

“Factors Influencing GenZ’s Intention to Purchase an Electric Vehicle”

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Affidavit

I hereby affirm that this Bachelor's Thesis represents my own written work and that I have used no sources and aids other than those indicated. All passages quoted from publications or paraphrased from these sources are properly cited and attributed.

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Abstract

Electric vehicles are gaining presence in many cities all around the world and, therefore, young are increasingly having the chance to choose between a conventional or an electric vehicle. The aim of this research is to find out which factors make gen Z members interested in purchasing an electric vehicle and finding out if social media influencers have an impact on those factors and act as moderators between them and purchase intention.

Convenience sampling was used in the form of an online survey for the data collection. As a result, only primary quantitative data was collected and analysed by the researcher.

The results show that purchase incentives and barriers had the strongest correlation with Gen Z's purchase intention. Furthermore, social media influencers do not appear to act as mediators between the dependent and independent variables.

All in all, this research shows an insight into gen Z's EV purchase intention and which factors seem to be more important to them when deciding to purchase an electric vehicle to help car manufacturers understand how to address this age group and to know which factors to have in mind when marketing their vehicles to Gen Z members.

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1. Introduction

Climate change is a trending topic in our daily lives due to the impacts it is having on the environment and as a result, on us humans. People of all ages are starting to take action and attempting to make a change and reduce their carbon footprint.

The transportation sector, particularly road transport, has become one of the most polluting factors in the environment due to the continued usage of internal combustion fossil fuel engines in conventional cars (Gryparisa et al., 2020). Countries all over the world are trying to increase the number of electric vehicles on their roads in an attempt to minimise or decrease their CO₂ emissions and the problems they cause. (Rezvani et al. 2015). Electric vehicles (EVs) rely on electricity to power the car and its electronic components (Maroti, P. K. Et al., 2022). Gen Z, as the upcoming generation of car drivers, is probably one of the last generations that will be able to choose what type of vehicles they will buy once they can afford one. This age group was born between 1996 and 2012. As this generation is rather active on social media it could be that they are being influenced by these platforms as they often discuss environmental topics and often show posts and ads of new EV's that might help manufacturers target them as potential customers, especially, through social media influencers (Koulopoulos & Keldsen, 2016).

Current papers investigate the general factors that make people move from combustion vehicles to electric vehicles. Topics such as government practicality, such as infrastructure for EVs, and incentives are discussed but according to Zhang et al. (2013), only a very weak link has been found between purchase subsidies and consumer propensity to acquire electric vehicles. As a result, factors other than financial incentives may serve as the key motivators for EV adoption. Cited in (Sierzchula et al. 2014). This study's objective is to find

out what effects influence Gen Z members' intention to purchase an electric vehicle and what impact social media influencers have on the factors that make Gen Z's think about whether they would choose an EV over a conventional combustion vehicle and why.

Some younger drivers might see it as an environmentally conscious action, others might do it to follow a trend as it happens with so many products that are present on social media platforms. The key aim of this research would be to find out if social media platforms influence this decision at all. If social media platforms raise environmental awareness (Zafar et al. 2021), then it will also change users' environmentally friendly behaviour and thus, for example, also make them consider buying an EV. In other words, electric car manufacturers can target young customers through different social media marketing techniques and turn them into potential future customers. Theories and models such as the Theory of Planned Behaviour (TPB) (Ajzen 1991), Theory of Reasoned Action (Ajzen & Fishbein 1975) and the Technology Acceptance Model (Davis 1989), as an extension of the first, will also be discussed in the literature review to gain a deeper insight into how individuals behave when they must make decisions and how new technological advancements are accepted by our society. Furthermore, the following research questions will be answered:

- To what extent do incentives influence Gen Z's intention to purchase an EV?
- To what extent does environmental consciousness have an impact on Gen Z's intention to purchase an EV?
- What effect do subjective norms have on Gen Z's EV purchase intention?
- What effect does the convenience of EVs have on Gen Z's intention to buy an electric vehicle?
- What is the role of social media influencers in the decision-making process of Gen Zs for buying an electric vehicle?

This paper will adopt the following structure. First, the impact of Greenhouse gas emissions (GHGs) on global warming will be reviewed, the second section will discuss the growth of electric vehicles in the market followed by the environmental awareness of millennials and the previously mentioned models and theories such as TPB, the Theory of Reasoned Action and the Technology Acceptance Model. The rest of the paper will tackle the pros and cons of electric vehicles and analyze the different factors that could lead Gen Z members to purchase or consider purchasing an electric vehicle.

A survey with a sample size of approximately 100 participants will be used to gather, analyse, and evaluate the data to test the hypotheses. Although Gen Z's might not be the potential customers as of now, due to financial reasons, they are the future customers and companies should understand which factors are most important to this generation and prepare themselves to turn them into future clients. Furthermore, as previously mentioned, the subsequent section will give an insight into the existing literature on the topic of Gen Z's purchase intention.

2. Literature Review

The literature review includes the Impact of CO₂ emission on climate change, Gen Z's environmental consciousness and how subjective norms affect their decisions, the incentives that drive consumers to purchase an EV, the convenience and barriers that come along with them, and the impact of social media influencers on Gen Z's purchase intention. Some of these will be backed up using different models that explain purchase intention and the acceptance of new technologies.

2.1. Impact of Co₂ emissions and the growth of electric vehicles on the market.

The effect that CO₂ emissions have on the environment is a topic that has been gaining a lot of attention in recent years. Natural catastrophes, which are predicted to become more common in the future, are frequently thought to be a direct effect of climate change, and they not only cost lives but also inflict significant economic losses (Coronese et al., 2019) as cited in (Austman & Vigne, 2021). Global warming is a major facet of climate change that poses a substantial danger to current ecosystems and is linked to a slew of negative outcomes, including extreme weather, resource depletion, and biodiversity loss (e.g., IPCC, 2019). As cited in (Verplanken et al., 2020).

Further research found that passenger vehicles account for most CO₂ emissions (44.3%) in the transportation sector. (European Environment Agency, 2019) as cited in (Austmann & Vigne, 2021). The transportation sector has become the second-largest consumer of energy and a major contributor to GHG and air pollutant emissions as a result of increasing urbanization and constant upgrading of economic and social activities (Atabani, Badruddin, Mekhilef, & Silitonga, 2011) as cited in (jiao et al., 2020). The fact that the transportation sector has an effect on the global Greenhouse Gas Emissions (GHGs) is not new to many people, but that it has such a big weight, specifically on the global CO₂ emissions, may be new to many people. Therefore, many

are starting to change their behaviour to do their part for the environment. One way of doing so is to look where we can cut back on our personal carbon footprint. Especially for those who travel a lot by car, the option of changing from a combustion engine vehicle to an EV is one option. Unlike conventional cars, electric EVs produce no gases while on the road, this is also known as “zero tailpipe emissions.” (Teixeira and Sodré, 2018, Driscoll et al., 2013, Morrissey et al., 2016) as cited in (Bastida-Molina et al., 2020). The countries that evolved the fastest have risen to the top of the global electric car industry. China, France, Germany, India, Japan, the Netherlands, Norway, and the United Kingdom are some of them (Xu et al., 2021).

It is important to understand that electric vehicles are not only gaining importance because of individuals’ environmental awareness, but also because the EV development may also help the government achieve energy security, sustainable growth, and satisfy the criteria of many regulations. Electric cars, as one of the most creative industrial clusters in the automotive sector, have enormous potential to boost economic and industrial competitiveness while also increasing investor attractiveness. (Xu et al., 2021). Thus, countries can combine their economic attractiveness towards investors at the same time as they do something beneficial for the environment and meet the CO₂ emission goals that were set. Additionally, around 17 countries have committed to zero-emission vehicle objectives or a phase-out of ICEVs by 2050 (IEA, 2020) cited in (Guo et al., 2021).

2.2. Incentives

Together with the environmental benefits come the benefits for those who chose to buy an electric vehicle. Benefits such as free parking, price reduction, the absence of taxes in some countries, and many more benefits. By doing so, countries want to make EVs more attractive for their citizens which, as

previously mentioned, will help them reduce their emissions and achieve their goals.

Some countries like Germany, Denmark and Austria demonstrate their dedication to electric vehicle adoption by establishing regulatory measures to promote EV market presence and supporting experimental activities to show EV functionality (Kaplan et al., 2016). The German Federal Ministry of Transport, Building and Urban Development has committed a rather large amount of 130 million euros to promoting electric vehicles in eight different testing areas. (Kaplan et al., 2016).

There are two main types of incentives: those that are provided at the purchase of the car, also known as purchase incentives, and those that are obtained throughout the ownership of the vehicle, which is also called reoccurring incentives. Purchase incentives are meant to lower the cost of a PEV. These incentives are used in various ways. PEV purchasers in all states of the USA, for example, are eligible for a federal tax credit of up to \$7,500 when they purchase an eligible car (Jenn et al., 2020). Recurring incentives, on the other hand, differ from one-time incentives in that they are generally given over the course of a PEV's ownership. Free or low-cost parking, access to exclusive lanes, free charging, road toll exemptions, or yearly road tax exemptions are all examples of incentives (Jenn et al., 2020). The reason why it has taken some countries quite some time to adopt electric vehicles might have been the fact that people were not ready to pay more for a car that was often less equipped than a conventional car and that had a mileage that was way below that of a combustion vehicle.

Car manufacturers have managed to develop cars that are on the same level as conventional cars. Volkswagen, for example, introduced a new series of vehicles called the I.D. family. The ID.3, for example, is manufactured in a factory that has a climate-neutral balance (VW Newsroom, 2021). By doing so, they not only produce vehicles that are environmentally friendly, but the whole process of building the car also helps to avoid Co2 emissions. This lets

their target audience know that the company is taking its goal seriously which then also improves its brand image.

Another factor to consider is how well electric vehicles are accepted by Gen Zs. One theory that discusses the adoption of new technologies is the Technology acceptance model (TAM). As the name suggests, the TAM helps explain how individuals accept new technologies which are often not well received. This model was suggested by Davis in 1989 and argues that there are two main factors that make people take on new technologies. He differentiates between the perceived usefulness and the perceived ease of use of the technology that is being discussed. This model is being used in several different areas, although it has originally been implemented to explain and examine the adoption and acceptance of computers (Shanmugawel & Michael 2022). For instance, if two elder individuals are interviewed about video games and one of them thinks that they are a waste of time and hard to play whereas the other one thinks it is helpful in the learning process and stimulates the brain, the second one is more likely to accept this new technology (Charness and Boot, 2016).

Expanding on this paper's topic, adoption of EVs, consumers' intentions to use e-vehicles are also driven by the previously mentioned perceived usefulness, perceived convenience of use, and perceived risk and attitude. (Yankun, 2020) as cited in (Shanmugawel & Michael 2022). At the same time, this lack of consumer knowledge and the risk they see in EVs make them rethink whether they are willing to use one (Wang et al., 2018) as cited in (Shanmugawel & Michael 2022). Additionally, Wang et al. (2018a) also mentioned that our opinion towards a particular innovation, like EVs in this case, can have a negative or positive impact on whether we would or would not accept that innovation (Singh et al., 2020). One's desire to accept an innovation is enhanced whenever that person has an inspiring mindset toward said innovation and vice versa (Liu et al., 2017) as cited in (Singh et al., 2020). For some people the jump from a conventional internal combustion vehicle to an EV might be a big innovative change in their lifestyle as there are some things that have to be considered when using one (such as charging the batteries and

finding charging stations) while others might just see it as a change in the vehicle's propulsion and don't think it would be a big issue in their daily lives. Furthermore, in Germany, Ziefle et al. (2014) compared the environmental benefits and hurdles of conventional and electric cars in terms of cost, comfort, trust, and technology, and found that the environmental benefit provides a compelling justification for Adoption of electric vehicles as cited in (Krischnan & Koshy, 2021). With this information the following hypotheses have been developed:

H1a: Purchase incentives have a positive effect on Gen Z's intention to purchase an EV.

H1b: Recurring incentives have a positive effect on Gen Z's intention to purchase an EV.

2.3. Environmental consciousness of Gen Z's

Ipsos MORI surveyed Generation Z on behalf of Amnesty International about their views on the issues they believe are most important, and whom they believe is accountable for solving injustices. Climate change was chosen by 41% of respondents, followed by pollution (36%), and terrorism (31%). In addition, at 57 percent, global warming was also the most important environmental problem (Barbiroglio, 2019).

Consumers' changing lifestyles, environmental degradation, and a desire to enhance the quality of life have made it necessary for families to consider environmental factors when making choices and decisions, also, consumer attitudes toward environmentally friendly items are influenced by a variety of variables like, for example, environmental awareness, which is defined as a person's attitude toward the environment, as well as a collection of facts and ideas about it, as well as the set of values that this person adheres to in their conduct (Kłos, L., 2015).

In order to measure GenZs environmental consciousness, The New Ecological Paradigm (NEP) will be used. The NEP scale is used to measure an individual's pro-environmental worldview and is made up of fifteen questions that, when answered, give you a score that backs up and measures that person's ecological world view. The respondents of these questions have to say to what extent they agree or disagree with each of the 15 statements in the survey (Anderson, 2012).

The fact that gen Zs care so much about the environment may be related to the fact people talk more about it today than they used to in the past and all the fact that is becoming a bigger concern to many individuals (Guo et al., 2012) as cited in (Calculli et al., 2021). The first effects of global warming can already be seen, and it is not necessary to be a professional to see that something is wrong. Be it extremely hot days during fall or cold days in spring, storms, or wildfires, this is making the younger generations afraid of what to expect for their future and that of their future children. As the results show in the survey mentioned above, global warming has been chosen as the most important environmental issue and this is the reason why, this study, aims to find out if this awareness would make Gen Zs consider an EV when they must choose a car.

Given the fact that GenZ's spend a lot of time on social media platforms, and topics such as environmental issues are discussed on these, it would make sense that these platforms could influence said choice. These platforms are thought to have a significant influence on public understanding of nature conservation. Indeed, studies have demonstrated that even conservation science material gleaned at professional conferences may be disseminated to a wider audience using social media platforms like Twitter. (Bombaci et al., 2015, Shiffman, 2012) as cited in (Wu et al., 2018). Based on this information, this paper posits its third hypothesis, stated as follows:

H2: Environmental awareness has a positive impact on Gen Z's intention to purchase an EV.

2.4. Subjective Norms

One of the most important theories used in several studies to explain purchase intention and consumer behaviour is the Theory of Planned Behaviour (TPB). The TPB uses three factors to describe behavioural intents and behaviour: attitude toward the behaviour, societal impact on the behaviour (subjective norm), and perceived behavioural control in carrying out the behaviour (Moons & De Pelsmacker, 2015). When it comes to Electric Vehicle purchases, attitude refers to a person's positive or negative assessment of the vehicle, like its eco-friendliness or its novelty for example (Moons and De Pelsmacker, 2012) as cited in (Ye et al., 2021). The latter being explained by the Technology acceptance model earlier in this literature review. Subjective norms, on the other hand, looks at the social pressure an individual might feel to go ahead and buy an EV (Moons and De Pelsmacker, 2012) as cited in (Ye et al., 2021). Finally, the simplicity of acquiring an EV has an impact on a type of control thinking, this is represented by the previously mentioned Perceived Behaviour control (Li et al., 2020b) as cited in (Ye et al., 2021).

Extending on the Subjective norms, some people might feel like they have to behave in some way or purchase certain things because they think that that is what the people around them would expect them to do or may be even to fit in. For instance, one might think that he or she must purchase an electric vehicle due to the fact that the people around them are very environmentally aware and that if they were to purchase a conventional vehicle this might upset them. This impact that subjective norms have on one's behaviour intention is also known as "the compliance effect" (Moons & The Pelsmacker, 2015).

Furthermore, what makes this theory useful to this paper is the fact that the TPB model's applicability to numerous environmentally beneficial behaviors was proven in the context of various cultural backgrounds (Chan and Lau, 2001;

Pagiaslis and Krontalis, 2014; Paul et al., 2016; Yadav and Pathak, 2017a) as cited in (Wei et al., 2021). For this paper the focus of the TPB will lay on the weight these subjective norms have on GenZs intention to acquire an electric vehicle. It has been proven that family members, friends and neighbours all have an impact on people's decision to purchase and EV since people feel that social pressure from everyone around them (Jansson et al., 2017) as cited in (Asadi et al., 2022), and it will therefore be interesting to see if this also applies to GenZ members.

Regarding the factors featured in TPB's all-inclusive hypothesis, Han and Kim (2010) observed that the whole evaluation of a specific action is coordinated by the attitude toward the adoption of EVs, and attitude is defined as a favourable or negative appraisal of the adopting behaviour, as cited in (Singh et al., 2020).

H3: Subjective norms has a positive impact on Gen Z's intention to purchase an EV.

2.5. EV Convenience

The idea that electric vehicles are something of the future is no longer the case and, in fact, although manufacturers have been trying to catch potential customers' attention by using rather futuristic designs, the only main difference between an EV and an internal combustion vehicle is its engine. So why do people make such a big deal out of this type of vehicle? The main reason for this might be answered by the previously explained TAM. Even though Electric vehicles are often still higher in prices than conventional vehicles and some other minor points, EVs are of great convenience to the public.

The fact that cars are not being used for just over 90% of their life, and the fact that electric vehicles can use that time to recharge their batteries overnight while being parked is already one major advantage it has over conventional vehicles (Pod-point, 2021). "Being able to begin each new day with a fully

shared car against inconvenient filling on the road is the primary convenience of electric vehicles (Eberhard & Tarpenning, 2006). As mentioned in the incentives section of this paper, if the infrastructure is available, which it is in most western countries, EV owners can charge their cars every time it is parked, eliminating the need for very long mileage which is keeping some people from acquiring such a vehicle. An average person in the US, for example, drives just over 60 km a day, meaning that he or she could drive their EV for several days without having to plug it in (Drive Change. Drive Electric, 2020).

Another major convenience factor that comes with EVs are the low maintenance and running costs compared to conventional combustion vehicles because of two main points: cheaper to “fuel” and the fact that there is no engine saves owners a fair amount of money as yearly services like oil changes or spark plugs must be made, saving owners up to USD1500 a year (Union of Concerned Scientists, 2018). This also shows that there are not only non-monetary but also monetary advantages outside of the purchase and recurring incentives that have been previously discussed in this review. Getting back to the Technology Acceptance Model and the perceived usefulness of new technologies, this might well be a factor convincing people to adopt EVs as they will notice that, with this possibility of always having a “full tank”, there is a massive advantage over conventional vehicles. Also, the perceived ease of use mentioned in the ATM can be used here given the fact that all it takes to have this advantage, is the very short time it takes to plug your car in when getting home, to work or to the next charging station.

2.5.1. Possible disadvantages (Barriers)

Some of the disadvantages that come with electric vehicles are the rather high prices compared to combustion vehicles, the lack of charging points in many cities, and the fact that in many cases, the electricity for the charging points is generated from burning fossil fuels. Despite the supposed environmental

benefits of electrifying the light-duty vehicle fleet, the percentage of EVs sold in the overall number of cars sold remains low (Rezvani et al., 2015).

To accomplish a change in the transportation industry, the newly developing propulsion technologies' cost drawbacks, as well as their restricted driving range, must be addressed. EVs now have a restricted driving range of about 160 km due to the restricted energy density of batteries. To overcome the restricted driving range hurdle, an extensive charging network would be necessary, however, the economic viability and success of alternative propulsion systems will be largely determined by factors such as relative average prices compared to those of conventional combustion vehicles (Gass et al., 2014).

Although governments are helping with subsidies, electric cars are still not able to compete with the prices of combustion vehicles, but car manufacturers are trying to increase production and sales to satisfy the new environmental laws and regulations (Jolly J., 2020). As previously mentioned, Volkswagen AG has not only started selling some of their normal cars like the Golf with an all-electric engine, but they have also introduced a new all-electric group of vehicles (The I.D.) that run on the same all-electric platforms. By doing so, they could be able to reduce their production costs and offer their models at a more affordable price.

Another big issue is the fact that many cities are still not ready to satisfy the needs of many electric car owners with charging infrastructure. Even if many people decided to “go green” and change to an EV, they would not be able to

charge their car in the city while they drink coffee because there are just not enough charging stations available as of now. Consumers' intents to acquire an electric vehicle have been found to grow when EV charging infrastructure is developed. Home charging is the most commonly utilized and most crucial piece of infrastructure in persuading people to buy a PEV (Funke and Plötz,

2017; M. Nicholas and Tal, 2017) cited in (Canepa et al., 2019). Having the commodity of charging their vehicle at night or over the weekend in their own garage appears to be a simple solution to this problem.

Despite some drawbacks that Electric vehicles have compared to internal combustion vehicles, it has been proven that the monetary and non-monetary incentives that come with EVs in many countries do indeed have a positive impact on the purchase of electric vehicles (Liao et al., 2017, Rezvani et al., 2015, Yang et al., 2016) as cited in (Ye et al., 2021).

H4a: Convenience of EVs have a positive effect on Gen Zs purchase intention

H4b: Perceived barriers are negatively related to purchase intention.

2.6. The Role of Social Media Influencers

2.6.1. Background of social media effect on purchase intention

Users create and upload multimedia material, including their thoughts on brands and items, on a regular basis. User-generated material, commonly known as UGC, has shown to be even more efficient and influential than traditional marketing campaigns designed by professionals in this field (Welbourne and Grant, 2016, Aral et al., 2013, Lipizzi et al., 2015) as cited in (Skolova and Kefi, 2020).

One major factor that businesses can profit from when using social media platforms to market their products and services is the electronic word of mouth (eWOM). It refers to the activity of sharing experiences about certain products and services over the internet (Hennig-Thurau, Gwinner, Walsh, & Gremler, 2004) as cited in (Liu et al., 2021). When users share the experiences they made with certain products, they are giving other potential customers unbiased and practical information about said product (Sigala, 2018) as cited in (Onofrei et al., 2022). Some people have seen potential in this procedure and have turned these recommendations into a profession. Often biased as they are paid by companies to share their products on several platforms, the

so-called influencers have gained a lot of importance in today's marketing campaigns of many large companies and in the automotive sector.

2.6.2. Social Media Influencers

Brown & Hayes (2008) used the definition: "Influencer is a third party who significantly shapes the customer's purchasing decision". As a result, many companies and brands are constantly looking for people that are popular on SM platforms to represent them and to become their brand ambassadors (Zhou et al., 2021b) as cited in (Cheung et al., 2022). Some SM users have a very large number of followers on their accounts and are very helpful for businesses as they help them reach their audience. Given the fact that influencers are active in many different sectors, brands can easily choose the best fitting influencer account to represent their company and target their customers with ease (Raggatt et al., 2018, Klassen et al., 2018) as cited in (Sokolova and Kefi, 2020). In this case, for example, a car manufacturer could reach out to an influencer that is active in the automotive content production such as car reviewers or photographers, as these have experience in the field and the only thing the car brand would have to do in most cases is facilitate a vehicle for the influencer for a few days so that they can review it.

Another key factor for car brands is that recruiting the right social media influencers to attract potential consumers as a social media marketing strategy is supposed to improve connection with customers, boost the impact of marketing efforts on them, to add even more value and finally, produce advantages for the manufacturers (Ananda et al., 2016) as cited in (Jiménez-Castillo & Sánchez-Fernández, 2019). Nonetheless, brands have to be careful when choosing the influencers they want to work with as a negative experience with an influencer might make followers also relate a brand to that negative experience and it is also important to select those influencers that best fit the product that wants to be marketed and based on other content that person might promote and also based on the audience said influencer

might address (Djafarova and Rushworth, 2017) as cited in (Chung-Wah et al., 2020).

The advantage for brands is that the vast majority of the followers that car influencers have will be people who are passionate about cars or at least interested in them and thus, target this group. In many cases car dealerships will give these photographers and car reviewers a car for a few days so that they can explore the vehicle and share their experience with all their followers. Followers and potential customers have the chance to hear someone's unbiased opinion other than that of the manufacturers themselves.

Inclusion, sincerity, and pragmatism are three values that define Gen Z, given that many social media influencers are part of Generation Z, it's no wonder that they adhere to these three ideals. About half of Gen Z members say they trust influencer recommendations (Geyser, 2021). Additionally, this behaviour may be connected to the previously discussed subjective norms and the way in which consumers are more prone to acquire something because they think that they must do so to please others or to feel accepted and think their family and friends would want them to do so.

To find out to what extent all these points influence Gen Zs intention to purchase an electric vehicle the following hypothesis has been created:

H5: Social media influencers act as a moderating factor between the previous hypotheses and Gen Z's purchase intention.

3. Methodology

This section of the paper will outline how the research for the hypothesis testing will be conducted. This section will be divided into five parts: research method, survey development, data collection, limitations and lastly, research ethics.

3.1. Research Method

This study will have basic research using a quantitative research type since quantitative methods provide a better understanding of the causal relationship of the impact certain factors exert on Gen Zs EV purchase intention. Furthermore, the data used for this study is primary data that has been collected by the researcher to later, conduct his experiment.

Since the goal of this study is to acquire evidence of a causal relationship between the independent and dependent variables, the research approach will be explanatory. Thus, analysing the link between the independent factors discussed in the literature such as incentives, environmental awareness, social norms, social media influencers, the convenience of EVs and the dependent variable, EV purchase intention.

For the data collection, a survey will be used as it simplifies the analysis of the data at a later stage and because it fits the quantitative data best. Furthermore, by decreasing the number of variables, and thus the length of the survey used for the data collection, to a limited number that are closely controlled, valid and reliable results are produced, allowing the researcher to make significant interpretations of the data. Further details about how the survey was designed and conducted can be found in the next section.

Furthermore, to analyse this data, statistical programs have been used to manipulate the data and to perform a series of tests to prove the data's

reliability, normality and correlation which will be explained in more detail in the following sections of the methodology in a manner that anyone with a statistical program can reproduce them. For this research specifically, the statistical program named Jamovi has been used as it provides all the tests and options needed for quantitative research of this kind.

3.2. Survey Development

As previously mentioned, a survey was used to find out which were the main reasons that would lead Gen Z members to purchase an electric vehicle. The survey is divided into eight sections: purchase incentives, recurring incentives, environmental consciousness, social norms, barriers, purchase intention and impact of social media influencers. These sections will be used to test the different hypotheses they belong to, making use of a five-point Likert scale for all questions with the following answers: “Strongly Agree”, “Agree”, “Neutral”, “Disagree”, and “Strongly Disagree”.

In terms of ethical considerations, and in order to ensure that only that data from respondents who explicitly gave their consent to partake in this survey, at the beginning of the survey, participants will be asked for their consent to fill out the survey and are informed about the anonymity of the data and about their freedom to take part or not. This is a filter question and only those respondents who agreed to take part in the survey will be directed to the next section. In this section, two demographic questions will be asked including the respondent’s gender and a filter question, “Age Group”, where those respondents that are not part of the gen Z group do not get to the next part of the survey where the first set of questions is asked as this will save a lot of time during the data cleaning process. Once the respondents answered the demographic questions and passed the age group filter question, they will answer questions related to the hypotheses stated in the literature review which have been mentioned at the beginning of this section.

Additionally, questions found in the survey were obtained or adapted from existing papers that researched similar topics and their sources can be found in the table below.

Figure 1: Construct Items Table

Variables	Constructs	Source
Incentives	Purchase incentives - For adopting EVs, a government direct subsidy policy is attractive to me - For adopting EVs, exemption from sales tax is helpful to me. - For adopting EVs, exemption from VAT is useful to me. Recurring Incentives - For adopting EVs, circulation tax reduction is attractive to me. - For adopting EVs, electricity supply subsidy is useful to me. - For adopting EVs, a preferential insurance policy is helpful to me.	https://www.sciencedirect.com/science/article/pii/S030100032X
Environmental Consciousness	- We are approaching the limit of the number of people that Earth can support. - The balance of nature is strong enough to cope with the impacts of modern industrial nations. - Humans are seriously abusing the environment. - The Earth is like a spaceship with very limited room and resources. - The Earth has plenty of natural resources if we just learn to develop them.	https://www.researchgate.net/publication/264858463_NeologicalParadoxEP_Scale/link/670cf264cee2840000000000/download
Subjective Norms	- Most people who I consider important think I should adopt an EV. - Most people who I consider important would want me to adopt an EV. - People whose opinions I value would prefer that I adopt an EV. - My interaction with people influences me to adopt an EV.	https://www.sciencedirect.com/science/article/pii/S09672000625
Convenience	- The use of EVs would reduce carbon emissions and energy consumption. - The use of EVs would make me healthier. - The use of EVs would reduce my transportation specific household expenditures - The use of EVs would improve my travel efficiency.	https://www.sciencedirect.com/science/article/pii/S09672000625
Barriers	- I consider charging infrastructure a barrier for EV adoption. - I consider safety a barrier for EV adoption. - I consider battery range a barrier for EV adoption	https://www.sciencedirect.com/science/article/pii/S030100032005162?casa=sG5l8tdKdZY&T1RqDNIYPvSI

		J1UZfcrf5U4P6 vN6dAPufDTy 4E_VzYNhIJ91 I
Social Media Influencers	- I would purchase a brand based on the advice I am given by the influencers that I follow. - I would follow brand recommendations from the influencers that I follow. - In the future, I will purchase the products - of brands recommended by the influencers that I follow	https://www.sciencedirect.com/science/article/pii/S0269301653
Purchase Intention	- I am willing to adopt EVs while choosing a vehicle in the near future. - I plan to adopt EVs while choosing a vehicle in the near future. - I intend to adopt EVs when choosing a vehicle. - I would like to recommend others adopt EVs when they choose a vehicle	https://www.sciencedirect.com/science/article/pii/S0962000625

3.3. Data Collection

As previously mentioned, the data for this study was collected with help of a survey which has been designed and shared through google forms and thus, only primary quantitative data has been gathered.

The sampling method used for the non-probability data collection was convenience sampling since this type of sampling makes use of those resources that are easily available to the researcher (Sexton, 2022). Furthermore, it was the quickest and most reliable way for the researcher to gather data from the study's focus group, Gen Z members. Additionally, as the researcher's aim was to find out how the current situation of all hypotheses of the research is, a cross-sectional sampling method has been used.

A link of the survey has been shared a total of six times on Instagram for three weeks starting on the 14th of April 2022 and a total of 98 responses had been collected by the time the survey was closed but due to the Gen Z filter question asked in the demographics section of the survey, which only let people born between 1997 and 2012 continue to the survey questions, and because of one case of straight lining detected during the data cleaning, the data of 90 survey responses could be used to proceed with the analysis.

Additionally, in some cases, respondents would leave a question blank or skip two or three consecutive questions submitting an incomplete survey. This issue has then been rectified during the data cleaning process by filling unanswered questions with the middle answer of the five-point Likert scale, namely the answer “Neutral”.

The next point in the data collection was to test the reliability of all the constructs for each variable by making use of the Cronbach’s alpha scale analysis.

3.4. Research Ethics

One priority of this study’s survey was to keep respondents’ confidential information safe and to inform all respondents about the anonymity of the study as no questions in the survey questionnaire can be traced back to them. Additionally, to keep up with the informed consent standards, all participants have been informed about the aim of the study and its expected duration, and only those participants who gave their consent to take the survey were allowed to take part.

Furthermore, as far as potential harm of the survey goes, it has been made sure that all questions are free of harm for the respondents, which has additionally been ensured as the questionnaire has gone through a check conducted by the university before the survey link has been shared on social media to begin with the data collection.

Finally, all data collected for this research is primary data collected by the researcher and only that data has been used later in the data analysis section to follow.

4. Data Analysis

4.1. Sample

Figure 2: Respondents Demographics

Age Group	n	%
Gen Z	91	93.8%
Other	6	6.2%

Gender	n	%
Male	34	38.1%
Female	57	61.9%

Source: own elaboration from Jamovi.

Sharing the link to the survey on Instagram has been highly effective for this data collection since, as previously mentioned in the literature review, gen Z members are highly active on this platform and because the researcher who shared the survey is also a member of this generation and thus, so are many of his followers who took the survey. This was the main reason leading to the high number of Gen Z members taking the survey (93.8%) and only six people who got filtered out of the survey accounting for 6.2% of the sample and, additionally, table 3 also shows that out of the 91 Gen Z members 34 were male and 57 were female respondents.

4.2. Descriptive statistics

After cleaning the data and making sure that it is error free, the data had to be manipulated to continue with the analysis and check for reliability, normality, and correlation. Therefore, the data of all variables has been transformed to continuous scale for further analysis. Additionally, the data for all hypotheses apart from H2 concerning environmental consciousness, and H4b, concerning barriers for adopting EVs, have been treated as reflective latent variables where the Likert scale has been transformed to continuous values ranging from 1 to 5 where 1 stands for “Strongly Agree” and 5 for “Strongly Disagree”. Additionally, for the barriers, the data has been reversed since the questions were written in a manner that expected affirmations such as: “I consider EVs

range to be sufficient”, or “I consider EVs to be safe”. As a result, a new transform code has been created for the data of these questions so that an answer 1 (Strongly agree) means that that participant perceives a barrier and the answer 5 (strongly Disagree) means that the respondent does not perceive that to be a barrier for purchase intention.

The other two variables have been treated as formative where the Likert scale results have been split up into two different groups. For the “Environmental Consciousness” variable, answers ranging from 1-3 have been recoded to 1 and all other responses have been recoded to 0. In this case, 1 would mean environmentally conscious and 0 would mean not environmentally conscious.

Thus, given the fact that this variable consisted of five questions in the questionnaire, each participant will get a score between 0 and 5. This helped the researcher to create a composite that can be used to find out the correlation between that independent variable and the dependent variable “Purchase Intention”. For the other independent variable, “Barriers for EV Adoption”, the answers 4 and 5 have been recoded to 1 and the rest 0, where 1 means “Yes, there is a perceived barrier”, and 0 meaning, “No, there is no perceived barrier”. Because there were three questions in the survey to calculate that variable, when creating said composite by summing up all responses for that variable, each respondent got a value ranging from zero to three. Additionally, just like it was done with the previous independent variable, that composite has then been used to calculate the correlation between “Perceived Barriers of Electric Vehicles” and “Purchase Intention”.

When testing for reliability, if the test shows a high Cronbach’s alpha value (above 0.6), the results are said to be reliable. As the descriptive table for the composites shows, the test has not been performed on formative variables. All other variables show reliability with a Cronbach’s alpha score larger than 0.6.

Figure 3: Descriptive and normality tests of collected data.

Variables	Mean	Std. Dev.	Shapiro-Wilk
P Inc 1	2.10	0.937	.827
P Inc 2	1.83	0.707	.799
P Inc 3	2.03	0.841	.841
RI 1	1.71	0.658	.775
RI 2	1.70	0.678	.778
RI 3	1.93	0.818	.837
EC 1	0.611	0.490	.618
EC 2	0.788	0.418	.513
EC 3	0.967	0.181	.173
EC 4	0.644	0.481	.605
EC 5	0.122	0.329	.383
SN 1	3.08	0.927	.890
SN 2	3.01	0.800	.856
SN 3	2.86	0.801	.867
SN 4	2.97	1.01	.908
C 1	2.67	1.11	.876
C 2	1.87	0.851	.771
C 3	2.86	1.04	.905
C 4	2.30	0.953	.878
B 1	0.356	0.481	.605
B 2	0.0333	0.181	.173
B 3	0.256	0.439	.543
PI 1	2.13	0.877	.807
PI 2	2.39	0.932	.862
PI 3	2.84	1.03	.888
SM 1	3.33	1.15	.839
SM 2	3.16	1.09	.866
SM 3	3.44	1.07	.864

Note. All Shapiro Wilk Tests were significant at $p < 0.001$, Source: own elaboration from Jamovi, $n=90$.

Figure 4: Composit Descriptives

Composit	Mean	Std. Deviation	Shapiro-Wilk	Cronbach's Alpha
Purchase Incentives	1.99	0.675	0.927*	0.737
Recurring Incentives	1.78	0.574	0.919*	0.711
Environmental Consciousness	3.12	1.05	0.909*	Formative
Subjective Norms	2.98	0.740	0.968**	0.853
Convenience	2.42	0.779	0.973 (NS)	0.781
Barriers	1.61	0.944	0.761*	Formative
SM. Influencers	3.31	1.04	0.900*	0.931
Purchase Intention	2.33	0.873	0.938*	0.909

Note. All Shapiro Wilk tests marked with * are significant at $<0,001$ and all values marked with ** are significant at < 0.05 . Those marked with NS are not significant. Source: own elaboration from Jamovi, $n=90$.

For the central tendency, the mean has been used to explain the data collected in the survey. As the responses for all questions, “Environmental Consciousness” and “Barriers”, ranged from 1 (Strongly Agree) to 5 (Strongly Disagree), by using the 5-point Likert scale.

As shown in the table above, purchase incentives had a mean of 1.99 which means that the average response for that set of questions was very close to 2 (Agree) with a standard deviation of 0.675. For recurring incentives had a mean of 1.78 (Agree) and a standard deviation of 0.574. For environmental consciousness, the mean was 3.12, as this was a formative question where the respondents got a score from 1 to 5, this means that the average response was just over the neutral mark of 2.5 and the standard deviation was 1.05. Subjective norms had a mean of 2.98 (Neutral) and a standard deviation of 0.740. Convenience had a mean of 2.42 (Agree) and a standard deviation of 0.779. Barriers, another formative variable, where the respondents got a value between 0 and 3 with a mean of 1.61 being rather neutral and had a standard deviation of 0.944. Social media influencers had a mean of 3.31 (Neutral) and a standard deviation of 1.04. the last variable in the table, purchase intention, had a mean of 2.33 (Agree) and a standard deviation of 0.873.

4.3. Reliability coefficient Cronbach’s Alpha analysis

If the test shows a high Cronbach’s alpha value (above 0.6), the results are said to be reliable. As a 5-point Likert scale has been used in the survey's answer sections, the measurement level for the transformation of the data was set to interval. The study’s results of reliability that have been measured with the coefficient Cronbach’s Alpha analysis were significant for all latent variables as shown in Table 5. Since “Environmental Consciousness” and “Barriers” are formative variables, the Cronbach’s alpha test has not been performed. Purchase incentives had a Cronbach’s alpha of 0.737, recurring incentives showed the lowest value at 0.711, Subjective Norms showed a value of 0.853,

convenience had 0.781, Social media influencers had the highest value at 0.931 followed by purchase intention with a value of 0.909.

4.4. Correlation Analysis

In this section, the effect of the independent on the dependent variables will be analysed, with the dependent variable being the purchase intention of Generation Z members. All independent variables were put through Spearman's correlation test to test the correlation between the different survey questions used to calculate how correlated each independent variable is with the dependent variable. The two indicators that were used for this section were the p-value and the strength of the relationship that is shown by spearman rho.

Hypothesis 1

H1a: Purchase incentives have a positive effect on Gen Z's intention to purchase an EV.

The aim of this hypothesis was to figure out whether there was a relationship between purchase incentives (those incentives that are only applied during the purchasing process of the vehicle and do not occur again after the vehicle has been bought), and the dependent variable, EV purchase intention. The Spearman's correlation shows that there is a moderate between purchase intention and Gen Zs intention to purchase an electric vehicle as it has a spearman's rho of 0.366, as shown in table 6, and the p-value is lower than .001 and therefore under the cut-off point of 0.05. We therefore accept H1a and reject the null hypothesis.

Hypothesis 1b

H1b: Recurring incentives have a positive effect on Gen Z's intention to purchase an EV.

The aim of this hypothesis was to find out if there is a relationship between recurring incentives, those that happen regularly after the vehicle has been purchased, and the intention to purchase an EV. It assumed that these incentives would lead to a greater acceptance among Gen Z members and would make them more interested in purchasing an electric vehicle. The spearman's correlation showed a moderate positive correlation between the independent variable Recurring incentives and the dependent variable Gen Z purchase intention with a spearman's rho of 0.259 and a p-value of 0.014. Thus, the null hypothesis has been rejected and H1b: Reoccurring incentives have a positive effect on Gen Z's intention to purchase an EV, has been accepted.

Hypothesis 2

H2: Environmental awareness has a positive impact on Gen Z's intention to purchase an EV.

This hypothesis' s aim was to figure out if there is a relationship between an individual's environmental consciousness and his/her intention to purchase an electric vehicle. In this case, the p-value for spearman's correlation was .849 and thus, well over the cut-off point of .05. As a result, H2 has been rejected and H0 has been accepted concluding that there is no positive relationship between environmental consciousness and Gen Z's intention to purchase an EV.

Hypothesis 3

H3: Subjective norms have a positive impact on Gen Z's intention to purchase an EV.

The aim of this hypothesis was to test if there is a correlation between subjective norms, in other words, how respondents perceive other people's thoughts about them and how that influences their actions, and their intention to purchase an EV and the dependent variable purchase intention.

The spearman's correlation showed that there is a relationship between social norms and Gen Z's intention to purchase an electric vehicle as the p-value of 0.003 was below 0.05 and additionally, the correlation between both variables

was moderate with a spearman's rho of 0.313. therefore, rejecting H0 and accepting H1.

Hypothesis 4

H4a: Convenience of EVs have a positive effect on Gen Zs purchase intention.

The aim of this hypothesis was to find out whether the convenience of electric vehicles have an impact on gen Z's decision to purchase an electric vehicle. The spearman's correlation for this hypothesis shows a p-value that is lower than 0.001 and therefore proves that there is a correlation. The rho value of 0.358 shows that there is a positive moderate relationship between the convenience of electric vehicles and Gen Z's intention to purchase one, rejecting H0.

H4b: Perceived barriers are negatively related to purchase intention.

This hypothesis tried to figure out the impact that perceived barriers of electric vehicles, such as range and charging infrastructure have on Gen Z's intention to purchase an electric vehicle.

The spearman's correlation matrix for this hypothesis showed a p-value of less than 0.001 and is therefore smaller than 0.05 making the value significant. In this case, the spearman's rho showed a negative moderate relationship between both variables with a value of -0.474 and thus, H4b has been rejected and H0 accepted. The reason for this negative correlation is that respondents did not see factors such as safety, range and charging infrastructure as barriers and thus, these "barriers" had a positive impact on EV purchase intention. In other words, gen Z members feel like the charging infrastructure, range, and safety of EVs are satisfactory for them.

Hypothesis 5

H5: Social media influencers act as a moderating factor between the previous hypotheses and Gen Z's purchase intention.

This hypothesis uses influencer impact on gen Zs purchase intention as a moderating variable between the previous variables and purchase intention to find out what impact influencers have on those variables and as a result, on

purchase intention. Nonetheless, the p-value for the spearman's correlation test has been calculated and had a value of .291 and therefore over .05. indicating that there is no significant relationship between social media influencers and PI. The next section "Moderation Analysis" has been created to further analyse this hypothesis.

Figure 5: Spearman's Correlation

Composit	Spearman's rho	p-value
Purchase Incentives	0.366	<.001
Recurring Incentives	0.259	0.014
Environmental Consciousness	0.020	0.849
Subjective Norms	0.313	0.003
Convenience	0.357	<.001
Barriers	-0.474	<.001
SMI	0.113	0.291

Source: own elaboration from Jamovi, n=90.

4.5. Moderation Analysis

In this section, the data will be analysed to find out if the moderating variable of the study influences other variables as stated by H5 in the literature review. In the case of this paper, the effect of a continuous moderating variable on a continuous dependent and independent variable will be analysed, and the relationship between a dichotomous independent variable and the same continuous dependent variable affected by the moderator "Social Media Influencers".

To test H5, several moderation analyses have been carried out where the outcome variable was Purchase Intention, the predictor variables were purchase incentives, recurring incentives, environmental consciousness, subjective norms, convenience, and barriers. The moderator variable used for

all analysis was, as previously mentioned, "Social Media Influencers". The results can be seen in the table below:

Figure 6: Moderation Significance

Using Social Media Influencers as moderating variable:

Predictor Variable	Estimate	SE	Z	p
P. Inc	-0.173	0.1173	-1.47	0.142
RI	-0.0987	0.1454	-0.679	0.497
EC	0.1312	0.0776	1.690	0.091
SN	0.2203	0.1300	1.695	0.090
C	0.1034	0.1128	0.916	0.360
B	-0.0516	0.0853	-0.605	0.123

Note. DV for all tests (PI) and IVM (SMI). Source: own elaboration from Jamovi, n=90.

As the table shows, the relationship between all predictor variables and the moderator variable are not statistically significant as their p-values are all above the 0.05 significance mark. Thus, these results recognize "Social Media Influencers" as a non-moderator between all independent variables and the EV purchase intention of Gen Zs.

Additionally, as the moderating effect was not statistically significant, the direct effects were analyzed and purchase incentives ($P < .001$), Recurring incentives (0.030), Subjective norms ($< .001$), Convenience ($< .001$) and Barriers ($< .001$), appeared to have a statistically significant and direct effect on purchase intention whilst social media influencers did not have an impact on it.

Although the moderating effect was not statistically significant for any predictor, the coefficient of covariance for the different predictors, as shown in table 6, are (-0.173) for purchase incentives, (-0.0987) for recurring

incentives, (0.1312) for environmental consciousness, the strongest (0.2203) resulted using subjective norms as predictor, (0.1034) for convenience and (-0.0516) for barriers.

4.6. Regression Analysis

In this section of the paper, the linear regression between the dependent and independent variables will be analyzed using the p values and regression weights of each variable. The table below shows the estimated regression weights, the standard error and the p value for each predictor variable analyzed.

Figure 7: Regression Weights

Predictor	Estimate	SE	t	p	Std. Estimate
Intercept	0.5112	0.812	0.87945	.382	
Plncent	0.5151	0.1609	3.20215	.002	0.3984
RI	-0.1748	0.1796	-0.97361	.333	-0.1151
EC	0.0420	0.0716	0.58701	.559	0.0504
SN	0.1926	0.1164	1.65441	.102	0.1633
C	0.3270	0.1252	2.61159	.011	0.2918
B	-0.2410	0.0892	-2.70065	.008	-0.2608
SMI	1.45e-4	0.0779	0.00186	.999	1.72e-4

Source: Own elaboration from Jamovi, n=90.

Figure 8: Normality Test (Shapiro-Wilk)

Statistic	P
0.974	0.070

Source: Own elaboration from Jamovi, n=90.

Figure 9: Model Fit

Model	R	R ²	F	df1	df2	p
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1	0.643	0.413	8.25	7	82	<.001
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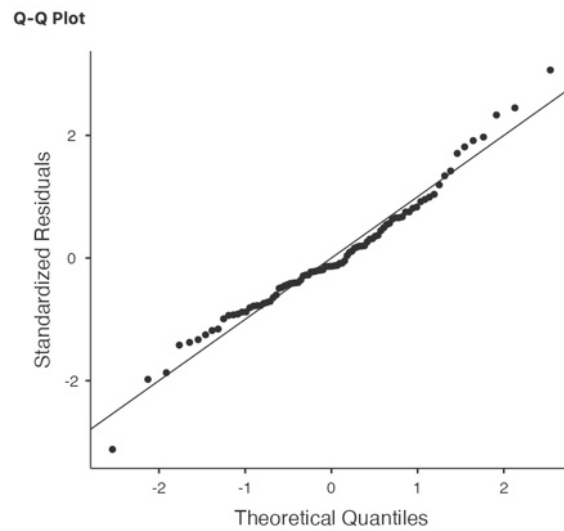
Source: Own elaboration from Jamovi, n=90.

For the regression analysis, the model fit measure R^2 showed a value of 0.413, meaning that 41.3% of variance in purchase intention can be explained with these predictors.

The table shows that only purchase incentives ($p = .002$), Convenience ($p = .011$), and Barriers ($p = .008$) were significant predictors for the EV purchase intention of Gen Zs. Recurring incentives ($p = .333$), environmental consciousness ($p = .559$), Subjective norms ($p = .102$), and social media influencers ($p = .999$), were all non-significant predictors for EV purchase intention of Gen Zs. when looking at the standardized regression coefficient it is possible to see that for each change in standard deviation of purchase intention, gen Z's purchase intention will go up by 0.3984. the same applies for all other variables that showed a significance below .05. In the case of convenience, we can see that for each change in standard deviation purchase intention will go up by 0.2918 and in the case of barriers, as the value is negative, for each change in standard deviation, purchase intention will decrease by -0.2608.

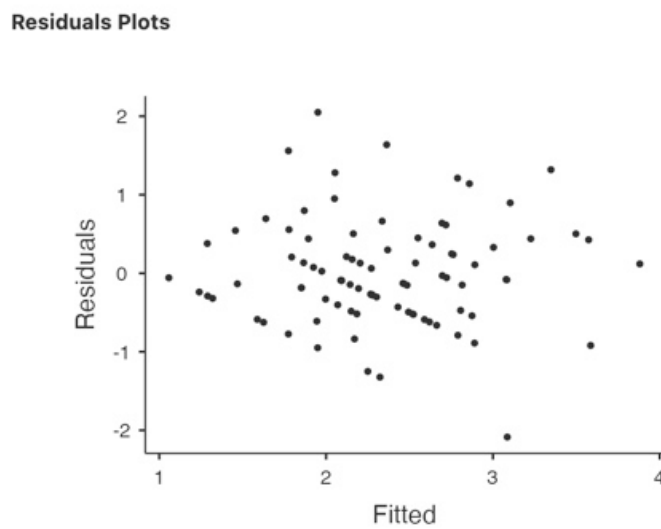
Other assumption checks used for the regression analysis are collinearity and normality. When tested for collinearity, all values were below the smallest cut-off point of 3, meaning that multicollinearity wasn't a problem with this data. When looking at the normality for the residual plots, residuals follow a normal distribution as they are scattered around 0 randomly as seen in the residuals plot below. Additionally, the Q-Q plot also shows that the data is normally distributed although there are a few outliers, which has also been confirmed by the normality test shown in *Table 8* where the p-value of .07 is larger than the cutoff point of 0.05, and therefore proven to be normally distributed.

Figure 10: Residuals Q-Q Plot



Source: Own elaboration from Jamovi, n=90.

Figure 11: Residuals Plot



Source: Own elaboration from Jamovi, n=90.

5. Conclusion of the findings

This paper analyses which factors influence Gen Z's intention to purchase an electric vehicle and although the regression and correlation analyses have accepted and rejected different variables, the results show that purchase incentives, recurring incentives, subjective norms, convenience, and barriers were correlated to purchase incentives. Additionally factors such as purchase incentives, convenience, and barriers also showed to predict purchase intention as their regression analyses resulted significant. Only these three could be fully accepted and the other hypotheses which only had a significant correlation were partially accepted.. To the researchers surprise, the moderating effect of social media influencers between the independent variables and the dependent variable was insignificant and the H5 has therefore been rejected.

The first hypothesis analysed in this paper aimed to see if there was a positive relationship between purchase incentives buyers received when deciding to purchase an EV and the purchase intention itself. As previously stated, "purchase incentives" was the independent variable, and "Purchase Intention" the dependent variable, as for all other hypotheses in the research. As hypothesized in the literature review, the data has proven that there is a positive relationship between purchase incentives and Gen Z's intention to purchase an electric car. Furthermore, this hypothesis has also shown to be significant for the regression analysis performed and can therefore be accepted. This result was expected as the (TAM) used in the literature review gave a good understanding of why gen Zs would accept an electric vehicle if it suits their needs and lifestyle. In terms of theoretical implications, as the result is consistent with the existing theory, this theory can be partially supported as it was not directed at gen Zs until this study has been conducted and may be used to study how it works with Gen Z members. Therefore, it is recommended to further study this theory when applied to gen Z members and this study may serve further research as a basis to expand on the theory. This hypothesis show

that purchase incentives are interesting and attractive to young drivers that are looking for a first or new vehicle.

The second variable that has been measured in this paper was yet another Incentive, namely, recurring incentives. Just like with the previous incentive, the research assumed that recurring incentives would have a positive impact on Gen Z's intention to purchase an EV. Despite the fact that the results shown by the correlation analysis showed a positive correlation, the regression analysis found the results to be insignificant. H1b could be partially accepted as there is a positive correlation between the variables, but due to the fact that the regression is insignificant, the outcome cannot significantly be predicted. This result was not a surprise as the same effect as that of the purchase incentives was expected given the fact that both types of incentives are of great practicality for the driver. The theoretical implication is that, perhaps, the theory has to be researched further for both recurring incentives and the Gen Z population as there might be a difference in how gen Zs perceive the two different types of incentives as useful to them.

The next hypothesis aimed to find out if there was a relationship between the environmental consciousness of Gen Z members and their intention to purchase an EV. Once again, it was assumed that there would be a positive relationship between both variables. Interestingly, both the spearman's correlation and the regression analysis performed to prove this hypothesis rejected H1, concluding that there is no relationship between one's environmental consciousness and the intention to purchase an EV. This result was very unexpected as the literature discussed that Gen Z's are very environmentally conscious and due to the fact that the main reason for the implementation of electric vehicles is to reduce the emission of greenhouse gases. In this case, the implications to theory may be that further research is needed in for it to be applicable to the members of generation Z.

Another key part of this study was the effect subjective norms have on Gen Zs and how they impact if Gen Z's would purchase an electric vehicle or not. Just like expected, there appears to be a positive relationship between both variables, that is, Gen Z members' purchase intention appears to be correlated to what they think they should do or buy to please those who are close to them, or what they think their friends and family would do in their situation. The same appears to be the case for electric vehicles. Once again, the regression analysis between both variables was insignificant meaning that the dependent variable cannot be predicted by the predictor (independent variable) and thus, the hypothesis can only be partially accepted.

The results also showed that perceived convenience has a positive effect on Gen Zs intention to purchase an electric vehicle, just as stated in H4a. Although it is often discussed that electric vehicles are not as convenient as conventional vehicles, Gen Zs seem to find them convenient for the use they would give them. As mentioned in the literature review with the technology acceptance model, it all depends on the use one would give the vehicle. Someone who might have to drive very long distances everyday might not find it as convenient as someone who needs a vehicle for their daily activities without a lot of time pressure. Additionally, the regression analysis for this hypothesis was significant meaning that purchase intention can indeed be predicted by the convenience of EVs. This result was not a surprise to the researcher as it has also been backed up by the (TAM) in the literature review as previously mentioned. Once again, as the results are consistent with the existing theory, the implications to theory are that the theory is appropriate to explain this behaviour applying it to Gen Z and that, once again, this study can be used as a basis to expand on the theory.

An interesting finding of this paper, which is somewhat related to the previous hypothesis, is the fact that Gen Z members did not have EV barriers to be of great importance when buying one. The results show a negative correlation for

this hypothesis that states that EV barriers have a negative impact on their intention to purchase one. The negative rho-value in the spearman's correlation analysis further proves the previous hypothesis and shows that gen Z members feel like EV infrastructure, range and safety are sufficient for them proving their convenience. Also the regression for this hypothesis is significant meaning that EV purchase intention can be predicted by barriers of EVs. Nonetheless, due to the fact that the hypothesis stated that barriers negatively impact purchase intention, the hypothesis has to be rejected due to the fact that Gen Z members considered these “barriers” as something positive instead of an actual barrier. Also this result did not come as a surprise as the barriers used, namely, safety, EV infrastructure and range, are enough for most gen Z's daily activities. Implications to the theory may be that these barriers should not be used as actual disadvantages in further studies, but they should be substituted with other barriers that may have a greater negative impact on Gen Zs convenience.

The last finding of this paper mixes all the previous hypotheses and implements social media influencers as a mediating variable between the independent variables and the dependent variable purchase intention. The paper expected to find a relationship between all independent variables and the dependent variable with Social Media influencers acting as a mediating variable. Interestingly, although the data for all variables apart from environmental consciousness were reliable and correlated, and despite the fact that social media influencers are increasingly gaining importance as promoters for many different brands in all sorts of industries, social media influencers do not appear to influence gen Z's thoughts about the impact of any of the two types of incentives mentioned, environmental consciousness, subjective norms, convenience or barriers and the dependent variable, purchase intention. As a result, this paper's last hypothesis, “Social media influencers act as a moderating factor between the previous hypotheses and Gen Z s purchase intention” was rejected and H0 was accepted. This could be related to the fact that, although Gen Z members are constantly exposed to

social media influencers on diverse platforms and follow their posts and content, may feel like their opinions are biased as many influencers do not pay for the products and services they review and share on these platforms. This might affect influencer's credibility in the eyes of many followers.

The main contribution of this paper to existing studies is the fact that it gives an insight into how the different factors that have previously shown to impact purchase intention do or do not have an impact on Gen Z's in tension to purchase an electric vehicle. Although not all hypotheses have been accepted and further research is required to gain an even deeper knowledge about gen Z's purchase intention, it is fair to say that this study did give further insight into which factors do and do not affect Gen Z member's impact on EV purchase intention and where further research is needed.

Furthermore, as previously mentioned, this study may not only serve to further research those factors that did have an impact on purchase intention, but also to investigate why those factors that did not seem to have an impact although they appeared to strongly contribute to gen Zs purchase intention of electric vehicles, did not do so.

5.1. Limitations

The first limitation faced during this research, which might also have contributed to the rejection of some hypotheses, was the limited sample size of 90 respondents after data cleaning. Additionally, another limiting factor at the beginning of the data analysis was the fact that all variables were treated as latent variables. This led to some issues later when the data was tested for reliability and normality as the questions chosen for both "Environmental consciousness" and "Barriers of EVs" were not always asking the same main questions, but rather, separate questions that did not show reliable results when performing the Cronbach's alpha test for reliability. As a result, these variables have been treated as formative variables to give respondents a score

to measure their environmental consciousness and if their perceived the barriers listed as barriers or not.

Since hypotheses H2 (Environmental awareness has a positive impact on Gen Z's EV purchase intention), H4b (Barriers have a negative impact on purchase intention) and H5 (Social media influencers have a moderating effect between the previous factors and EV purchase intention of Gen Zs), have been rejected or only partially accepted, further research in these areas is recommended. One possible limitation of this study that might have had an impact on the outcome of the previously mentioned rejected hypotheses might have been the sample size of the survey. To be sure there is no relationship at all between these two variables, the researcher recommends and encourages further research as these were two variables that appeared to go hand in hand.

For Environmental consciousness, it could have been the reason that the questions for the new ecological paradigm have not been the best choice for this study and thus, should be replaced by other items that measure environmental consciousness for future research. In the case of Barriers, a similar approach could be made as it appears that gen Z members did not see these barriers as a negative factor but rather something positive as they were satisfied with how electric vehicles performed in the areas that were asked in the questionnaire. The same applies to H5, as Gen Z members do not seem to base their purchase decisions on recommendations and opinions of influencers, other items may be used to calculate the impact of social media influencers on Gen Z's purchase intention as the questions asked in this research's survey may not have calculated the impact of social media influencers on gen Z's purchase intention accurately enough.

An interesting addition for further research could be to see if social media influencers act as a mediator for those gen z members that are car enthusiasts as the respondents who took the survey created for this study might have been

taken by some people who might not be interested in vehicles at all, which could have an effect on the outcome. For this study it was appropriate since understanding the behavior of the entire gen Z group was the aim for this paper and not just those with a special interest in vehicles.

Another factor that may have led to a limitation during this research may have been the fact that a quantitative approach was chosen instead of a qualitative or mixed method. Although the quantitative method was a good choice for all latent variables, perhaps it would have given a deeper insight into gen Zs purchase intention to use a mixed method approach as the respondents could have added why they feel that way about a given question and the quantitative analysis could have been backed up by the qualitative information.

5.2. Managerial Implications

As the results of this study show, there was a relationship between purchase incentives, recurring incentives, subjective norms, convenience, and the dependent variable purchase incentives. As a result, firms should take these factors into consideration when thinking about targeting Gen Z members as potential customers.

When talking about incentives, it is important for car manufacturers to inform potential customers about the existence of this kind of bonuses even though they are implemented by the state and not the manufacturers themselves. This could be done by informing the potential customers about these incentives in their marketing campaigns to attract people who might not have known about the existence of these. This way people who are not too invested into finding out the latest news of the automotive industry may be attracted by the many advantages they could be getting if they were driving an electric vehicle.

In terms of convenience of electric vehicles, manufacturers could increasingly work together with the state to make sure there is infrastructure which is

sophisticated and practical enough to make potential customers feel like they do not have to give up on any of the commodities they are used to from conventional vehicles. This could be by increasing the network and availability of charging stations both in cities and on the most important and most used highways. If gen Z members see that they could, for example, do a road trip with their friends in an electric vehicle without having to spend hours recharging their EV, the probability that they will also travel larger distances with an electric vehicle will automatically increase as the practicality increases.

Also, the subjective norm factor is highly connected to the marketing strategy of electric car manufacturers. If manufacturers manage to create a need for electric vehicles, they will very likely increase their chances of attracting gen Z members. For example, by creating a trendy car which is simple to use, has sufficient range for the daily activities such as driving to university, work, gym, grocery store, etc., and that has an innovative design with all the features a young driver needs, the chances that it will be well received by this target audience and increase purchase intention are very high.

As for the hypotheses that have been rejected, it is important to keep in mind that although environmental consciousness and social media influencers did not seem to have an impact on gen Zs purchase intention, they are still key elements for businesses to promote their product.

Environmental consciousness is a key element of every company's corporate social responsibility and although gen Zs environmental consciousness did not appear to have an impact on their EV purchase intention, car manufacturers should still promote the environmental benefits of their electric vehicles and the advantages they have for society on the long run. If manufacturers were to ignore this factor although it did not appear to have a direct impact on purchase intention, it could, as a result, severely harm their brand image.

Finally, as discussed in the limitations section, gen Z's purchase intention did not appear to be influenced by social media influencers, there might be a

group of individuals within the gen Z group that are car fanatics and that might follow the trend of electric vehicles through influencers in the future as new cars come to the market. Manufacturers should therefore not ignore social media as a marketing strategy to reach gen Z members, but perhaps target specific groups of gen Z members that are interested in EV content within social media platforms.

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7. Appendix

Questionnaire

I am currently working on my bachelor thesis which intends to find out how social media influencers have an effect on Gen Z's intention to adopt an electric vehicle (EV).

The data collected will exclusively be used for research purposes and all responses will be completely anonymous.

It consists of a set of short questions about your environmental consciousness and factors which would motivate you to adopt an EV.

Time required: 4 min

Thank you for your time!

I agree to take this survey
YES/NO

Demographics:

I am a member of Generation Z (1997-2012)
YES/NO

Gender
Male/Female/Prefer not to say

All following questions are answered with a 5-point Likert scale:

Strongly Agree/Agree/Neutral/Disagree/Strongly Disagree

Purchase Incentives

- For adopting EVs, a government direct subsidy policy is attractive to me
- For adopting EVs, exemption from sales tax is helpful to me.
- For adopting EVs, exemption from VAT is useful to me.

Recurring Incentives

- For adopting EVs, circulation tax reduction is attractive to me.
- For adopting EVs, electricity supply subsidy is useful to me.
- For adopting EVs, a preferential insurance policy is helpful to me.

Environmental Consciousness

- We are approaching the limit of the number of people the Earth can support.
- The balance of nature is strong enough to cope with the impacts of modern industrial nations.
- Humans are seriously abusing the environment.
- The Earth is like a spaceship with very limited room and resources.
- The Earth has plenty of natural resources if we just learn how to develop them.

Subjective Norms

- Most people who I consider important think I should buy an EV.
- Most people who I consider important would want me to buy an EV.
- People whose opinions I value would prefer that I buy an EV.
- My interaction with people influences me to buy an EV.

Convenience

- The use of EVs would improve my travel efficiency.
- The use of EVs would reduce carbon emissions and energy consumption.
- The use of EVs would make me healthier.
- The use of EVs would reduce my transportation specific household expenditures

Barriers

- EV charging infrastructure is easily accessible for me
- EVs are safe
- The distance that EVs can travel before needing to recharge is acceptable to me

Purchase Intention

- I am willing to buy EVs while choosing a vehicle in the near future.
- I plan to buy EVs while choosing a vehicle in the near future.
- I intend to buy EVs when choosing a vehicle.

Impacts of Social Media Influencers

- I would purchase a brand based on the advice I am given by the influencers that I follow.
- I would follow brand recommendations from the influencers that I follow.
- In the future, I will purchase the products of brands recommended by the influencers that I follow.

Thank you for your time

If you have any further questions, please do not hesitate to contact me via
fabioluca.santana@gmail.com