example, of electric vehicles (East, 2003; Nosi and Pratesi, 2012).

In addition to these limitations, there are important areas not addressed here but equally valid for further research. First, the experimental design could involve in the future a larger number of people and address a more heterogeneous sample, representative of pro-environmental consumers. Secondly, because car sharing is considered to be an utilitarian good, it maybe interesting to replicate the study using another kind of product, maybe hedonic.

## References

- Assadourian E. (2010). Transforming Cultures: from Consumerism to Sustainability. *Journal of Macromarketing*, 30: 186-191.
- Auger P., Devinney T.M. (2007). Do what consumers say matter? The misalignment of preferences with unconstrained ethical intentions. *Journal of Business Ethics*, 76: 361-383.

- Autio M., Heinonen V. (2004). To consume or not to consume? Young people's environmentalism in the affluent Finnish society. *Young*, 12(2): 137-153.
- Bamberg S., Möser. G. (2007). Twenty years after Hines, Hungerford, and Tomera: a new meta-analysis of psycho-social determinants of pro-environmental behaviour. *Journal of Environmental Psychology*, 27: 14-25.
- Baumeister R.F. (2002). Reflections and reviews – Impulsive purchasing, and consumer behaviour. *Journal of Consumer Research*, 28(3): 670-677.
- Boulstridge E., Carrigan M. (2000). Do consumers really care about corporate responsibility? Highlighting the attitude-behaviour gap. *Journal of Communication Management*, 4(4): 355-368.
- Bray J., Johns N., Kilburn, D. (2010). An exploratory study into the factors impeding ethical consumption. *Journal of Business Ethics*, 98: 597-608.
- Carrigan M., Attala A. (2001). The myth of the ethical consumer – do ethics matter in purchase behavior? *Journal of Consumer Marketing*, 32: 385-391.
- Carrington, M., Neville, B., Whitwell, G., (2010). Why ethical consumers don't walk their talk: Towards a framework for understanding the gap between the ethical purchase intentions and actual buying behaviour of ethically-minded consumers. *Journal of Business Ethics*, 97(1): 139-158.
- Carrington M.J., Neville B.J., Whitwell G.J. (2014). Lost in translation: exploring the ethical consumer intention-behaviour gap. *Journal of Business Research*, 67: 2759-2767.
- Carstensen L.L., Isaacowitz D., Charles S.T. (1999). Taking time seriously: a theory of socioemotional selectivity. *The American Psychologist*, 54: 165-181.
- Caruana R. (2007). Morality and Consumption: towards a multidisciplinary perspective. *Journal of Marketing Management*, 23(3/4): 204-225.
- Chan A., Wong S., Leung P. (1998). Ethical Beliefs of Chinese Consumers in Hong Kong. *Journal of Business Ethics*, 17(11): 1163-1170.
- Claycomb C., Porter S., Martin C. (2000). Riding the wave: response rates and the effects of time intervals between successive mail survey follow-up efforts. *Journal of Business Research*, 48(2): 157-162.
- Connolly J., Prothero A. (2008). Green Consumption: Life-Politics, Risk and Contradictions. *Journal of Consumer Culture*, 8: 117-145.
- Doyle S.X., Roth G.T. (1992). Selling and Sales Management in Action: The Use of Insight Coaching to Improve Relationship Selling. *Journal of Personal Selling & Sales Management*, 12(1): 59.
- Dwyer F.R., Schurr P.H., Oh S. (1987). Developing Buyer-Seller Relationships. *Journal of Marketing*, 51(2): 11-27.
- East R. (2003). *Comportamento del consumatore*. Milano: Apogeo.
- Fung H.H., Carstensen L.L. (2003). Sending memorable messages to the old: age differences in preferences and memory for advertisements. *Journal of Personality and Social Psychology*, 85(1): 163-178.
- Furrer O., Liu B.S.-C., Sudharshan D. (2000). The relationship between culture and service quality perceptions: Basis for cross-cultural market segmentation and resource allocation. *Journal of Service Research*, 2: 355-371.
- Gebauer J.E., Riketta M., Broemer P., Maio G.R. (2008). Pleasure and Pressure Based Prosocial Motivation: Divergent Relations to Subjective Well-Being. *Journal of Research in Personality*, 42: 399-420.
- Gjesme T. (1983). *On the concept of future time orientation: considerations of some functions' and measurements' implications*. North Holland: Elsevier Science Publishers B.V.

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- Graham R.J. (1981). The role of perception of time in consumer research. *Journal of Consumer Research*, 7: 335-342.
- Gregory-Smith D., Smith A., Winklhofer H. (2013). Emotions and dissonance in “ethical” consumption choices. *Journal of Marketing Management*, 19(11/12): 1201-1223.
- Griskevicius V., Tybur J.M., Van d.B. (2010). Going green to be seen: Status, reputation, and conspicuous conservation. *Journal of Personality and Social Psychology*, 98: 392-404.
- Hartmann N., Özdemir E.D. (2010). Impact of different utilization scenarios of electric vehicles on the German grid in 2030. *Journal of Power Sources*, 196: 2311-2318.
- Heaney J. (2007). Generations X and Y’s internet banking usage in Australia. *Journal of Financial Services marketing*, 11(3): 196-210.
- Higgs-Kleyn N.H. (1998). Unethical Consumer Behaviour: An Exploratory Investigation. *Management Dynamics*, 7(1): 35-52.
- Hines J.M., Hungerford H.R., Tomera A.N. (1986/1987). Analysis and synthesis of research on responsible environmental behaviour: A metaanalysis. *Journal of Environmental Education*, 18: 1-8.
- Hofstede G. (1980). Culture’s consequences: international differences in work-related values. Beverly Hills, CA: Sage.
- Hume M. (2010). Compassion without action: examining the young consumers consumption and attitude to sustainable consumption. *Journal of World Business*, 45: 385-394.
- Jackson T. (2005). *Motivating sustainable consumption: A review of evidence on consumer behaviour and behavioural change*. London: Policy Studies Institute.
- Joireman J.A., Lasane T.P., Bennet J., Richards D., Solaimani S. (2001a). Integrating social value orientation and consideration of future consequences within the extended norm activation model of proenvironmental behavior. *British Journal of Social Psychology*, 40: 133-155.
- Joireman J.A., Van Lange P.A.M., Van Vugt M., Wood A., Vander Leest T., Lambert C. (2001b). Structural solutions to social dilemmas: A field study on commuters’ willingness to fund improvements in public transit. *Journal of Applied Social Psychology*, 31: 504-526.
- Joreiman J.A., Van Lange P.A.M., Van Vugt M. (2004). Who cares about the environmental impact of cars: those with an eye to the future. *Environment and Behavior*, 36: 197-206.
- Kanchanapibul M., Lacka E., Wang X., Chan H.K. (2014). An empirical investigation of green purchase behaviour among the young generation. *Journal of Cleaner Production*, 66:528-536.
- Kees J. (2011). Advertising framing effects and consideration of future consequences. *Journal of consumer affairs*, 45(1): 7-32.
- Keough K.A., Zimbardo P.G., Boyd J.N. (1999). Who’s smoking, drinking, and using drugs? Time perspective as a predictor of substance use. *Basic and Applied Social Psychology*, 21(2): 149-164.
- Klineberg S.L. (1968). Future time perspective and the preference for delayed reward. *Journal of Personality and Psychology*, 8(3): 253-257.
- Kronrod A., Grinstein A., Wathieu L. (2012). Go Green!! Should Environmental Messages Be So Assertive? *Journal of Marketing*, 76(1): 95-102.
- Leonidou L.C., Leonidou C.N., Kvasova O. (2010). Antecedents and outcomes of consumer environmentally friendly attitudes and behavior. *Journal of Management*, 26(13-14): 1319-1344.

- Lindsay J.J., Strathman A. (1997). Predictors of recycling behavior: An application of a modified health belief model. *Journal of Applied Psychology*, 27: 1799-1823.
- Loewenstein G.F. (1988). *Frames of Mind in Intertemporal Choice*. *Management Science*, 34(2): 200-214.
- Macnaghten P. (2003). Embodying the environment in everyday life practices. *The Sociology Review*, 51: 63-84.
- McDonald N.C., Aalborg A.E. (2009). Why Parents Drive Children to School: Implications for Safe Routes to School Programs. *Journal of the American Planning Association*, 75: 331-42.
- Meyers-Levy J., Maheswaran D. (1992). When Timing Matters: The Influence of Temporal Distance on Consumers' Affective and Persuasive Responses. *Journal of Consumer Research*, 19(3): 424-433.
- Miniero G., Codini A., Bonera M., Corvi E., Bertoli G. (2014). Being green: from attitude to actual consumption. *International Journal of Consumer Studies*, 38: 521-528
- Mowen J.C., Mowen M.M. (1991). Time and outcome valuation: implications form marketing decision making. *Journal of Marketing*, 55: 54-62.
- Muncy J.A., Eastman j. K. (1998). Materialism and Consumer Ethics: An Exploratory Study. *Journal of Business Ethics*, 17(2): 137-145.
- Nosi C., Pratesi A. (2012). La domanda di auto elettriche tra entusiasmi tecnologici e resistenze psicologiche: una ipotesi di segmentazione. *Mercati e Competitività*, 2: 31-44.
- Ottman J.A., Stafford E.R., Hartman C.L. (2006). Avoiding green marketing myopia: ways to improve consumer appeal for environmentally preferable products. *Environment*, 48(5): 22-36.
- Pastore A. (2012). Green Marketing e mobilità sostenibile. *Mercati e Competitività*, 2: 13-20.
- Prothero A., Dobscha S., Freund J., Kilbourne W.E., Luchs M.G., Ozanne L.K., Thøgersen J. (2011). Sustainable Consumption: Opportunities for Consumer Research and Public Policy. *Journal of Public Policy & Marketing*, 30: 31-38.
- Rallapalli K.C., Vitell S.J., Wiebe F.A., Barnes J.H. (1994). Consumer Ethical Beliefs and Personality Traits: An Exploratory Analysis. *Journal of Business Ethics*, 13(7): 487-495.
- Robinson J., Nicosia F. (1991). Of time, activity, and consumer behavior: an essay on findings, interpretations, and needed research. *Journal of Business Research*, 22(2): 171-186.
- Sarigöllü E. (2009). A cross-country exploration of environmental attitudes. *Environment and Behavior*, 41: 365-386.
- Schwartz S.H. (1977). Normative influences on altruism. In: Berkowitz L. (Ed.), *Advances in experimental social psychology*, 10: 221-279. San Diego: Academic Press.
- Sheahan P. (2009). *Generation Y: Thriving and Surviving with Generation Y at Work*. National Centre for Vocational Education Research (NCVER), Adelaide, SA, Australia.
- Sheahan P. (2005). *Generation Y: Thriving and Surviving with Generation Y at Work*. Australia: Hardie Grant Books.
- Simonson I. (1992). The Influence of Anticipating Regret and Responsibility on Purchase Decisions. *Journal of Consumer Research*, 19(1): 105-118.

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- Smola K.W., Sutton C.D. (2002). Generational differences: Revisiting generational work values for the new millennium. *Journal of organizational behavior*, 23: 363-382.
- Strathman A., Gleicher F., Boninger D.S., Edwards C.S. (1994). CFC: Wweighing immediate and distant outcomes of behavior. *Journal of Personality and Social Psychology*, 66: 742-752
- Sujan H., Sujan M., Bettman J.R. (1988). Knowledge structure differences between more effective and less effective salespeople. *Journal of Marketing Research*, 81-86.
- Sullivan P., Heitmeyer J. (2008). Looking at Gen Y shopping preferences and intentions: exploring the role of experience and apparel involvement. *International Journal of Consumer Studies*, 32: 285-295.
- Szymanski D.M., Churchill Jr G.A. (1990). Client evaluation cues: a comparison of successful and unsuccessful salespeople. *Journal of Marketing Research*, 163-174.
- Vohs K.D., Baumeister R.F., Tice D.M. (2008). Self-regulation – goals, consumption, and choices. In Haugtvedt C.P., Herr P.M., Kardes F.R. (eds.), *Handbook of Consumer Psychology*. New York: Psychology Press.
- Wei Y., Donthu N., Bernhardt K.L. (2013). Effects of cognitive age, dispositional time perceptions, and time view manipulations on product attribute evaluations. *Journal of Business Research*, 66: 2171-2177.
- Weitz B.A., Sujan H., Sujan M. (1986). Knowledge, Motivation, and Adaptive Behaviour: A Framework for Improving Selling Effectiveness. *Journal of Marketing*, 50(4): 174-191.
- Wright P., Weitz B. (1977). Time Horizon Effects on Product Evaluation Strategies. *Journal of Marketing Research*, 14(4): 429-443.