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Sustainable Prosumer

Identity projects and motives

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Abstract

As people develop different identities throughout their lifespan, unparalleled challenges such as climate change and COVID-19 and the great tendency to adapt to more sustainable life have encouraged them to opt for types of identities that are more suitable to overcome such challenges. Identities based on purchasing products and services for self-consumption have become less attractive, an inactive stance has been supplanted with a more active one where a growing number of people are more conscious of the adverse effects of their consumption on the environment and society, and more inclined to disengage from the market by refusing overconsumption and forming an identity that is denoted by anti-consumption or self-production. The purpose of this qualitative research was to trace the sustainable prosumer identity development and identify the various motives by which this identity is guided in different contexts and the market's role in sustainable prosumer identity development. The collected data from 19 interviews revealed several different motives by which three different clusters are guided. Certain motives have driven two clusters towards sustainable prosumer identity partially and wholly, and one cluster away from this identity. The study accentuated the change of motives through identity development, the impact of the marketplace mechanisms on this development, and the unprecedented challenges.

Keywords

Consumer culture theory, Prosumer, Prosumption, Identity, Identity motive, Identity process. The process oriented model

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1

Introduction

1.1 Background

In modern times, people are increasingly taking to their heels many Do-It-Yourself (DIY) projects such as home growing food, noticeably, during the coronavirus shut-downs (Going the Gardening Distance-Results from Richgro's Gardening during COVID-19 Survey (2020); Perera and Hewege' study (2021), and the resurgence of garment sewing between females instead of buying new fast fashions, especially after incidences suchlike 9/11 and the Great Recession (Martindale & McKinney, 2020). Let alone the considerable consumers' tendency to project their identities via sustainable consumption (Black, 2010; Connolly & Prothero, 2003, 2008; Horton, 2003; Huttunen & Autio, 2010; Soron, 2010), therein many sustainable identities have been resurrected by the earlier studies on sustainable consumption, namely anarchist, hero, antihero, environmental hero, vegetarians, vegans, recyclers, green voters, environmentally conscious consumers, and ethical citizens (Cherrier, 2006; Autio et al., 2009; Perera & Hewege, 2021). Thereby, exploring those identities and their guiding motives in line with sustainable consumption and sustainability is deemed to be crucial in today's marketplace.

Nevertheless, identity is a complex, volitional, and relational phenomenon, as Schau (2018) described the identity of a consuming human being. The thing that turns a consumer's identity into a salient feature of a contemporary consumer culture where the market derives its perpetuity from a massive flow of commercial offerings (Arnould & Thompson, 2018; Larsen & Patterson, 2018), and consumers emphasize their distinctiveness through exploring, choosing, purchasing, or even rejecting these offerings (Arnould & Thompson, 2018; Gabriel & Lang 2006; Larsen & Patterson, 2018). Thus, consumer identity projects are facilitated by the marketplace (Schau, 2018), wherein consumption has become the arena where identities are contested and performed by consumers who are portrayed as identity seekers and makers (Arnould & Thompson, 2005; Larsen & Patterson, 2018; Gabriel & Lang 2006).

Given that consumer identity is perceived as volitional, i.e., intentionally created and affected by its context, it is subject to choices (Schau, 2018). Particularly speaking, in a time when consumption takes the lead in determining "who it is we are" and wherefore, identities are chosen from the display windows to the extent that makes identities themselves saleable products (Miles, 1999). Accordingly,

shopping is not only an acquisition of products and services but also the purchasing of identity (Clammer, 1992). Every choice involves the consumer's self, including the risk of exposing their identity to the surrounding world (Miles, 1999). Thus, options have become the focal point around which consumerism revolves as it has paved new avenues for identity construction, and with psychological, cultural, and economic dimensions in mind, contemporary consumption has been delineated by the freedom to choose (Gabriel & Lang, 2006). In modern society, a free individual has been depicted as a free consumer, and consumer freedom has been deemed a synonym for consumer choice (Bauman, 1988). Therefore, goods and services are not merely considered parts of an extended self (Belk, 1988) but also the impetus with which self-image and self-esteem are enhanced (Gabriel & Lang, 2006).

Hence, identity becomes Rome to which all consumption discussions lead, and goods and services have been harnessed to serve consumer identity projects (Arnould & Thompson 2005; Belk, 1988). In this context, consumer culture theory (CCT) is deemed a turning point, wherein Arnould and Thompson (2005) coined the term to contribute to the theoretical knowledge regarding consumption and marketplace behaviors. Whereas CCT embeds four interrelated thematic domains, consumer identity projects occupy the largest area of research (Askegaard, 2015). Whereby consumer identity projects look basically into how contemporary reflexive consumers utilize different market offerings to construct a coherent sense of self-identity (Arnould & Thompson, 2005; Askegaard, 2015).

However, although CCT has anchored itself within consumer culture research, it could not avoid criticism (Askegaard, 2015; Saren, 2007). Besides, consumer identity projects have also undergone many pitfalls. Having in mind the direct impact of a consumer's surrounding environment on their identity projects (Giddens, 1991), unprecedented occurrences suchlike climate change and its dire consequences, as well as the outbreak of COVID-19, have led to deconstructing an established consumer identity (Perera & Hewege, 2021). Thus, particularly in the modern marketplace, consumer identity projects have succumbed to such exceptional challenges, and espousing a conventional consumer identity, who purchases goods and services for personal consumption, is no longer the desirable identity to confront such challenges. Let alone that "consumption as usual" no longer completely meets consumers' basic human needs including but not limited to personal survival and avoiding uncertainty (Perera & Hewege, 2021). Thus, new identities have presented themselves as more covetable to confront unprecedented challenges, whether they are economic, environmental, or social. Sustainable prosumer identity is seen as one of those that stand out from the crowd to be one of the nominated identities to replace the conventional consumer identity.

Although prosumption, which is an amalgamation of production and consumption, is not new, wherein humans are by their inherent nature prosumers (e.g., hunting and gathering societies are a clear demonstration of prosumption) (Ritzer et al., 2012), there is no unambiguous definition of prosumer (Perera et al., 2020). However, in plain language, prosumers are both producers and consumers, wherein they produce and consume many of their goods and services (Chandler & Chen, 2015; Eckhardt et al., 2019; Kotler, 1986, 2010; Ritzer & Jurgenson, 2010; Toffler, 1980). In this

paper, however, we adopt Lang et al. (2020) definition that prosumers are “individuals who consume and produce value, either for self-consumption or consumption by others, and can receive implicit or explicit incentives from organizations involved in the exchange” (p. 178). Moreover, Lang et al. (2020) page regarding Toffler’s (1980) book articulated that “prosumers do not necessarily require a second party to co-create value” (p. 177).

Prosumers and prosumption, including sustainability-conscious prosumers, have exponentially attracted scholarly attention (Perera & Hewege, 2021), wherein prosumers have been discussed extensively in the literature (Aikawa & Yasui, 2017; Chandler & Chen, 2015; Lang et al., 2020; Martindale & McKinney, 2020; Perera & Hewege, 2021), particularly after several social changes, for instance, the emergence of the Internet and social networking (Davis, 2012; Ritzer et al., 2012). Different lenses have been used to explore this substantial phenomenon. For instance, “Do-It-Yourself” (Watson & Shove, 2008), “Service-dominant logic of marketing” (Lusch & Vargo, 2006), “value co-creation” (Humphreys & Grayson, 2008; Prahalad & Ramaswamy, 2002, 2004a, 2004b; Zwick et al., 2008), “pro-am” (Leadbetter & Miller, 2004), and “productive consumption” (Laughey, 2010).

Moreover, exploring prosumer identity, motives, and value was not absent in the literature, wherein prosumer identity and their different motives and roles have been studied in various contexts and disciplines, including service literature and service rendering. For instance, in the mental health service system, Aikawa and Yasui (2017) examined the process in which prosumers, or as they called them peer-delivered service providers, develop their identities. Drawing on the dialogical self-theory, Aikawa and Yasui (2017) postulated that if an embracement between both consumers and provider positions affirmatively occurs, they integrate into the third through dialogues between the two, i.e., prosumer. Thereby, the prosumer identity development process can be comprehended as part of the individual’s comprehensive change process. Moreover, Lang et al. (2020) demonstrated the usefulness of prosumers during times of crisis with apparent reference to the COVID-19 crisis. Although they did not examine the prosumer identity nor its motives per se, they contributed to the service literature by underscoring the value and role of prosumers in crises, particularly during the time of the COVID-19 outbreak. Additionally, Chandler and Chen (2015) investigated prosumer social motivations from a service experience point of view. The study came in line with Normann’s (2001) quote, “Instead of seeing the business as a flow of material to which value is continuously added and ending with the customer, we now see business starting from the customer and flowing to the company” (p. 21). Ultimately, the authors encouraged service researchers and managers to understand the importance of prosumers and their motivations and how the services rendered by the organization can intersect with these motivations.

Besides, Martindale and McKinney (2020) researched the motivations behind women sewing clothing for themselves. They linked home sewing to the Do-It-Yourself (DIY) movement, and they ascribed its resurgence to several occurrences, including people’s tendency to be more connected to home, especially after 9/11, and the increase in unemployment after the Great Recession in 2008, the thing that

provided people with more time to increasingly participate in sewing. By implementing, among other theories, the theories of prosumerism (Kean & Levin, 1989; Kotler, 1986; Toffler, 1980), the researchers concluded that personal fulfillment is what motivates women to sew clothing for themselves. Finally, Perera and Hewege (2021) explored prosumer identity from a sustainable consumption perspective. According to the authors, sustainable prosumer identity arose from the ruins of typical consumer identities, wherein different environmental problems have deconstructed traditional consumer identity. However, according to Perera and Hewege (2021), consumption is not perceived as an unfavorable phenomenon, a stance adopted in this thesis. That is, consumption induces people to work and communicate. Accordingly, products and services are valuable means for society. Even when a sustainably motivated prosumer opts to engage in self-production, eventually, they ought to purchase essential components from the marketplace (Perera & Hewege, 2021). Be that as it may, from a sustainability consumption point of view, the conflict engendered from those attempts to balance environmental and personal well-being makes exploring sustainable consumer identity intriguing as more studies on sustainable prosumers from various points of view are required (Perera & Hewege, 2021). In this context, this thesis is situated in line with other studies on prosumer identity projects. Therein, it traces the different motives that guide prosumers to project their sustainable identities in different contexts.

1.2 Problem area

Consumer culture theory (CCT) has been used to understand the “co-constitutive, co-productive ways in which consumers, working with market-generated materials, forge a coherent if diversified and often fragmented sense of self” (Arnould & Thompson, 2005, p. 871). Wherein consumer identity projects are one of the four pillars that underpin consumer culture theory (CCT) (Arnould & Thompson 2005, 2018), where consumers are deemed as identity seekers and makers, and markets are viewed as a vital source of “mythic and symbolic resources” through which people construct “narratives of identity” (Arnould & Thompson, 2005, p. 871). Consequently, via consumption, people forge their self-identity (Bauman, 1988; Saren, 2007).

Nevertheless, Perera and Johnson (2022, p.1) and Perera and Hewege (2021, p.176), regarding Giddens’ (1991) book *Modernity and Self-Identity*, articulated that “individuals are in the process of continuously and reflexively building a coherent and rewarding sense of identity-based on their surroundings.” Perera and Hewege (2021) ascribed this continuous building process to the challenges that individuals encounter from their environment, circumstances, and other people. Perera and Johnson (2022) contended that the way an individual contends with global environmental issues impacts how an individual conceives their self-identity. For instance, personal identity might be influenced by occurrences associated with climate change. Wherefore, how a consumer perceives their environment and how they engage with it is what determines how a consumer projects their self-identity (Connolly & Prothero, 2008). Nevertheless, a consumer’s understanding of their environment and how they deal with it does not merely influence the process by which a consumer constructs their self-identity, Perera and Hewege (2021) argued that the established consumer identities are also subject to constant deconstruction due to major environmental

problems, suchlike climate change, and critical health crises such like the COVID-19 pandemic. Thus, individuals might fail to construct a longstanding end-consumer identity. Hence, in view of those challenges, a typical consumer identity cannot be seen as a suitable identity for consumers to embrace. Principally, when such challenges increase consumers' consciousness on questions associated with health and well-being. Therefore, consumers might inaugurate new identity projects and possibly be more sustainability-conscious (Perera & Hewege, 2021).

At this point, three main things are worth mentioning. First, even though consumers are identity seekers and makers, and their identity projects are mediated by the marketplace, including its different products and services (Arnould & Thompson, 2005), consumers' identity is also subject to deconstruction considering different challenges (Perera & Hewege, 2021). Secondly, the extent to which the market facilitates consumer identity projects is unclear, considering the rise of sustainable prosumers as a replacement for traditional consumers and their tendency to disengage from the market (Perera & Hewege, 2021). Thirdly, the fact that should not be ignored is that the sociological discussion of identity starts where the psychological discussion ends (Gabriel & Lang, 2006).

Thus, studying different identity projects is deemed significant, especially in our current time when conventional consumer identity is no longer desirable in the face of a changing environment (Perera & Hewege, 2021). Not to mention the ongoing research that individuals undertake to construct an identity that satisfies their standards and values (Luyckx et al., 2006). Additionally, individuals strive and desire for forms of identities that meet their motives (Vignoles, 2011), which makes studying individuals' different motives indispensable when exploring and investigating individuals' identities in general and sustainable prosumer identity in particular. Accordingly, assisted with a psychological model, the process-oriented model, this thesis explores the sustainable prosumer identity and its guiding motives.

Prior studies have focused on prosumers' social motivation, placing the prosumers in the context of service experiences and value co-creation (Chandler & Chen, 2015). Although this study found that prosumers are motivated by social and individual factors, only limited studies have oriented themselves towards examining the prosumers' motives on the question of sustainability and sustainable identity.

Accordingly, examining prosumers' motives deems to be significant as a proactive move to identity formation. It might be hard to say that one initiates an identity project without a guiding motive. Not to mention the relatedness between the personal motive and satisfying basic needs (Vignoles, 2011), wherein several theories have contended that identity processes developed to satisfy basic human needs, such as human survival (Sedikides & Skowronski, 2000), and avoid uncertainty (Hogg, 2007). On the other hand, Perera and Hewege (2021) defined consumption as consumers' actions that are performed to survive or satisfy their basic human needs. Thus, consumption certainly provides consumers with a sense of well-being. Ultimately, despite the abundance of prosumer literature (Eckhardt et al., 2019; Ritzer & Jurgenson, 2010; Toffler, 1980), prosumers' certain aspects remain completely unexplored (Martindale & McKinney, 2020).

1.3 Purposes and Research Questions

This thesis's purpose is to contribute to the previous literature on consumer identity projects within the context of sustainability by investigating sustainable prosumer identity projects and motives as more people attempt to replace market offerings with self-produced products and services for self-consumption. The study is divided into three areas. First, assisted with the process-oriented model, we aim to trace the different stages in which an individual undergoes to develop a sustainable prosumer identity and identify the various motives that guide an individual to embrace a sustainable prosumer identity or even the motives that make sustainable prosumer identity undesirable. Secondly, we endeavor to examine the impact of the choices offered by the marketplace on sustainable prosumer identity development and its guiding motives. Finally, we reflect on prosumer sustainable identity development and its motives in different contexts, such as COVID-19 and climate change, and examine the impact of the contexts on identity development and its motives.

The thesis attempts to answer the following research questions:

RQ1: What are the motives that steer a prosumer towards a sustainable prosumer identity in different contexts?

RQ2: How do people opt for and develop a sustainable prosumer identity to satisfy their guiding motives?

RQ3: How can the market influence sustainable prosumer identity development?

The study can help researchers, managers, and service designers to understand prosumers and their genuine motives better. Shifting the focus away from market mechanisms for identity development processes will assist in determining the real motives that guide each process of sustainable prosumer identity development. Accommodating prosumers with more space to reflect on their identity apart from any pressure that might be caused by the market mechanisms and their different offerings. Moreover, the study might help uncover any sustainable market strategy based on greenwashing.

2

Theoretical Background

To provide a solid theoretical basis for our research, we review relevant theories of consumer identity projects from CCT, the process-oriented model of personal identity development, and identity motives. The chapter initiates a brief introduction to consumer culture theory, focusing on consumer identity projects. After that, the prosumer will be introduced, including sustainable prosumer identity and motives. Identity theory and motives come next. We conclude the chapter by presenting an integrated identity development model wherein we discuss the process-oriented model within the market context.

2.1 Consumer Culture Theory

2.1.1 Consumer identity projects

From the early 1980s onward, consumer culture theory (CCT) has lingeringly become more pronounced. It has incrementally but significantly contributed to the cognitive psychological approaches and conventional econometrics that focus on studying consumer behavior and decision-making (Askegaard, 2015). According to Arnould and Thompson's (2005) definitional article, CCT is "a social arrangement in which the relations between lived culture and social resources, and between meaningful ways of life and the symbolic and material resources on which they depend, are mediated through markets" (p. 869). Arnould and Thompson (2005) developed a thematic framework, and they suggested four distinct but interrelated research domains (Askegaard, 2015; Arnould & Thompson, 2005). Among these four domains, consumer identity projects are deemed to constitute the ample scope of CCT research (Askegaard, 2015).

Consumer identity projects investigate how contemporary reflexive consumers, by working with market-generated offerings, form a consistent if also diversified, complex, fragmented sense of self-identity (Askegaard, 2015; Arnould & Thompson, 2005; Saren, 2007). Put it differently, goods and services are used to achieve identity projects that can be deemed a focal point for contemporary consumer culture (Arnould & Thompson, 2005; Belk, 1988). In this sense, precisely in late capitalism, consumption represents the arena where personal identities are fought over and strived to win (Gabriel & Lang, 2006), and consumers are envisioned as identity seekers and makers (Arnould & Thompson, 2005; Gabriel & Lang, 2006), "Whether

choosing goods, exploring them, buying them, displaying them, disfiguring them or giving them away, consumers are, above all, frequently presented as thirsting for identity and using commodities to quench this thirst” (Gabriel & Lang, 2006, p. 79). Thus, exploring and choosing are two essential aspects for consumers to forge their identities.

2.1.2 Consumer as an identity seeker

Choices have paved the way for individuals to build their identity through “material culture”. Depending on the addictive nature of consumption, consumer culture produces long-term dissatisfaction, meaninglessness, and dependency. Thus, individuals have been turned into identity seekers, and consumption represents the way to their identities. Traditionally, identity has been politically used to differentiate each person from the other and in some sciences, such as forensic sciences. After that, however, identities and individuality have been shifted from people to products by the market. Instead of differentiating people from each other, branding has become a device to grant identities and uniqueness to the people. Hence, the identity burden has been lifted off the individuals’ shoulders and shifted to those who attempt to control them, which becomes more evident in the consumption studies in our current time (Gabriel & Lang, 2006). Especially after Erikson (1950) coined the term “identity crisis”, which refers to the fact that identity is not fixed or given, instead it is achieved with others (Gabriel & Lang, 2006; Larsen & Patterson, 2018; Vignoles, 2011, p. 404). In other words, the fact that identity is subjective has caused an individual to search for answers to reflexive questions like “Who am I?” (Gabriel & Lang, 2006, p. 81; Schwartz et al., 2011, p. 2), and “In what ways am I different from others?” (Gabriel & Lang, 2006, p. 81). Thus, identity projects become a story where an individual is both the author and the protagonist; It never ends, and all its chapters will be written and rewritten to the extent that makes the writing process part of the story (Gabriel & Lang, 2006; Larsen & Patterson, 2018). Herein, new capitalism, armed with its convincing illusions of free choice, works to fragment the continuity of those narratives and prevent any attempt by the individual to retrieve any coherent narratives of bygone days (Sennett, 1998).

2.1.3 Consumer as an explorer

Gabriel and Lang (2006) elucidated that consumers are consistently enticed to explore the latest products and experiences under consumerism. Thus, different places have been turned into “cathedrals of consumption” (Ritzer, 2007, p. 174), and consumers have become explorers. Consumers’ exploration journey has been ascribed to the mystification and unfamiliarity created by markets (Gabriel & Lang, 2006). Consumers find themselves amid unfamiliar products at unfamiliar prices or even familiar products in unfamiliar packaging. Herein, one might be mistaken to think that consumers’ exploration journey is unpremeditated. Places that consumers are invited to explore are designed to be user-friendly, where an invisible hand holds consumers’ hand throughout their journey of discovery, and every single detail, ranging from the legislation that aims to protect consumers to the price tags, is prearranged to assure a relaxed exploration. Ultimately, “it is hard to imagine consumption without exploration or exploration without consumption” (Gabriel & Lang, 2006,

p. 65). Notwithstanding, the consumer exploration journey cannot depart without a motive to guide it. Whereas man's longing for novelty and yearning to know the unknown has been ignored, particularly by economists, curiosity and seeking for diminutive differences in everyday purchases are to be deemed as the impetus that motivates consumers to search for new meanings, new excitements, and even new identities (Gabriel & Lang, 2006; Scitovsky, 1976).

2.1.4 Consumer as a chooser

In the free market, product manufacturers, brands, and retailers provide consumers with a wide range of choices, and consumers have been empowered by society to make choices (Schwarzkopf et al., 2018). According to Schwarzkopf et al. (2018), as choosers, people recognize and reflect on the existing options, and eventually, they decide how to allocate their time and money based on their expectations. In the context of consumerism, consumers make their consumption choices through collecting, recognizing, and evaluating the information about products (Bettman, 1979; Gabriel & Lang, 2006). Consumers actively and passively seek information in the market to choose the right products and place themselves in a better position when they are bargaining with product providers (Gabriel & Lang, 2006). They tend to make choices that could help them reduce risks, diminish uncertainty, solve their issues and even socialize with others (Burton & Babin, 1989; Gabriel & Lang, 2006).

Gabriel (2015) stated that "Choice then is the bedrock of contemporary identity projects", and consumers construct and extend their identity through their choice of objects (p. 27). They might even choose things that could affect their identity opportunistically (Gabriel, 2015). Individuals create their self-identity through making choices constantly, and all their choices are determined by which kind of person they intend to be (Gabriel & Lang, 2006). For instance, in the case of choosing brands, consumers attempt to satisfy their in-depth psychological needs by selecting a specific brand, thereby expressing their personality and presenting their identity (Gabriel & Lang, 2006). From Gabriel and Lang (2006), consumers make choices based on whether the product satisfies their needs or not. Besides, the products' utility, social value, emotional value, and the product's meaning are the factors that consumers will assess when deciding on options. From a psychological perspective, consumers' motivation explains their reasons for distinguishing and choosing various products. The relationship between changing environments and consumer motives has received attention. For instance, consumers prefer to make ethical, proper, and environmentally friendly choices (Gabriel & Lang, 2006).

Sustainable consumption is one of the solutions to reduce the ecological destruction caused by consumerism, and scholars have investigated the construction of self-identities affected by sustainable consumption (Connolly & Prothero 2003; Soron, 2010). Soron (2010) suggested that people create their sustainable identity by choosing and consuming products with green symbolic values. People maintain their identities by making sustainable consumption choices in their daily lives, and they create sustainable lifestyles at the same time (Soron, 2010). Apart from choosing sustainable products and services in the marketplace, some consumers have realized

the dire consequences on the environment caused by the market mechanism, so they attempt to mitigate environmental impacts by disengaging from the market (Perera & Hewege, 2021). The consumers who produce their products could project their new prosumer identity eventually.

2.1.5 Criticism on consumer culture theory

Consumer culture theory and consumer identity projects were not immune from criticism. Saren (2007) highlighted three critiques regarding consumer identity. First, “disadvantaged consumers”, wherein some consumers are more equal than others. Saren (2007) argued that people’s “freedom” to construct their identity via consumption is rather limited by the “structuring influence of the marketplace” (p. 348). Moreover, whereas consumers pursue their personal goals through the market, they are actually “enacting and personalizing” from a choice of “cultural scripts” that are written by marketers (Arnould & Thompson, 2005; Saren, 2007, p. 348). Additionally, for the majority, freedom is not to emancipate themselves from the ideological chains of the consumer culture, rather they consume to survive.

Not to mention that not all consumers can completely participate in the consumer society due to, among other things, low income, limited access to the market, as well as lack of education and information (Saren, 2007). Moreover, identity work fundamentally demands individuals to render economic, social, cultural, and symbolic resources, class distinctions and disparate access to resources have been neglected. (Skeggs, 2004, 2014). Hence, for individuals who have insufficient resources to narrate their identities by dint of consumption, and for those for whom such identity work is unreachable, resistance to repudiate the neoliberal agenda and protest environmental degradation is likely to occur (Skeggs, 2014). Secondly, “consumer identity and choice” (Saren, 2007, p. 348). Considering that the consumer is a chooser (Gabriel & Lang, 2006; Saren, 2007) means that consumers ought to have the freedom to choose where to buy, what to buy, and from whom (Saren, 2007). In this respect, consumers are seen as “sovereign” in the market, as Smith (1961) described them. However, consumers have lost their freedom to the market (Horkheimer, 1967). Thirdly is “the saturated consumer” (Saren, 2007, p. 348). This critique is based on the notion that consumer identity is never fully constructed and is constantly in process. Besides, consumer identity does not give a chapter and verse on personal identity (Saren, 2007). This process can be ascribed to the alterations that occur across different phases of the lifespan. For instance, a child’s perception of themselves as a ‘consumer’ differs from an adult’s perception (Saren, 2007).

Finally, the choice. In conformity with the monotonicity of preferences and the utility theory assumptions, precisely the “more-is-better” assumption, consumers are always inclined to consume more given the choices available (Manelli, 1991). Hence, for marketing, consumers ought to be offered many choices in the form of an abundance of market offerings. Wherefore, consumers find themselves drowned in miscellaneous products and services, which arguably leads them to overconsumption that exceeds their needs and increases their waste (Bataille & Hurley, 1988). Besides, the “inherent gap” where consumers attempt to fill their incompleting identity by consumption. This is what makes the market inescapable (Kozinets, 2002;

Arnould, 2007), “unsatisfied” consumers are captivated by the market and creating “more demand” is what dominates the market’s logic.

2.2 Prosumer

2.2.1 Prosumer identity

As an initial concept, Toffler introduced the prosumer in his book *The Third Wave* in 1980. Toffler (1980) referred to people who “consumed what themselves produced” with prosumer and “production for use” with prosumption (Toffler, 1980, p.266; p. 481). In the post-industrial era, consumers began producing goods and services (Toffler, 1980). Prosumption is a continuous process involving production and consumption, through which consumers make products for their use (Ritzer, 2014; Xie et al., 2008). In the mental health service field, a prosumer has been defined as a person who receives health care services and provides them to others in return for payment, which is a combination of professional service provider and consumer (Aikawa & Yasui, 2017; Manos, 1993). Concerning the concepts of prosumer and prosumption, Ritzer et al. (2012) emphasized that these concepts are not something new, but the diverse prosumption practices nowadays have attracted scholars’ attention to the product in consumers’ consumption. One of the more typical examples is in the Web 2.0 era, and prosumers use social media for non-material production in the “social factory” known as the Internet, where they engage in the co-creation of brand meaning by generating content and interacting with others (Ritzer et al., 2012, p. 382). Besides, prosumers have produced consumer value through prosumption, and they create their own consumption experiences while receiving the products or services made by themselves (Xie et al., 2008).

Within the prosumption context, the distinction between producer and consumer becomes blurred (Kotler, 2010; Manos, 1993; Ritzer, 2010). Prosumption is a fusion of production and consumption, which drew forth the integrated identity of the prosumer with the producer aspect and consumer aspect (Ritzer, 2010, 2015). However, instead of regarding prosumer identity as a unitary identity that consists of multiple aspects, scholars have argued the identity of prosumers differently. From Humphreys and Grayson’s perspective (2008), since there is a fundamental distinction between the producer and consumer based on their value creation, the prosumer is the intersection identity of producer and consumer. This project adapts the former argument of prosumer identity. Furthermore, the identity of the prosumer is dynamic and fluid, which means prosumers are positioning and repositioning themselves constantly (Aikawa & Yasui, 2017). They explained how producers and consumers align the service provider and consumer position into prosumer identity. According to their proposed prosumer identity development model, individuals integrate their experiences to negotiate between provider identity and consumer identity, and they develop their identity toward prosumer by creating their value and meaning (Aikawa & Yasui, 2017). Aikawa and Yasui (2017) also stated that prosumers would continue to maintain their identity by actively engaging in communities or groups to provide help to others. Besides, prosumers could develop their new identities by presuming narratives and interacting with other community members (Davis, 2012; Ellis et al., 2010). As a worker, in some cases, consumers are involved in the products or

services production process, and their identity could be constructed through their work (Gabriel & Lang, 2015).

2.2.2 Sustainable prosumer identity and motives

Along with the emergence of prosumers and prosumption activities, new technologies were developed to reduce environmental impacts, for example, environmental pollution (Toffler, 1980). Unlike the ecological issues caused by the prevalence of consumerism, scholars noticed that some prosumers have already started to distract themselves from the influence of the mass market, and they are more inclined to produce and consume their customized goods and services with reduced environmental pollution (Connolly & Prothero, 2003; Toffler 1980; Perera & Hewege, 2021). Perera et al. 's study (2020) defined the concept of green prosumer, which refers to those who engage in environmentally friendly consumption by their choice and produce products or services for self-use.

According to Perera and Hewege (2021), sustainability-conscious prosumers can be defined as individuals who strive to protect the environment's well-being and are less contingent on market mechanisms and manufacturers with lower or no environmental credentials. By adopting an active position to mitigate the adverse effects of the mainstream market system on environmental well-being, they detest trade practices that damage the environment. They reject overconsumption, and they might take one step further and form an identity that is characterized by anti-consumption or self-production. Sustainability-conscious prosumer identity can be analogous to empowered and informed consumer identity. They are consistently looking for important information on producers' environmental credibility before undertaking any purchasing decision. However, even if they refuse to purchase from the marketplace but rather produce whatever they want to consume, the development of prosumer identity is, to a certain extent, supported by market practices. Thereon, essential resources for such self-production must be bought from the market. Eventually, a sustainability-conscious prosumer is an individual who performs practices that can be described as any form of self-production intending to minimize the harmful impacts of consumption on the environment, for instance, growing vegetables or generating electricity for self-consumption (Perera & Hewege, 2021).

There are three segments of sustainability-conscious prosumers proposed by Perera and Hewege (2021). Firstly, semi-prosumers might take actions to reduce the environmental issues caused by the existing market mechanism, and they might reuse or exchange resources to avoid waste (Perera et al., 2020; Perera & Hewege, 2021). Secondly, collective prosumers create their exchanging and sharing system in their community rather than engage in the mainstream market (Perera et al., 2020; Perera & Hewege, 2021). They create and share their values, subculture, and identities through collaborative and sustainable practices. In terms of creative prosumers, they prefer to produce self-use products or services on their own, and planting food is one of the examples of prosumption of creative sustainability-conscious prosumers (Perera et al., 2020; Perera & Hewege, 2021).

Scholars have examined prosumers' motives or intentions to engage in prosumption

(Manos, 1993; Aikawa & Yasui, 2017; Chandler & Chen 2015). In mental health studies, Manos (1993) mentioned that prosumers intend to gain more skills, experience, and knowledge by providing services to others and joining self-help communities. Besides, prosumers believe that they can receive a sense of value by being prosumers (Aikawa & Yasui, 2017). Moreover, some prosumers engage in prosumption by their choice since they could gain emotional and economic benefits through prosumption activities (Ritzer et al., 2012). Chandler and Chen (2015) summarized that prosumers are motivated by individual and social motivation. By choosing prosumption activities freely, prosumers will satisfy their autonomy and competency motivations, and they are socially motivated to engage in prosumption activities to build social relationships with others and community development (Chandler & Chen, 2015). Additionally, the requirement for distinctiveness is also a motivation to guide people to consume sustainably or engage in anti-consumption (Connolly & Prothero, 2003).

The motives that drive people's identity construction play an essential role in interpreting their actions and understanding their identity (Vignoles et al., 2011). Examining the motives or intentions of consumers can help understand the natural causes of their sustainable consumption choices (Connolly & Prothero 2003). First, environmental and economic motives are among the motives that drive people to choose sustainable prosumption, especially in energy prosumption (Hansen et al., 2022; Palm, 2017). According to Hansen et al. (2022), prosumers who install solar panels to generate energy by themselves are driven by their environmental concerns and the environmental benefit. Besides, saving costs on energy or gaining economic benefit is also one of the motivations for engaging in energy prosumption (Palm, 2018). However, Hansen et al. (2022) mentioned that some people refuse to install solar panels due to the long pay-back time. Secondly, like some prosumers who have distanced themselves from the market mechanism, anti-consumers have adopted sustainable lifestyles that include refusing, reducing, and reusing consumption to express their identity or desired identity (Black & Cherrier, 2010). Based on Black and Cherrier (2010), in addition to being influenced by environmental concerns, these socially responsible anti-consumers are also motivated by their needs to obtain self-interest and well-being.

Furthermore, pro-environmental behaviors, referring to sustainable behaviors, are also oriented by moral motives (Clayton & Myers, 2015; Gatersleben et al., 2019). Moral motivation stems from the judgment that individuals make on whether something is right or not based on their values and principles (Hardy & Carlo, 2005). Morally motivated pro-environmental behaviors are highly associated with self-transcendent (altruistic and biospheric) values (de Groot & Steg, 2009). In brief, people with altruistic values prioritize the actions that benefit others over themselves, and people with biospheric values behave to benefit the ecosystem (de Groot & Steg, 2009). Both values could predict environmentally friendly behaviors significantly (Stern, 2000). These people whose sustainable behaviors are driven by their moral motives might engage in fair trade and choose green and locally produced products to benefit the collective, the environment, and future generations (Gatersleben et al., 2019).

2.3 Identity Theory

2.3.1 Personal and material identity

Identity Studies is by all accounts one of the fastest expanding areas in the social sciences (Côté, 2006). The significance of Identity Studies is ascribed to the roles it plays in guiding life paths and personal decisions (Kroger, 2007). While people employ various strategies to claim or defend certain aspects of their identity, ambiguity and inconsistency are concomitant to what precisely people are attempting to construct, maintain, and defend. Therefore, determining the essential properties of a satisfactory identity is still a topic at hand (Vignoles, 2011).

Opting for identity to be the focal point of this study ascribes to the fact that identity is amongst the most frequently studied constructs in the social sciences (Brubaker & Cooper, 2000; Côté, 2006). Although “Identity”, across several studies, has been utilized to indicate different things, the identity meaning remains to be unclear. However, in plain language, “Identity” might involve an implicit or explicit answer to the question: “Who are you?”, wherein “you” can refer to singular or plural. The question might also be asked reflexively, i.e., “Who am I” (Vignoles et al., 2011, p. 2). According to Vignoles (2011), identity is “all aspects of the image of oneself—as represented in cognition, emotion, and discourse” (p. 2). In adopting Vignoles’s (2011) definition, several ramifications ought to be articulated. First, drawing on William James’ quote:

In its widest possible sense, however, a man’s Self is the sum total of all that he CAN call his, not only his body and his psychic powers, but his clothes and his house, his wife and children, his ancestors and friends, his reputation and works, his lands and horses, and yacht and bank-account. (James, 1890, p. 291)

An identity can be extended further than the individual’s physical limits, ranging from material possessions and places to include the brands they utilize (Dittmar, 2011).

Second, identity is not an “objective truth” but an idea of a set of ideas (Vignoles, 2011). Moreover, identity might be defined on three “levels”, namely, individual, relational, and collective (Sedikides & Brewer, 2015), that is, individual identity denotes aspects of self-definition at the personal level (Schwartz et al., 2011, p. 3). A fourth aspect of identity can also be added to the per mentioned three levels, namely, the material identity, which can also be recognized in a William James’ quote:

The Empirical Self of each of us is all that he is tempted to call by the name of me. But it is clear that between what a man calls me and what he simply calls mine the line is difficult to draw [...] a man’s Self is the sum total of all that he CAN call his, not only his body and his psychic powers. (James, 1890, p.291)

In other words, a person’s identity stretches beyond individual selves to include not only, for instance, mind, body, and friends but also material goods that are deemed

an extension of an individual's identity (Schwartz et al., 2011). The same idea has shown itself in many other disciplines' debates, particularly on projecting a "sense of self" via consumer objects (Belk et al., 1988). Herein, Belk (1988) introduced the notion of "extended self", which means that consumers reflect who they are and who they want to be by purchasing, using, and disposing of products.

Finally, it should be emphasized that these multiple aspects of identity do not exist independently, instead they interact and intersect with each other. Accordingly, it might be noted that the individual always receives much attention. However, alternatively, identities can be regarded as ways of thinking or even talking (Rattansi & Phoenix, 2005; Schwartz et al., 2011).

2.3.2 The process-oriented model

Personal identity develops throughout different stages of the lifespan. Identity development has been deeply rooted in Erikson's (1950, 1968) and Marcia's (1966) work. For Erikson, identity work is never "final" and continues to develop throughout the lifetime. Due to different factors, one's identity is subject to alteration and transformation (Luyckx et al., 2011, p. 77-78). Based on this fundamental assumption, Luyckx et al. (2006) proposed an integrated process-oriented model to outline personal identity development throughout various lifespan stages. It is worth mentioning that the process-oriented model is based on three models: Bosma and Kunnen's (2001) transactional model, Kerpelman's (1997) identity control model, and Grotevant's (1987) process model.

Herein, it might be hard to carry on without briefly highlighting the core notion of each model. Initially, exploration was the heart of Grotevant's (1987) process model, defined as "Problem-solving behavior aimed at eliciting information about oneself or one's environment to decide on an important life choice" (p. 204). Grotevant (1987) deemed exploration as an impetus for identity work. Secondly, identity control theory (Kerpelman et al., 1997) is considered an extension of Grotevant's (1987) model. The theory regards identity development as a series of frequent feedback loops to minimize the lack of compatibility between one's self-perception and the feedback received from others, for instance, parents or peers (Kerpelman et al., 1997; Schwartz et al., 2011). Lastly, the transactional model, where Bosma and Kunnen (2001) argued that identity development might be depicted as a series of short-term repeated and periodic transactions between a person and their context.

The process-oriented model is a four-dimensional model that comprises four inter-related dimensions: exploration in-breadth, commitment making, exploration in-depth, and identification with commitment (see Figure 1). According to Luyckx et al. (2006), the model incorporates commitment formation and commitment evaluation processes, and each process contains one dimension of exploration and another of commitment. In the commitment formation process, which involves exploration in-breadth and commitment making, one of several conceivable identity alternatives is selected (Luyckx et al., 2006). In this process, exploration in breadth pertains to gathering information on different identity alternatives, whereas commitment alludes to enacting firm choices in other identity domains.

In the commitment evaluation process, which involves in-depth exploration and identification with commitment, identity commitments are constantly evaluated. Exploration in-depth has relevance to introspective mechanisms, obtaining information, and collecting feedback about existing commitments, whilst identification with commitment implies the extent of sureness and security experienced concerning one’s current commitments and the extent to which these commitments concur with one’s own standards and desires (Bosma, 1985). When a person reaches the final dimension, i.e., identification with commitment, they might decide that this is not the desired outcome, then a new exploration in breadth will be initiated, as well as a new search for alternatives. Herein, it should be noted that the double-headed arrows between the dimensions represent the reciprocal nature between these dimensions.

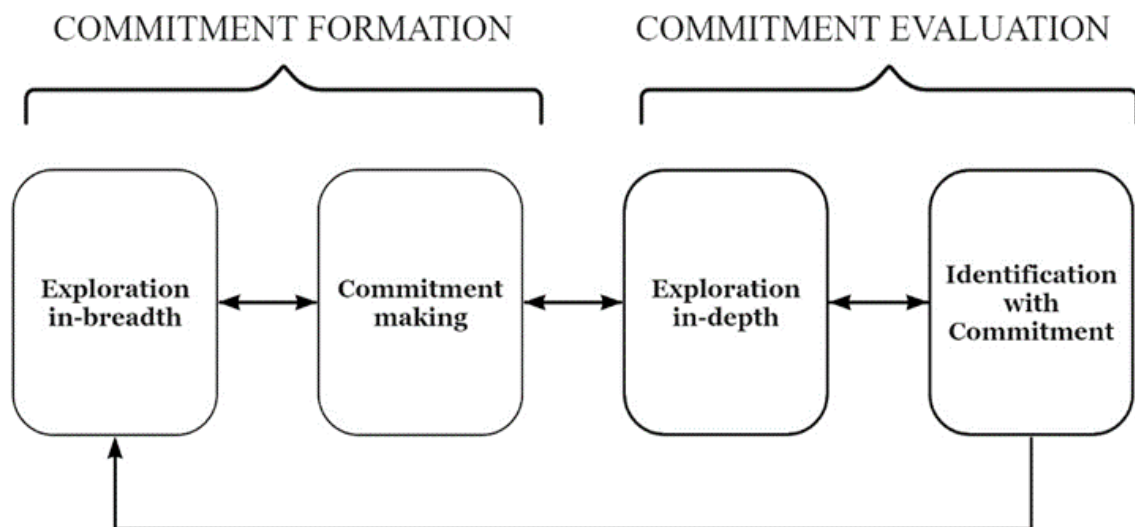


Figure 2.1: Integrating commitment formation and commitment evaluation processes (Luyckx et al., 2011).

2.3.3 Identity motives

People implement various strategies to proclaim or defend specific aspects of their identities. This might manifest itself in the goods people purchase to symbolize their coveted identities (Vignoles, 2011). Although several theories argue that identity processes are substantially guided by the need to develop, maintain, and enhance a sense of self-esteem (Gregg et al., 2011; Heppner & Kernis, 2011), Vignoles (2011) argued that besides self-esteem, there are also multiple motives associated with identity processes, and “paying attention to the multiplicity of identity motives can help us better to predict and understand identity-related outcomes, and ultimately to change them for the better” (p. 403). According to Vignoles (2011), “people are motivated to construct identities characterized by feelings of self-esteem, continuity, distinctiveness, meaning, efficacy, and belonging” (p. 404).

Herein, it should be noted that although the identity is not fixed or given (Erikson, 1950), the meanings that people give to themselves are stable. Moreover, identities might be constructed instead of “real”, however, social actions by which individuals defend their identities are real and their consequences. In other words, people might risk or even sacrifice their lives to maintain and defend certain aspects of their iden-

tities. Given that identities are guided by diverse motives, determining the set of motives that makes certain forms of identities more desirable over others is deemed cardinal to many theorists (Vignoles, 2011).

Vignoles et al. (2006) defined identity motive as “tendencies toward certain identity states and away from others, which guide the processes of identity definition and enactment” (p. 405). That is to say, people will pursue and aspire to types of identity that satisfy these motives whilst they avoid forms of identity that thwart them (Vignoles, 2011). Hereto, it might be significant to mention that people are not often aware of their identity motives (Vignoles, 2011). This might be ascribed to several identity maintenance strategies, including forms of self-deception or biased thinking (Gregg et al., 2011), to protect a coveted self-image (Vignoles, 2011). Gregg et al. (2011) denoted that our use of terms like self-awareness does not necessarily indicate a detailed examination of the self or the acquisition of an insight into one’s motives. Furthermore, unless motives are frustrated, they seldom come into conscious awareness. The thing that makes individuals report their motives unattainable. For instance, those who do not claim self-esteem motives might do this to protect their self-esteem. However, identity motives can be deduced from their anticipated impact on identity processes. There is a positive relationship between satisfying motives and well-being. For instance, people who express high self-esteem can report higher life satisfaction (Heppner & Kernis, 2011).

2.3.4 Motivated identity construction theory

Although there is a lot of research and perspectives on motivational influences on identity processes, the reason behind opting for motivated identity construction theory is the assumption underpinning this theory. That is any form of identity must satisfy particular motivational attributes to be adaptive or utilitarian. The theory anticipates that self-esteem is not the only motive that guides people’s identity process, with cross-cultural variation in mind, five other motives are concomitant to self-esteem. Thus, all the six motives are expected to be universal. They are continuity, distinctiveness, meaning, efficacy, belonging, and self-esteem. It is worth mentioning that this theory obviates the need for creating separate identity theories as this set of motives can be applied across diverse levels and fields of identity, for instance, understanding the role of identity in consumer behavior (Vignoles, 2011).

Self-esteem has appeared in enormous theories and empirical findings (Heppner & Kernis, 2011). According to James (1890), Self-esteem can be defined as the sum evaluation of one’s accomplishments. Other definitions have associated self-esteem with “worthiness” and “competence” (Mruk, 2006; Tafarodi & Swann, 2001). Overall, self-esteem motivates people to see themselves in a “positive light” (Vignoles, 2011, p.412). The continuity motive is defined as the need to feel a sense of connection between individuals’ past, present, and future regardless of significant life changes. Thus, people’s connection to their past and future selves allows them to be more accountable for their past actions and the ability to form future goals (Vignoles, 2011). On the other hand, the meaning motive refers to the necessity to find the meaningfulness and purpose of one’s existence (Baumeister, 1991). The meaning motive plays a significant role when people encounter “traumatic” events. In

other words, it is particularly significant when people are faced with unforeseeable challenges, and the meaning motive assists them in contending with such challenges (Vignoles, 2011). Furthermore, it provides a “meaning system” for individuals to evaluate themselves, which is equally necessary for self-esteem (Pyszczynski et al., 2004). The following motive is the efficacy motive, defined as seeking the feeling of competence and control (Bandura, 1994; Bussey, 2011). Efficacy motive is a people’s judgment of their capabilities to control and perform the courses of action demanded to acquire predetermined types of performances (Vignoles, 2011). It does not concern the skills one has but rather the estimation of the gains that one can attain with the skills one presently possesses. In other words, people’s perception of their capabilities to achieve a performance level that allows them to organize and execute influence over events that impact their lives (Bresó et al., 2011). However, people might deal with their efficacy motives erroneously. This implies that they might overestimate control or underestimate the time needed to achieve desirable goals (Vignoles, 2011). Finally, the belonging motive, which is according to Baumeister and Leary (1995), is defined as a “fundamental human motivation” (p.497). Vignoles (2011) identified the belonging motive in interpersonal relationships and within groups as the need to maintain a feeling of closeness to others and inclusion within their social context.

2.3.5 Basic human needs

Deci and Ryan (2000) defined basic needs as those that impact individuals’ well-being. Though the unfulfillment of basic needs will not result in survival issues, people will live better if they can satisfy these needs (Deci & Ryan, 2000). Basic human needs are deemed to be the need for essential things for human survival, such as food, water, and oxygen (Pittman & Zeigler, 2007). Pittman and Zeigler (2007) suggested different analytical orientations of the current theories of basic human needs. Firstly, basic needs at the biological or basic level refer to the needs that would affect human survival (Epstein, 2003; Maslow, 1943; Pyszczynski et al., 1997). According to Maslow’s Hierarchy Needs (1943), they take priority over other needs. Secondly, the need for belonging is also one of the basic human needs. Whereas social support, such as the assistance provided by others, is also essential for survival and well-being (Baumeister & Leary, 1995; Deci & Ryan, 2000). Moreover, self-esteem, autonomy, and competency are also crucial needs at the individual level (Deci & Ryan, 2000; Epstein, 2003; Maslows,1943; Pyszczynski et al., 1997).

From Vignoles et al. (2008), basic needs are intrinsic driven forces that lead individuals to perform specific behaviors, which might affect their self-perception. Additionally, Luyckx et al. (2009) suggested that the satisfaction of basic needs impacts the process of personal identity formulation. For instance, the need for competence forces individuals to explore their identities in breadth and in-depth (Luyckx et al., 2009). It can be demonstrated when individuals with higher perceptions about their competencies are more inclined to engage in exploration actions. Therein, individuals, who perceive themselves as more capable, are more likely to make identity commitments. Moreover, satisfying the belonging needs offers individuals a sense of security on the psychological level, which helps them explore their identities further (Luyckx et al., 2009).

Vignoles et al. (2006) suggested that identity motives and physiological needs (i.e., human needs), for instance, avoiding uncertainty (Hogg, 2007) and human survival (Sedikides & Skowronski, 2000), are anticipated to function analogously. Thus, identity motives and basic needs are not mutually exclusive, instead they are complementary. Put it differently, it is not difficult to envisage an individual under the guidance of basic needs and identity motives. Identity motives mentioned by Vignoles (2011) and Vignoles et al. (2006), i.e., self-esteem, continuity, distinctiveness, meaning, efficacy, and belonging, are likely to emerge because it has some adaptive function in satisfying one or a few basic needs. For instance, owning a distinctive and meaningful sense of identity might be particularly significant for reducing uncertainty (Hogg, 2007).

2.3.6 The integrated identity development model

According to consumer culture theory, consumers are identity seekers and makers, and consumer identity projects are mediated by the market mechanisms (Arnould & Thompson, 2005, 2007). Accordingly, Market offerings are essential for consumers to construct a coherent sense of identity (Askegaard, 2015; Arnould & Thompson, 2005; Saren, 2007). Therein, consumption is the atmosphere in which identities are fought over (Gabriel & Lang, 2006; Larsen & Patterson, 2018). By offering a variety of choices, consumers become increasingly dependent on the market to form their identities, and driven by this dependency, consumers are constantly depicted as identity seekers (Gabriel & Lang, 2006).

Erikson’s ideas of identity crisis during the 1950s, where identity is no longer a fixed or stable concept, have allowed psychologists to deliver consumers as a manageable package to businesses. Thus, instead of adopting the “mass psychology” where identities flow freely from the mass (collective) to the individual, the market has altered this flow of identities and individuality from people to products (Gabriel & Lang, 2006). Besides, the individuals seek and choose their identity among different alternatives (Vignoles et al., 2011). Some might define themselves as typical consumers, others as sustainable prosumers, and so forth (Perera & Hewege, 2021).

Nevertheless, particular unprecedented challenges (COVID-19 and climate) have led individuals’ identities to be deconstructed. Thus, conventional consumer identity has become less attractive, and the emergence of sustainable prosumers as a suitable replacement has stressed people’s great tendency to disengage from the market (Perera & Hewege, 2021). Wherein the limitation of the sustainable choices has underestimated the market role on the question of identity development.

Due to our aim to trace identity motives throughout the identity development and to highlight the touchpoints between the psychological model through which individuals develop their identity and the market role in impacting this model, we opted to integrate the process-oriented model with the consumer culture theory in one model. Therein, the aim is not only to trace and highlight the individuals’ motives but also to articulate the market’s influence on these motives and, consequently, on the sustainable prosumer identity processes (see Figure 2).

Herein, it must be noted that the integrated identity development model is not intended to replace any model or theory; instead the model will be employed to trace the motives that guide the sustainable prosumer identity development, as well as the impact of the choices that are offered by the marketplace, on these motives. We also test this model in a changing context to examine the effect of one visible challenge (COVID-19) and another less visible one (Climate change) on the identity motives.

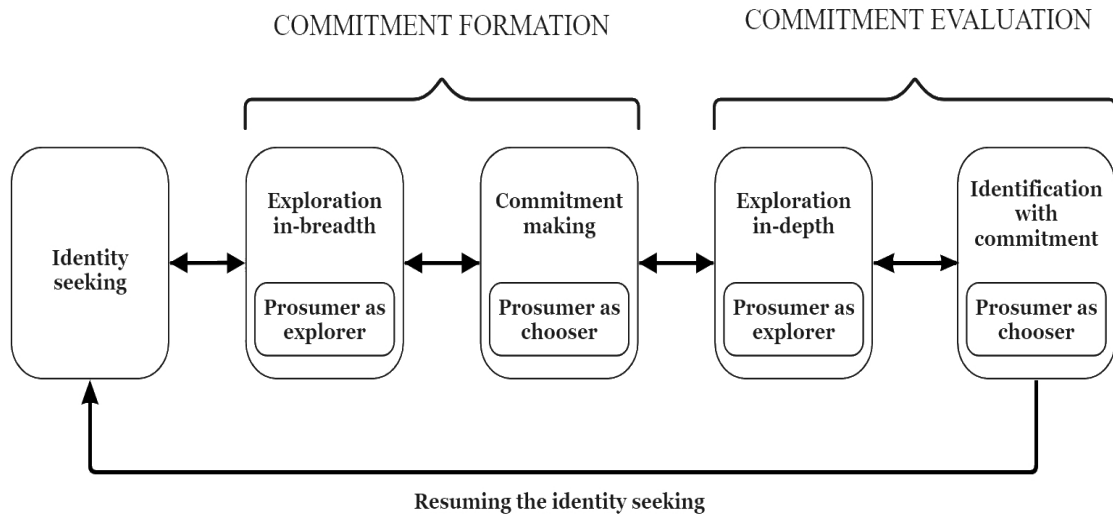


Figure 2.2: Integrating sustainable prosumer identity formation and evaluation processes model in the market context (Arnould & Thompson, 2005; Gabriel & Lang, 2006; Luyckx et al., 2011).

3

Methodology

This chapter starts with a discussion of research philosophy, including the ontological and epistemological stances. We take the research philosophy positions as our basis and our research objectives as our guide to conduct this research. Secondly, we explain the research design and method we chose, followed by a detailed description of how data was collected through semi-interviews and analyzed qualitatively. In the last part of the chapter, we discuss our research's ethical and quality considerations.

3.1 Research philosophy

This research aims to determine why and how motivations influence sustainable identity commitment exploration and evaluation processes of prosumers and how the identification of sustainable prosumers is affected by motivations and choices. This research accepts constructivism ontological and interpretivism epistemological stances. Ontology and epistemology comprise the philosophical basis for social science research, determining the research design and research process (Bryman, 2012; Silverman, 2013). The ontological stance focuses on the nature, fundamental elements, and existence of social reality (Bryman, 2012). Constructivist ontology posits that social phenomena and categories are constructed socially, and the constructed social reality is constantly fluctuating (Bryman, 2012). Identity is the subjective feeling and experience of discovering self in the interpersonal and social constructed process (Schwartz et al., 2011). Besides, the “authentic self could be the subjective feeling of truth” (Vignoles et al., 2011, p.18). This research attempts to understand what constitutes the sustainable identity of prosumers, and we consider identity motives as essential guiding factors in the constant formulation and evaluation process of their sustainable identity. Our research stems from the constructivism ontological position based on this understanding of prosumer identities.

Bryman (2012) suggested that the epistemological stance considers what knowledge should be accepted and how people learn and acquire knowledge in social reality. Positivism and interpretivism are two opposite positions of epistemological consideration for social science research (Bryman, 2012). Positivism concerns the objectivity of social reality. One of the principles of positivism addresses the significance of value-free and non-bias in conducting research (Bryman, 2012). However, the interpretivism position emphasizes the importance of the “subjective meaning of social

action” and the different aspects of the research issue (Bryman, 2012, p.30). From an interpretivism point of view, the social reality is understood and explained by researchers, consequently, the subjectivity and values of researchers are inevitable in the whole research (Bryman, 2012). As a traditional approach from the interpretivism view, the hermeneutic-phenomenological approach emphasizes the necessity of understanding the meaning behind social actions (Bryman, 2012). Employing a phenomenological approach is also common for researchers to understand the personal interpretation of people’s identities (Schwartz et al., 2011). In our research, we chose to focus on the sustainable aspects of prosumer identity and prosumption actions they take, and we want to clarify, understand, and interpret the multiple motivated identities of prosumers. We want to abduct appropriate answers to explain the process of sustainable prosumer identity development. The personal and subjective understanding of sustainable prosumers provides a window into the meaning behind their sustainable identities. As a result, our research departs from positivist epistemology and points to interpretivism.

3.2 Research approach

Although both quantitative and qualitative approaches are applicable for identity studies (Schwartz et al., 2011), this research’s qualitative strategy has been employed to understand the motives that guide prosumers to construct their sustainable identities. There are several reasons. Quantitative identity research is mainly conducted to assess and rate the correlation among different identity factors (Vignoles et al., 2011). Nevertheless, Flick (2014) argued that causal relationships could be examined through quantitative research without further explanation. Wherefore, understanding and explaining sustainable prosumers’ motives are not possible with quantitative methods. On the contrary, qualitative research could help the researcher gain more insight into the identity development process with choice-making and motivation of prosumers. Qualitative research could help researchers explore the issues and understand the particular social phenomenon (Bryman, 2012). Besides, people can conduct an in-depth analysis of non-numerical data with qualitative strategy, taking individuals’ experiences and perceptions as examples (Bryman, 2012). To Vignoles et al. (2011), the qualitative research strategy chosen in identity research aims to understand the personal experience of their identities. Consequently, quantitative research allows us to provide an in-depth study of the motives behind sustainable prosumer identity projects.

Considering the purposes of this study, an abductive approach is the most appropriate. Inductive methodology develops theories based on interpreting and analyzing empirical data, whereas the deductive method uses empirical data to test hypotheses derived from existing theory (Flick, 2014). However, both deduction and induction have their limitations. The deductive process cannot suit the case when new theoretical ideas have been generated during the research. The issue of the inductive approach is that observation data could be incomplete and not presentative enough to support the generalization of new theories (Flick, 2014). Compared to these two methods, Haig (2018) suggested that the abductive approach, which interprets empirical phenomena based on existing theories and develops new ideas concurrently, is suitable for social science research. Although compared with deduction, abduc-

tive analysis brings conclusions with less uncertainty, and it still allows researchers to modify and expand the existing theories and inspire them to new theoretical insights (Timmermans & Tavory, 2012). The deployment of abductive reasoning enables new perspectives and insights into the scientific knowledge system in the case of observed phenomena resistant to explanation by existing theories (Tavory & Timmermans, 2014). Therefore, we decided to conduct the abductive approach to explore the motives-driven development process of sustainable prosumers' identities.

As for the choice of literature, theories are helpful for researchers to know how the social reality has been constructed and what is still unknown about the specific social phenomenon (Silverman, 2013). We searched and reviewed the related theories to clarify our study field and prepare the theoretical basis for this research, and our analysis of empirical data follows the consumer identity projects and identity theories also (Gabriel & Lang, 2006; Luyckx et al., 2006; Schwartz et al., 2011). We first reviewed the previous studies on consumer identity projects to understand how consumers extend themselves by exploring and choosing products and services in the market. After we noticed the shortness of using consumer identity projects in our sustainable prosumer study, we searched for alternative identity theories on a psychological level to provide us with a complementary perspective. Still, during our qualitative analysis of the interview data, we noticed the complexity of the motives that guide prosumers to formulate and evaluate their sustainable identities by coding and to categorize the new explanations of sustainable prosumers. We searched, reviewed, and assessed the relevance of literature during the whole research process.

3.3 Data collection

3.3.1 Sampling

Given that purposive sampling is a non-probability form of sampling that is employed to select participants, not on a random basis, and aims to select participants who are closely relevant to the posed research questions (Bryman, 2012), the interviewees have been selected purposively based on the research theme and the research questions (Silverman, 2013). Consequently, participants have been chosen with certain criteria relevant to the inclusion or exclusion of units (sites and people) of analysis. By following the frameworks of sampling posited by Flick (2014), we focused on the individual prosumers and organizations' founders who undertake sustainable activities relevant to our research objective. Accordingly, we have initiated preparing a list of attributes, types, and definitions of prosumers and sustainability-conscious prosumers (see Appendix A, Q1). Moreover, drawing on Perera and Hewege's (2021) and Toffler's (1980) work, we attempted to have a detailed and comprehensive definition of sustainability-conscious prosumers and green prosumers. Additionally, to ascertain that sample participants are different in terms of essential characteristics relevant to the research question and ensure variety in the resulting sample (Bryman, 2012), our targeted groups included both founders undertaking sustainable initiatives and individuals engaging in sustainable prosumption practices. Herein, it is worth noting that according to Manos (1993), the mental health help providers were deemed as prosumers and organizers. Therefore, we have not looked at founders as

they are merely initiative organizers but also as sustainable prosumers who contribute to sustainability.

Our efforts were oriented to finding founders and individuals who satisfy the research's predetermined criteria to carry on with purposive sampling. To find the right founders, we have initiated online research using keywords such as "sustainable organization", "green organization", and "mental health". Our initial research has ended up with a list of some social and environmental nonprofit organizations. After that, before we started emailing any of the organizations, we attempted to learn more about each organization and those who stand behind it. We have corresponded with eight organizations, however, we interviewed only two founders. One is a staff member from Bay Area Green Tours, California, United States. This interview was conducted via email. And Heba Mousa, the founder of Tabdeel organization, Egypt. The interview with Heba was conducted through a video conferencing service.

When it comes to finding individuals who fit our research benchmark, different social media platforms were the departure point for reaching out to potential individuals. Our efforts have led us to seventeen individuals: four Syrians, four Chinese, three Swedes, a German, French, Sri Lankan, Spanish, Croatian, and Turkish. Gender-wise, we interviewed ten males and nine females.

It is worth noting that several aspects have been taken into consideration during the sampling course of action. The level of knowledge and awareness regarding sustainable prosumption and sustainability the participants possess. However, most of the interviewees could show sufficient knowledge regarding the topic. The thing that motivated us to ask more in-depth questions and collect diverse and relevant answers. Moreover, the cultural backgrounds might, to a significant extent, as we could observe, influence participants' motives to develop a sustainable prosumer identity. Although the cultural aspects are not the focus of this research, interviewing consumers from various countries allows us to have a comprehensive view that enriches our conclusions.

3.3.2 Interviews

To understand the sustainable prosumer identity development process and its guiding motives, 19 semi-structured interviews were conducted to collect empirical data. Semi-structured interviews provide a general structure to guide the interview process in following the right direction (May, 2011). Moreover, semi-structured interviews are more flexible than structured interviews, which leaves room for interviewees' responses and generates more questions (Bryman, 2012). The collected data enable us to track identity development and its multiple guiding motives in different contexts and generate new conclusions using an abductive approach.

The interview guide is used to guide our interviews' course of action and keep our questions within the limits of the core themes. The interviewers could adjust the order of questions according to the interviewee's responses for fluidity (Bryman, 2012). Our open-ended interview questions have been formulated with our research questions in mind (see Appendix B). The interview guide is constructed based on a

theoretical foundation derived from relevant studies and researchers (see Appendix A). Two interview guides have been prepared with different questions. The first one was oriented toward a founder and an organizer from two non-profit organizations, while the other one was geared toward individual prosumers to capture a broad perspective on prosumers' tendency to develop sustainable identities and their guiding motives (see Appendix B). We regarded the founder and organizer as individual sustainable prosumers and sustainable initiative organizers. By asking the founder and organizer questions about their impulses behind holding sustainable initiatives, we aimed to know more about their sustainable prosumer identity development and what motives guide this development. Additionally, organizers were asked to share their thoughts and experience about the prosumers who participated in their sustainable initiatives to gain more insights regarding prosumers' motives to participate in sustainable initiatives from a founder's and an organizer's perspective. After gathering basic information from the organizations' websites and other related articles, we adjusted our interview guide to make them more suitable for each organization considering their different initiatives.

We started our interviews with individual prosumers by asking introductory questions aimed at identifying their prosumer identities and whether they, in the first place, embraced the sustainable identity or not (see Appendix A and Appendix B). For instance, the reason behind choosing the opening question "Are you a prosumer?" was to ensure that the participant fits the thesis's predetermined criteria. However, following Flick's (2014) suggestion, we changed some keywords such as "prosumer" to make our questions more understandable, given that "prosumer" is not a common word in daily life. Some examples are followed by specific questions to help interviewees better understand the questions. In some instances, we asked follow-up questions to induce the interviewees to share more and probe their answers in-depth (Flick, 2014). All the interview questions were generated based on the identity development process model, and we prepared these questions for each stage of the process. Based on the responses and feedback from previous interviews, we have improved and modified our interview guide from time to time to make them more appropriate.

In total, we have conducted 19 semi-structured interviews, which satisfy the requirement of an adequate sample amount for research (Francis et al., 2010). The participants, aged 24-42 years, have undertaken sustainable prosumption activities in their life (see Appendix C). In-person and online interviews' duration ranged from thirty minutes to one hour each. Following May's (2011) recommendation, to test whether we have prepared valid interview guides to collect relevant data, we conducted one pilot interview with an organizer and another with an individual prosumer. Before conducting interviews, we introduced our research purpose and contents to each interviewee. Participants' explicit consents were obtained where participation was voluntary, and participants were informed that the meetings were recorded. (Flick, 2014). Three interviews were conducted in person, and most of the interviews were carried out online for different reasons (Flick, 2014). For instance, since we have some interviewees who live in other countries, most of the interviews were conducted via Zoom. Also, due to cultural reasons, some interviewees preferred answering our questions via email. Two interviews with non-profit

organizations were conducted via Email and Zoom in response to the interviewees' preferences. In-person interviews were conducted in an appropriate place, providing a quiet environment to record the interview and allow the interviewee to answer questions more comfortably (Flick, 2014).

Assisted with a mobile application, all the verbal interviews were recorded and transcribed. However, we checked our audio after each interview and modified the transcription. Afterward, the transcriptions were sent to the interviewees for double-checking to ensure the authenticity of the data. Linguistically speaking, 13 interviews were conducted in English, three in Chinese, and three in Arabic. Given that interviewees might feel more comfortable answering our questions using their native language, we think that we will enrich their answers by using their most proficient language. Eventually, all interviews are translated into English.

3.4 Data analysis

We primarily employed qualitative analysis to analyze the transcribed interview data to understand further what motivates prosumers to choose sustainable identities and deviate from sustainable identity construction. As this research adopts abductive scientific logic, we have opted for specific coding strategies and data processing procedures to deliver an in-depth analysis of our collected data. Vila-Henninger et al. (2022) suggested that abduction incorporates the features of induction and deduction, intending to provide the most reasonable theoretical-based explanations for the given phenomenon, coupled with empirical data to validate these explanations. They further suggested that abduction, induction, and deduction iteratively perform their roles at different stages during the whole research process (Vila-Henninger et al., 2022). Following Timmermans and Tavory's (2012) recommendations, we applied the grounded theory methodology in our data analysis process optionally, which assisted us in constructing a more meaningful and innovative theoretical perspective building on the existing theories.

According to Saldaña (2021) and Vila-Henninger et al.'s (2022) guidance on the coding methods utilized in qualitative research, we carried out our reading and coding of the transcribed interview text with qualitative data analysis software (CAQ-DAS). In the coding process, the text was read line by line, assigning codes and memos for each relevant content to our research questions. Codes can represent the meaning and attribute of text summarily in fewer words (Saldaña, 2021). The same codes and categories have been assigned with contents that share similar implications. Our abductive research intends to investigate which motives guide prosumers' sustainable identity choices and how these motives affect their sustainable identity development process. With our research design and research questions in mind, we wanted to probe and interpret the identity development of sustainable prosumers from our collected data. Therefore, we have combined multiple coding strategies to assign codes for different interviewees' answers. Additionally, analytical memos were prepared to track the essential coding processes, the meaning of the codes, and why we coded them, allowing researchers to iterate over the data to reach the most appropriate answers to the research questions (Saldaña, 2021).

Drawing on Saldaña (2021), we have chosen to go with three coding methods in each step of our coding process. In vivo Coding has been selected among other elemental coding methods as our primary approach to analyzing our qualitative data. Using In Vivo coding aims to erect a foundation for future coding cycles. For the first cycle of coding, In Vivo Coding, “literal coding” draws from the participant’s own words and phrases (Saldaña, 2021, p. 105). Indeed, having in mind that an analytical memo is crucial during In Vivo coding, we did not write memos merely because they are a significant element in the grounded theory but also considering that an analytical memo serves as a code and category-generating method (Saldaña, 2021).

Secondly, we have chosen the Focused Coding method as an “intermediate coding” (Saldaña, 2021, p.238). Focused Coding comes after In Vivo Coding, which helps us find the most critical codes to evolve the most prominent categories. In this stage, we categorized the in vivo codes into focus codes based on theories (Aikawa & Yasui, 2017; Chandler & Chen 2015; Gatersleben et al., 2019; Hansen et al., 2022; Manos, 1993; Palm, 2018; Perera & Hewege, 2021; Ryan & Deci, 2000; Vignoles, 2011). Focused codes helped us classify identity motives and other motives of prosumers and how motives guide each stage of the sustainable prosumer identity construction process. Eventually, we could classify three clusters of prosumers who undergo different sustainable prosumer identity development processes. The same coding strategies coded all codes under each cluster of prosumers. Besides, some in vivo codes have been categorized into sustainable choices and limited sustainable choices offered by the market, which could help us analyze the association between market choices and prosumers’ sustainable identity development. In addition, we named one of the focused codes as context impact to help us analyze how changing context influenced participants’ multiple motives and sustainable identity construction.

When it comes to the second cycle coding methods, Axial Coding is implemented to gather the fragmented data during the in vivo coding to determine the dominant codes and the less significant ones to reach the best presentation of the data. Implementing axial coding aims to bind categories and subcategories to demonstrate the relatedness among them. After axial coding, we have generated themes, and we could identify the motives which could guide prosumers to steer to/away from sustainable identity formation and evaluation.

3.5 Ethical and quality considerations

To ensure this research has been conducted without causing any harm to individuals and society and better improve the quality of our study (Bryman, 2012). We followed the ethical principles, including no harm to participants, respecting and being equal to all of the participants, no lack of informed consent, providing a positive contribution to society, and protecting participants’ privacy during the research (Bryman, 2012; May, 2011, Flick, 2014). Firstly, it is demonstrated by obtaining informed consent from the interviewees in advance when collecting data, recording the interviews, and using responses and background information of participants with their permission. All of the interviewees participated in our research voluntarily, and they were able to choose freely which interview formats would make them feel more comfortable. Respondents are informed by email, personal messages through chat,

and verbally. We introduced and explained our research to participants in detail to ensure no hidden ideas or deception for them in our study (Bryman, 2012). Secondly, we showed respect for our respondents' values by not judging or commenting on their responses and not proactively interpreting their answers with interviewers' views during the interviews. We wanted to protect the interviewee's privacy by avoiding any questions that probe into respondents' private information during the interviews and preventing respondents from being offended. In our thesis, the names of these interviewees have been anonymized. In addition, we have complied with our commitment to confidentiality by using anonymous ways to ensure that respondents' personal information will not be exposed to anyone. For instance, the real names of individual prosumers will not appear in our research paper (Flick, 2014). The names of sustainable social enterprises will be shown in this paper with their permission. The basic information, the audio files, and the transcriptions of all the interviewees were kept secure, and no one could access these files except two authors.

Reliability and validity are two criteria commonly concerned with assessing the quality of qualitative research (Flick, 2014; Silverman, 2013). Firstly, reliability focuses on consistent results when using different research instruments or studying by other researchers on the same study subjects (Hammersley, 1992; Kirk & Miller, 1986). Based on Flick's (2014) recommendations for procedural reliability, we opted for the proper theoretical grounding prudently and the optimal research method to satisfy the reliability of this study. During the interview data collection, we sampled participants who matched the requirements for the research, and we took full advantage of each interview to assess, refine and extend the interview questions so that we could collect more reliable data (Flick, 2014). In data analysis, we have tested the chosen coding strategies iteratively and have simultaneously reflected on and improved the coding procedures by incorporating relevant theories. Eventually, we decided to employ a set of coding strategies that could better help us organize our findings well and fulfill our research purposes, which could increase the reliability of the project. Furthermore, validity concerns whether the generated results are typical and representative of a particular social phenomenon and whether the researcher's interpretation of the empirical data has credibility (Silverman, 2013). Based on Maxwell's (1992) explanation of validity, we have increased the validity criteria of this project by ensuring the authenticity of the interview transcriptions. Besides, we want to interpret participants' expressed views correctly and adequately through some strategies. For instance, we initially utilized In Vivo Coding strategies to extract key points from the participants' own words to help us fully understand and correctly interpret their sustainable identity construction processes and motives. In addition, interview data analysis and findings generation are all based on the related theories to help us fulfill the validity requirements of the project.

4

Findings

We proceed to present our findings in the following chapter, where our participants are divided into three clusters. The first cluster represents the participants who could fully develop a sustainable prosumer identity. The second cluster includes the participants who partially develop a sustainable prosumer identity. We identify both clusters' motives and trace their identity development. The third cluster represents the participants who did not opt for a sustainable prosumer identity, whereas a sustainable prosumer identity was not an attractive identity. Motives to deviate away from sustainable prosumer identity are highlighted in this cluster. Lastly, we examine the impact of the surrounding environment on the sustainable prosumer identity work and motives.

4.1 Fully developed a sustainable prosumer identity

Participants in this cluster could reach a distinct level of certainty and security experienced with existing commitments that satisfy their standards and values (Luyckx et al., 2006) and their guiding motives (Vignoles, 2011). This implies that these participants have undergone both sustainable prosumer identity processes, considering that they are initially identity seekers (Arnould & Thompson, 2005; Larsen & Patterson, 2018; Gabriel & Lang, 2006).

4.1.1 Identity formation process

Participants, in the course of the commitment formation process, opt for the sustainable prosumer identity of many possible identity alternatives. For instance, Ella's tendency to develop a sustainable identity started in adolescence age:

What motivates me is an inner motive. I am a vegetarian. I have been a vegetarian for like 15 years. I am also an animal activist. And I like to protect nature and the environment, and I think that we are responsible for like 90% of the environmental damage. So, we should start now. It's not too late, but it's starting to be late for us to realize that we are harming the environment and thus ourselves.

Guided by her inner motive, Ella's choice to be a vegetarian started at an early age, thirteen years old, wherein the market did not mediate her decision. The idea that

animals ought to be slaughtered was an inadmissible idea for her, especially when she had a closer look at the food industry and noticed that animals are sometimes not being treated well. This motive has guided her towards the identity that satisfies it, i.e., being vegetarian and later an animal activist. The identity can be subsumed under a sustainable prosumer identity (Manos, 1993; Perera & Hewege, 2021).

Founders who stand behind different nonprofit organizations have also followed suit other individuals on the question of sustainable prosumer identity projects. After she completed a master's degree in Urban Development, Heba Mousa founded Tabdeel in 2018, which was her first step toward a sustainable prosumer identity:

I have actually witnessed my city, Alexandria, getting deteriorated because of air pollution and noise pollution, and also the lack of women's participation in cycling and working mobility, or the limited participation. These were personal reasons for me because I have a family history of lung diseases. I also get impacted by every limitation on women's mobility in the city.

Tabdeel is an Egyptian organization that aims to encourage people, particularly women, to cycle instead of using public or private transportation. Whereas prosumption typically begins when individuals perform services for themselves that afterward turn into a self-help group (Manos, 1993), different reasons have encouraged Heba to move from self-help to group-help. According to Manos (1993), regardless of the problem that brings people together in a self-help group, they share the same goal and invade those territories priorly occupied by other individuals. Heba has moved from an inactive stance to a more active one and taken deliberate actions to mitigate the detrimental effects of the conventional market system on environmental well-being (Perera & Hewege, 2021).

4.1.2 Identity formation motives

Although motives might vary from one participant to another, the participants have shared several common motives throughout the formation process. These motives are environmental, moral, efficacy, belonging, and long-term economic motives.

Environmental motive

The environmental motive was the most common motive during the formation process. Participants who have formed a sustainable identity were aware of the environmental impact of their presumption's daily choices. They have shown their concerns regarding the impact on the human living environment and ecosystem. Interestingly, this motive did not only accompany individuals in their everyday choices but also on the career level, as Eva articulated:

I think everyone deserves a cleaner and more livable environment. What is as important as designing the most comfortable spaces for people is the continuation of comfort.

Eva, an architect from Turkey, expressed her environmental motives by stressing that a clean and livable environment ought to be sustainable. Eva's environmental

motive aligns with sustainability-conscious prosumers' definition (Perera & Hewege, 2021), and the environmental concerns and benefits described by Hansen et al. (2022).

The environmental motive might guide prosumers beyond the product itself to be stretched out to the extent that includes the whole production process. Noah, who cares about the negative environmental impact caused by food consumption and production, said:

In Europe, if everyone wants to eat avocados for their breakfast, which they don't grow in Europe. This creates a big problem shipping all these avocados and planting them on a large scale, killing all other kinds of forests and ecosystems to create a space to grow them.

Noah expressed his preference to eat less meat and consume more eco-friendly food products that require less energy, waste, and pollution for the environment. He also manifested an environmental motive associated with one of the products (Avocados) provided by the market. Noah has kept himself informed about the product itself and its production and supply chains. The thing that according to Perera & Hewege (2021) refers to a sustainability-conscious prosumer identity.

Moral motive

A moral judgment guided the tendency to form a sustainable prosumer identity. It is an inclination to choose the right and moral choices, a judgment affiliated with self-transcendent, i.e., altruistic and biospheric values (de Groot & Steg, 2009). A staff member from Bay Area Green Tours, a sustainable nonprofit organization, stressed the idea of leaving the earth for future generations better than we found it:

What motivates our team to encourage others to incorporate sustainability in their personal lives comes from the wisdom of the Indigenous elders, we don't own the earth. We are here only briefly and must leave the earth better than we found it for future generations.

As reported by a BAGT staff member, activities offered by BAGT are not merely designed to benefit the collective but also the environment and future generations. An idea that comes in line with those who express their moral identities by engaging in sustainable activities that benefit the collective, the environment, and the future generations (Gatsleben et al., 2019). Observably, "future generations" is one of the most frequent codes throughout the coding process.

The moral motive can also play a significant role in guiding individuals to participate effectively in a self-help group. Sven, a Syrian master's student, demonstrated this idea by sharing his experience:

I was a volunteer for more than a year in Jordan, where I participated in a psychosocial team that used to help people (Syrian) who have experienced the war and suffered from social and psychological traumas. So, by giving them the help they need, I can say that socially I was contributing to a better social well-being of that society and making it more sustainable. [...] When I can see that my help to you may benefit

you in a way that I can feel comfortable, that actually motivates me. So, the fact that you will be better motivates me and also the fact that If I don't help you, scares me, [...]. So, the frustration and the hopefulness, those kinds of things on a social level again. [...].

Asking Sven about his reason to participate in the psychosocial team, his answer was limited to a few words:

It's complicated. An ethical motive.

Sven's participation in a sustainable social organization for a year to provide help for people with psychological traumas was guided by, according to Sven, moral concerns and a willingness to contribute to socially sustainable development.

Long-term economic motive

The long-term economic motive was also one of the most frequent motives we could observe across the interviews. Where participants were motivated by long-term economic motives to construct a sustainable identity, it is worth noting that economic motives might demonstrate the market's offerings' impact on the sustainable prosumer identity formation process. Eva explained how sustainable materials are not merely good for the environment but also have long-term economic benefits, with cost differences in mind:

As an architect, I sometimes prefer to use sustainable materials instead of using materials that may harm the environment, considering the cost calculations of the buildings I design. No matter how costly these may seem in the short run, they will certainly bring you and our world a profit in the long run.

Eva's long-term economic motive had no direct impact merely on her personal life but also her professional career. She expressed her desired identity, i.e., sustainable prosumer identity, in different contexts. Eva's decision to use sustainable materials or even recommend those materials has exceeded the current economic benefits; to exclude any future externalities and generate long-term profits.

Nils shared with Eva the same long-term economic motive. As Nils's decision to opt for a sustainable identity might come at a cost, his long-term economic motive has assisted him in choosing this identity. For Nils, the equation was not based on low short-term costs but rather the long-term high benefits:

We are using sustainable electricity from (a sustainable provider) for our house, it's wind power. [...] It is a bit expensive. But I think that would be beneficial maybe in the future when it comes to energy usage and the cost of energy.

Constructing a sustainable identity has served Nils's long-term economic motives. Although sustainable generated electricity costs more, Nils has chosen, among other electricity providers, a company that generates electricity sustainably. Like those who attempt to gain economic benefit by saving costs on energy by engaging in energy prosumption such as installing solar panels (Hansen et al., 2022), Nils has

recognized the long-run benefit of using electricity that is sustainably generated. According to Leo, accessing a reliable energy source might be challenging in Syria. Choices are limited considering their prices and eco-friendliness:

Because you are producing your energy which, after a particular point in time, would be free. If you subtract the cost of the solar panels and other expenses like after a point it would be beneficial for you.

Throughout the war years in Syria, several families have found themselves with limited choices concerning the energy supply. Prices and the carbon footprint have varied from one solution to another, and the economic benefits. Some solutions were deemed cheaper in the short term and less sustainable (electric generator), while others, relatively speaking, were more expensive in the short run and more sustainable (solar panels).

Efficacy motive

The efficacy motive has appeared frequently in participants' discourses. Noticeably, the market's role has been voiced increasingly in connection with the efficacy motive. Self-efficacious participants, considering their skills, had declared great interest in influencing the market. Noah mentioned that people are dependent on the market, and sometimes they do not have freedom of choice:

We have to try to influence the market to change and the market has to try to offer sustainable alternatives.

Noah clarified that people's choices are based on the limited sustainable alternatives offered by the market. Sustainable prosumers tend to alter the market to satisfy their future sustainable needs, and they seek to acquire a sense of competence and control to influence and change their environment (Vignoles, 2011; Bresó et al., 2011).

Given that choices have, to a great extent, limited by the market mechanisms, many participants, armed with their ability to influence the market, weigh their purchasing decision using the environmental scale instead of the market one. For example, Alfred said:

[...]. I really think just falling into the system would be thinking that you have no choice but to buy the lowest price. [...] the law of the markets but I want to change that because I think there should be laws for all [...].

Alfred purchased a phone produced using materials obtained under the fair-trade arrangement. He described the phone as more expensive and not good compared to other phones produced under unsustainable conditions but sold at a lower price. However, he maintained his stance on purchasing the phone made under the Fair-trade arrangement.

Self-efficacy motive is not limited to people's ability to influence a given situation or ability to perform, and it can also be attained by encouraging others to perform a specific performance (Redmond, 2010). Leo is not only encouraged to participate

in sustainable actions, but he also wants to share his experience, so he gets others on board:

Surely, because these sustainable actions encourage people to do more. For me, it is favorable to get rid of the unsustainable actions that we have in our society. [...] If I do undertake a sustainable act and I speak about it, more people might be encouraged to do the same.

Encouragement and discouragement significantly impact people's ability to perform (Redmond, 2010). Leo believed in his capability to influence others and make them more engaged in sustainable activities. Leo described his motivation to convince more people of the feasibility of living and consuming sustainably.

However, influencing other people might be more visible in sustainable events and initiatives. Sustainable event organizers might be among those who are highly motivated with a self-efficacy motive. A BAGT staff member talked about how the team's role in BAGT is to encourage others:

This has a huge impact on social justice because we show them how they can find better-paying jobs that also help the planet. [...] Anyone can lead a typical sightseeing tour, but our initiative is to share, to educate, and involve our guests on a level that we hope that they will never forget.

A staff member from BAGT mentioned that they could contribute to promoting sustainability by reaching out to more people and educating them to act sustainably. She added that the organization has the perceived competency to impact social justice and environmental protection by educating people with shared sustainable information and knowledge.

Belonging motive

Asking about the superiority of collective sustainable actions has led us to uncover another motive that guides the sustainable prosumer identity formation, that is, the belonging motive. According to Olof:

If people stand together. And the psychological pressure of everybody doing it. That you're not doing it, you're not being part of the group. I think it will definitely influence or impact highly if you purchase those (eco -friendly products) or not.

Olof articulated the relationship between the belonging need and achieving sustainability. While people avoid exclusion, opting for a sustainable identity is extensively guided by the belonging motive, given that the belonging motive refers to the social acceptance and maintaining feelings of closeness to others (Vignoles, 2011).

Belonging motive can play a significant role in steering individuals towards a sustainable prosumer identity. For instance, collective sports can increase the feelings of closeness to others and make a sustainable identity more desirable to serve the belonging motive. Heba (Tabdeel's founder) has emphasized the importance of belonging motives in association with forming a sustainable prosumer identity:

Because I think a lot of people were motivated to support cycling [...] or sometimes a lot of people participate in cycling groups. Because it's a group activity and they want to be part of a community, for example. It's not related to cycling itself, but it's more related to a sports activity that they can do in a group.

Heba ascribed participation in collective sports (cycling) to people's inclination to be part of the community. In other words, it is associated with the belonging motive. Whereas people need to enhance feelings of social inclusion and closeness to others (Vignoles, 2011), they might form sustainable prosumer identities to satisfy such motives.

4.1.3 Identity evaluation process

In conformity with Luyckx et al.'s (2006) process-oriented model, the fact that participants have made certain choices does not mean that the sustainable prosumer identity process is finished. Participants might collect more information and steer their attention inward to evaluate the options being taken. They might also attempt to determine what other people think about their chosen identity (Luyckx et al., 2006). In other words, participants, who opt for sustainable prosumer identity, will initiate a further exploration, however, this time in-depth. Alfred raveled out the impact of other people's opinions on his choice:

[...]. (People) would think that I have been hurt by the capitalist system by buying very expensive things (phones). And I think it's the opposite. [...] They are the only ones to use Fairtrade gold, and in the end, the product is more expensive. [...]. But it's enough for me and I wanted to do this effort. And so sometimes it's possible but people laugh at me because they say I bought a stupid phone that doesn't work and that is three times as expensive.

Herein it is worth noting that receiving negative feedback or criticism on the sustainable prosumer identity does not necessarily mean that this identity will be less desirable or less satisfactory for one's motives. Back to Alfred, people's feedback on his choice did not alter his willingness to form a sustainable prosumer identity.

The market impact on the participants might be significant on the question of proceeding with sustainable prosumer identity work. While the market impact on the sustainable prosumer identity evaluation process might be salient, disengagement from the market might be a challenge. Ella explained how she could overcome some of these challenges:

Let's say, for example, the thing with vegetables and fruits, I can plant my own thing to an extent, not everything. I can go and buy them from a specific place that produces them directly from the farm, not like the greenhouse. Yeah, locally produced. As I said, I am a vegetarian. I don't eat any meat or industrialized meat. I'm using glass instead of plastic. And sometimes when I go to the restaurant, I take my own knife and fork. I don't take the plastic ones. Yeah, I like these small things that make a big difference. Because in total they are big things.

Ella's attempts to construct a sustainable prosumer identity did not stop after the formation process, rather it progressed to the next process. While this process is characterized by gathering information on the chosen identity (Luyckx et al., 2006), the market impacts sustainable identity projects. The provided choices might, to different extents, affect people's attempt to explore in-depth her desirable identity.

Accordingly, by providing the needed information and the choices for the participants, the market might push the idea of forming a sustainable prosumer identity to the next level. However, this was not the case according to Nils:

I have a car. I have to use the car, but the car is not electric. But the car is benzene. because [...] of the price and the infrastructure that I don't have, charging spots. And the differentiation between the ability for you to do the sustainable act and then what's provided to you by the market.

Although Nils showed a great interest in projecting a sustainable identity by purchasing sustainability-generated electricity, the road to owning an electric car was not paved. For Nils, it was challenging to work with the market-provided offerings to identify himself as a sustainable driver.

4.1.4 Identity evaluation motives

Conspicuously, certain motives have continued to guide participants' sustainable identity work. However, interestingly, we could observe some alteration, where some motives have become less significant, and new motives came on the scene. In other words, some motives that previously guided the formation process have become inconspicuous in the evaluation process, whereas other motives have become more salient. Clarified further, while environmental, efficacy, and moral motives have continued to guide sustainable prosumer identity work, self-esteem and continuity motives have become more salient in the evaluation process. We highlight the salient motives that steer the evaluation process, i.e., self-esteem and continuity motives.

Self-esteem

People are continuously trying to see themselves in a positive light. Wherein competence, worthiness, and good feelings about themselves can be seen as momentum pushing identity work forward. Throughout the evaluation process, Leo was motivated by self-esteem, where he expressed good feelings about himself:

Ultimately, the outcome of the action that you have undertaken is what determines if you should continue or not. When you realize that what you are doing is really work and beneficial, you wish this project to be bigger (An App to help people who are in need anonymously). I would say that the messages that I have received from those people who are in need are what motivated me to proceed with this project or wish this project to continue.

Leo has worked on a mobile application dedicated to helping people anonymously. After launching the App, Leo has read many messages that led him to recognize

this project's significance. Feelings of accomplishments, worthiness, and competence (Heppner & Kernis, 2011), which are associated with self-esteem, motivated Leo to carry on with this project and his sustainable prosumer identity projects.

Organizers of sustainable initiatives have also shown the same motivation for self-esteem. As reported by BAGT's staff member, feeling of pleasure and satisfaction was what motivated the BAGT's team to continue:

Every time that we take on a new project, such as Solutinaries Speak, or Virtual Team Building, we pour all of our energy into assuring that the quality of the programming will be top notch. We pride ourselves on producing memorable experiences. We would rather say no to something if we cannot ensure that it will be valuable for our participants.

According to a staff member of the BAGT, sustainable prosumer identity satisfied the organizers' self-esteem motives. In other words, The satisfaction of self-esteem motive has been derived from the aspect of sustainable prosumer identity (Vignoles, 2011) that was closely related to their achievements.

Continuity motives

Past incidents have not only had a significant impact on the participants' willingness to form a sustainable prosumer identity but also an impact on the future goals that some participants are looking forward to achieving. Connecting her memories and prior experiences to her current time is what forms Heba's future goals:

I have actually witnessed my city, Alexandria, getting deteriorated because of air pollution and noise pollution, and also the lack of women's participation in cycling and working mobility, or the limited participation. These were personal reasons for me because I have a family history of lung diseases. I also get impacted by every limitation on women's mobility in the city. [...] I have done many small projects here and there in different fields related to the environment. [...] And I participate in it because of my background, but also my background covers other things. When I see that I have the knowledge and I can contribute enough to a certain project I do it.

Heba's continuity motives were clearly illustrated by connecting incidents in the past to her current work and her future goals. Heba's unchanged essential and core values that she has maintained throughout her lifetime (Vignoles, 2011) are what fed her continuity motives and, consequently, her choice of sustainable prosumer identity.

4.2 Partially developed a sustainable prosumer identity

4.2.1 Identity formation process

Participants in this cluster have expressed a great desire to construct a prosumer sustainable identity. However, they did not achieve the degree of security and cer-

tainty that their commitment fits with their standards. Carl, a Croatian computer engineer, said:

Of course, I like to make my life greener. But I am not seeing 2022 as the right year for all of this because the market is not ready for this. There are not too many good products of good quality [...] I didn't even see any marketing for the future.

Carl highlighted the shortcomings that the market might have regarding sustainability. Keeping in mind that the evaluation process is heavily dependent on information gathering (Luyckx et al., 2006), the information provided by the market alongside the market offerings might play a significant role in pushing this process further or not. At this stage, prosumers seek to answer questions like whether sustainable choices, including the information offered by the marketplace, come in line with the direction that they have chosen, i.e., sustainable prosumer identity.

4.2.2 Identity formation motives

The motives that participants expressed in this cluster to form a sustainable prosumer identity are, to a certain extent, similar to motives that participants have in the first cluster considering the formation process. Whereas both clusters (1,2) share the environmental, moral, and belonging motives, self-esteem and short-term economic motives were what characterized this cluster.

Short-term economic motive

Whereas the long-term economic motive is the guiding motive for participants in the first cluster to form a sustainable prosumer identity, participants in this cluster were motivated by short-term economic motives. Åke, who tried to perform some sustainable presumption activities, said:

[...] I have some skills in repairing things, repairing some small issues in my car for example. So, I don't need to go to a shop that costs me and the environment a lot of resources and I can fix my problem with myself but for example, for a bigger issue, I have to work to go to the shop.

Engaging in presumption does not only help prosumers to gain emotional benefits but also economic (Ritzer et al., 2012). By consuming recycled products, and providing services by himself, such as fixing his car, Åke has sought to form a sustainable prosumer identity where the short-term economic motive was his guidance to form this identity.

Indicators such as saving money or time and creating benefits were what characterized most of the participants' answers in this cluster. For instance, Astrid shared her experience on the question of purchasing second-hand items:

[...] also, it's still a matter of money. I think I spend less money on second-hand items such as kitchenware, my speakers, and so on. They're cheap and I can easily replace them without feeling like I've wasted money. [...]. I think I made choices based on how much money I could save. Then I will check if these choices make my life easier. Maybe, at last, I will consider if the choices are good enough for the environment.

Astrid prioritized the short-term economic benefits over the environmental concerns and the environmental benefits. Whereas individuals are not motivated to form a sustainable prosumer identity if the pay-back time is long (Hansen et al., 2022).

Linking quality to the paid price and the outcome performance of some products are among the reasons that might encourage the participants to purchase or repurchase eco-friendly products. Participants' experiences with such choices significantly impact opting for the sustainable prosumer identity as an identity that serves their short-term economic motives. In this context, Carl expressed his experiences when it comes to recycled products:

Regarding the recycled products I already tried one, the toilet papers, the recycled ones actually are really bad products, I dislike them. And after that, I started to not think about buying another recycled product. But regarding rechargeable batteries or even reusable water bottles, so to be honest, it's not about an eco-friendly mindset. It's more about saving money.

Carl shared his experience with using eco-friendly products. The low quality of the product made him skeptical about his sustainable choices in the market. Besides, he clarified that their short-term economic benefit mainly drives his option to purchase some recycled products.

Environmental motive

Like cluster one, participants in cluster two articulated clearly their environmental motive as they deemed that forming a sustainable prosumer identity serves their environmental motive. Erik showed a great interest in the environment and its related issues:

Well, I mainly participate in order to serve the environment since I am very interested in environmental issues. And I believe that there is no way we can survive without acting immediately and helping the environment. So, for example, I use sustainable products in order to reduce my overall consumption of products.

Observably, Erik lined up his environmental motive with other human basic needs motives, mainly speaking, human survival. At this juncture, basic needs and identity motives have to be distinguished. According to Vignoles (2011), "Whereas basic needs push for certain ways of acting, which may have some consequent impact on identity and well-being, identity motives push for certain ways of seeing oneself, which may thus necessitate engaging in certain actions" (p. 406). Even if it has been argued that identity processes developed to succor basic human needs, and identity might be affected by basic needs, identity motives should not be equated with basic human needs (Vignoles, 2011).

Belonging motive

In this cluster, the belonging motive has continued to show itself as an indispensable and essential motive to form the sustainable prosumer identity. For example, collective actions have a significant an impact on Erik to engage in sustainable activities:

Yes, absolutely. If I see other people collectively performing actions that would motivate me to follow in line and that would make my conscience tell me that other people are participating it will put more pressure on me actually. [...]. So, I would be highly motivated if other people collectively performed sustainable actions. [...] You know, these activities bring happiness to people, bring them together. And you meet new people, and we help each other [...].

For Erik, forming a sustainable identity helped him avoid any frustration caused by not satisfying his belonging motive. As previously mentioned, the belonging motive refers to the social acceptance and maintaining feelings of closeness to others (Vignoles, 2011).

Moral motive

A moral motive is a sharable motive between the first and the second clusters. On the question of masks availability during the pandemic, Astrid showed great care about others and future generations:

[...] I'm not sure. But I'm concerned about these issues sometimes. During this pandemic, I noticed that some people don't have masks to wear. [...]. I want to leave the new masks for someone who needs them more, [...]. I just believe that as long as I don't consume extra masks, then I don't feel guilty about it. [...], we also want our children to live also on this planet, and we don't want to destroy it.

Astrid's moral motive is more associated with altruistic values. Wherein altruistic and biospheric values (self-transcendent) are common values among those who have sustainable-friendly behavior (de Groot & Steg, 2009; Krajhanzl, 2010). Moreover, concerns about future generations are again a common indication of the moral motive.

Self-esteem

Similarly, we use the same indications, namely, accomplishments, worthiness, competence, confidence, efficacy, and feeling good about oneself (Heppner & Kernis, 2011), to trace self-esteem motives in our collected data. For instance, Erik said:

First of all, these initiatives mainly focus on the fact that we are helping the environment, so this is a very noble reason for us to participate. [...], as you're meeting people who have good morals for the environment. Now, so you know, it's all beautiful in every way you look at it.

For Erik, self-esteem motive was the lighthouse towards which indications like feeling good about himself, noble reason, and good morals were sailing.

4.2.3 Unsatisfied motives

While sustainable prosumer identity had satisfied certain motives during the formation process, participants deviated away from sustainable prosumer identity as it did not further serve their motives under the evaluation process. This might be

ascribed to participants in the evaluation process collecting more information and other people’s feedback about sustainable prosumer identity (Vignoles, 2011). During this process, two motives are not satisfied by developing a sustainable prosumer identity, namely, the efficacy motive and the short-term economic motive.

Efficacy motive

Efficacy motive shows itself again, however, this time as a guiding motive away from sustainable prosumer identity. Åke highlighted the impact of time availability, skills, and knowledge on his decision to participate in collective sustainable initiatives:

[...] I think if I participate, it’s for the common good. And if I didn’t participate, it’s because of my available time availability, skills availability, and knowledge availability. For example, I will not participate in gardening projects with zero knowledge of how to plant a tree.

Åke’s reluctance to participate in collective sustainable initiatives was due to his judgment of his capabilities to perform that action (Bresó et al., 2011). As previously mentioned, the efficacy motive is about one’s ability to influence their surroundings. This implies that one is not merely an “object” but also an “actor” (Vignoles, 2011). However, sustainable prosumer identity is not the chosen identity to satisfy participants’ efficacy motive. Participants have attributed to the lack of required skills, competence, or capabilities to influence their environment. Eventually, this does not mean they do not have an efficacy motive, but the sustainable prosumer identity does not satisfy the efficacy motive.

Short-term economic motive

As discussed earlier, the short-term economic motive is among the motives that stop the sustainable prosumer identity formation process. Herein, the short-term economic motive is the motive that guides the participants away from sustainable prosumer identity. For Erik, sustainable prosumer identity does not meet his economic motive:

[...], that would depend on my economic situation, you know, if I am at that month, having some extra cash and the difference is not really that big, [...]. I would consider buying a sustainable product and spending some extra money to support that company, you know. But if the price is really high, and I use this product a lot. I would probably think twice before buying sustainable products.

Prioritizing short-term economic motives has an impact on Erik’s final choices. When the economic motive is prioritized, he may opt for non-sustainable choices that could help him save more money and consequently make the sustainable prosumer identity less attractive.

4.3 Undeveloped sustainable prosumer identity

Not all the participants in this study have deemed the sustainable prosumer identity a desirable identity, wherein some participants have manifested that a sustainable

prosumer identity does not satisfy their motives. Hereafter, we highlight the motives that sustainable prosumer identity does not meet. Those motives are short-term economic motives and efficiency motives.

4.3.1 Unsatisfied short-term economic motive

Lack of time and money were among the indicators that have led us to choose short-term economic motive to be one of the motives that steer the participants in this cluster away from sustainable prosumer identity. From the interviews with these participants without sustainable identities, these participants' sustainable behaviors were highly dependent on the market offerings. They have explored the sustainable choices in the marketplace, and purchasing second-hand products is one of their common choices. However, environmental concerns were not the determining factor influencing their sustainable alternatives. Although they engage in sustainable prosumption, such as mending clothes, recycling the products, and fixing their bikes, their prioritized motive is still short-term economic motive. Ingrid, a Chinese master's student explains the reason why she chose used products and mended clothes by herself:

[...], all the time, effort, and money I spent are not worthy enough to buy new clothes. [...]. When I am shopping, I don't focus on the environmentally friendly issues. [...]. There is a second-hand shop near my house so I often go around there to see if I can buy something useful. [...]. And if they are something I like, I will feel very happy. [...]. And I can save a lot of money by buying those second-hand products.

By contrasting mending clothes with purchasing new ones, Ingrid expressed that she believed self-service could be more economically beneficial to her instead of typical consumption. She admitted to a lack of environmental awareness when she entered the market. Economic benefits and her preferred experiences with secondhand consumption were the primary starting points for her sustainable choices. Prosumers who reject the mainstream market may also choose used alternatives for personal reasons, such as to become frugal (Perera et al., 2020).

However, Ingrid was skeptical about opting for a sustainable prosumer identity. She ascribed that to time and money shortages:

[...]. If I have enough time and money, I will consider trying something more sustainable. Like you said, collecting some information about sustainability. But I'm not sure if I could make sustainable choices or not. [...]. I want to make full use of my money to make my life keep going.

She is highly likely to gather more information if her economic motive is fulfilled, but she cannot commit to the sustainable domain. In this case, sustainable prosumer identity cannot be chosen by her after she was exploring in breadth (Luyckx et al., 2011). As for Ingrid, she would make sustainable choices only if they could satisfy her short-term economic motive.

Conversely, the high cost of sustainable products or services, and the previous unsatisfied experience with sustainable offerings from the market, might steer prosumers

away from a sustainable identity. Anders deemed sustainable choices more expensive, and for one to try any sustainable alternatives, it has to be affordable:

[...] I know the market can offer some products that are environmentally friendly or promote things for environmental protection. But both products and services are too expensive for me. [...] I think I will focus more on the expense and the time cost of my choices. As I said before, about my rechargeable batteries. I tried them because I thought it would save my time and money, but it didn't. I'm not happy with those rechargeable batteries, which made me buy the normal one again. I'm not sure if I want to try new sustainable choices or not, if it's cheap, then maybe I will try.

The finding shows that sustainable offerings with lower economic costs will attract more prosumers with an undeveloped sustainable identity. They tend to choose more sustainable alternatives when their economic motive has been fulfilled. Although some sustainable prosumption actions they took may benefit the environment, the motive to fulfill their self-interests and basic needs as a priority could prevent these participants from committing to a sustainable identity in the identity formation process.

Moreover, according to the responses from the participants from the third cluster, sustainable prosumer identity can be chosen as their desired identity to satisfy their belonging motive in the future. For instance, Anders explained how people collectively perform sustainable actions that will impact his personal choices:

Well, I think I will do it when everyone around me does it, not because I'm so green, but because I need to be part of the group. I know I need to be involved in the collectives, so I need to do the same thing as them [...].

He showed his basic needs to maintain a feeling of inclusion within his social context (Vignoles, 2011). Both Anders and Ingrid demonstrated that avoiding being isolated from the social group is a significant factor in engaging in collective sustainable prosumption actions.

Participants mentioned that collective sustainable prosumption not only could meet their needs to have a sense of belonging within the community or social group, but it will also benefit them eventually. Ingrid extended her answers about why she tends to explore some collective sustainable prosumptions:

[...], I want to do the same thing as everyone else in the collective and feel myself as one part of them, not be left out. [...], sustainable action is something that is positive for me and good for future generations. Take generating my own electricity as an example, it saves money on electricity, so why not? [...].

Here we can notice that Ingrid's intention to choose collective sustainable prosumption activities is motivated by her economic motives, which means she anticipated sustainable prosumption could satisfy her self-interests. Saving cost is one of the most common factors that encourage people to generate their electricity (Hansen

et al., 2022; Palm, 2017). However, they could easily abandon sustainable choices when sustainable choices cannot satisfy their short-term economic motive. For instance, sustainable options are always time-consuming for the participants. Anders explained why he has no willingness to opt for sustainable events and actions:

[...]. I won't join sustainable events by myself. I have more important things to do, I don't want to spend my time on these sustainable events or anything like this.

His answer implied that the limited sustainable choices in the market could not serve their economic motive, so they deviate from forming their sustainable prosumer identity. The market has always played an indispensable role in constructing people's identity narratives (Gabriel, 2015). Participants' needs to save costs, time, and efforts or gain benefits from the market offerings cannot be satisfied with these limited sustainable choices in the marketplace. Generally speaking, these participants with undeveloped sustainable identities have prioritized their economic motives over others.

4.3.2 Unsatisfied efficacy motive

As for these prosumers whose sustainable prosumer performances were motivated by their short-term economic motive, sustainable prosumer identity is not the desired personal identity to serve their efficacy motive. Unlike former presented participants with sustainable identification, prosumers from this cluster had a lower perception of their capability to change the environment or the market.

Unsatisfied efficacy motive makes it harder for these participants to commit to sustainable prosumer identity in the long run. There is an example from Anders's responses:

[...] when I came to Sweden, you know the service for repairing was so expensive [...] I started to learn how to fix them. But if I have enough money, I will still give preference to a new one [...]. If the cost of repairing the bike is not comparable to a new one, then I would just go and buy a new one. We don't even know if we will have problems again in the future after the repair this time.

Anders had to fix his bike to save money since he moved to Sweden. While he has learned some relevant skills to self-repair his bicycle, his perception of his ability to work on it is still weak. Relevant services the market offers are so costly that he needs to save money to enhance his skills and provide self-help. Prosumers tend to solve their problems by creating solutions on their own, and their competence needs would be satisfied by solving their problem successfully (Chandler & Chen2015). However, Anders has expressed his concerns with the outcome of his self-help due to his limited skills and knowledge in fixing bicycles. Compared with fixing by himself, his preference is choosing a new one to avoid uncertain maintenance problems in the future. When people's needs for self-efficacy are not met, it is difficult for them to actively develop and improve their skills and engage in new endeavors (Bussey, 2011). From here, we can realize that participants without sustainable prosumer identification will eventually return to the market mechanism, which indicates they

are highly dependent on the market offerings, whether they are sustainable or not.

Furthermore, sustainable prosumer identity cannot serve their efficacy motive in this context was shown by Ingrid's answers to the question of why she has not chosen to prosumer her food and energy:

[...]. I don't grow my food or generate my electricity because I don't know how to do it. And I'm not sure how much it will cost me if I generate electricity and plant food on my own. [...]. I think I can make some of these attempts, but I don't want to make my life become more complicated. I mean take much time and effort on it, [...], I might choose to grow something that's easy [...].

Anders has shared the same idea about this:

[...]. For generating electricity, this is something I had never considered. It's too difficult for me to install solar panels, it's very technical and I don't have any experience with this. [...].

Both responses revealed that participants mainly consider whether they can match their capabilities with some creative prosumption performance or not. Ingrid was also aware of whether the money, time, and efforts invested in these sustainable performances were valuable enough. Even though she has shown her tendency to attempt to choose such creative, sustainable actions in the future, she still has a feeling of insufficient capabilities that the sustainable prosumer identity cannot serve, which stops her from forming her identity in the sustainable domain. Fulfilling the efficacy motive is essential for these participants to form a sustainable prosumer identity through creative prosumption.

The importance of fulfilling the efficacy motive in sustainable prosumer identity development could be indicated by the apparent difference between participants' cognition of their efficacy, especially between prosumers with strong, sustainable identification and prosumers without sustainable identity. In this cluster, participants have expressed they feel useless in influencing the environmental changes. Anders responded by sharing some of his insights on sustainability issues:

[...]. But for me, sustainable consumption is a very small part of sustainable development. [...]. I'm not sure if sustainable consumption has a particularly huge impact on the environment. [...] for me the biggest problem with them (eco-products) is that they are expensive and if I buy them my cost of living will increase directly. [...]. I think we cannot stop climate change, [...] the world will come to an end anyway, probably because of nuclear war, instead of climate change.

He stated that he lacked knowledge about the environmental impact of sustainable consumption. Besides, from his perspective, even though the market could provide people with sustainable solutions, these options are still not sufficient to meet all aspects of people's demands, for instance, economic needs. Additionally, the impact of war and industrial emissions on humans and the environment is much more severe and visible to him. Being a sustainable person cannot give him the sense of self-efficacy that refers to being competent and in control of the given environment

(Vignoles, 2011). He demonstrated his inability to do anything about changing and protecting the environment, and thus sustainable identity is not the identity he currently aspires to construct.

In sum, participants in the third cluster cannot finish the formation process of sustainable identity development since they are keen on other identities to prioritize their short-term economic and efficacy motives. After exploring different identity alternatives, these participants cannot make the initial commitment to sustainable prosumer identity. They have not chosen the sustainable prosumer identity domain as this identity cannot satisfy their short-term economic and efficacy motives well.

4.4 Changing context impact

When considering different unprecedented challenges such as climate change and its dire consequences and the outbreak of COVID-19, we could realize significant changes regarding the sustainable prosumer identity's guiding motives. In most cases of this study, basic human needs are the dominant motives that guide the participants to construct their identities during different unprecedented occurrences. Although Emma was one of those participants who could develop a sustainable prosumer identity fully, she has shown less interest in any sustainable identity during the COVID-19 outbreak:

I think, if you talk about the COVID-19 pandemic, then the hazard in your own health makes you care less about the environment [...] Yeah, it would make me less focused on my ability to be more sustainable. For instance, [...] I spent too much water to feel like I don't carry the virus in my hand and to my people, the people because then I will work them so much, think less about the environment.

Emma has prioritized her basic needs associated with human survival over any other motives and deviated away from a sustainable prosumer identity. This result approved the views of Maslow (1943), the needs which are more crucial to human survival have to be met before the other motives can be addressed. Besides, identity projects are subject to the direct impact of a consumer's surrounding environment (Giddens, 1991). This changing environment has impacted participants' dominant motives for their identity development.

Here we can find that when unexpected changes threaten people's survival and health, their basic needs become more prominent than other identity motives. For some participants, environmental motives remain one of the primary motives guiding the choice of their desired identity, while basic needs at the physical level become the ones they wish to satisfy in priority. This point also has been shared by Ella:

They were fearful and including me it was like a hectic period of time. We were all trying our best to survive, and honestly saying I was not considering my choices as I was before [...]. [...] Other things like sustainable choices, clothes, and these things were pushed aside because there was something that was more important.

From her answer, we realized that keeping survival became more important for her during this particular period. Even for these participants with complete identification with a commitment to sustainable prosumer identity, they paid less attention to environmental impact during the special events. Instead, they even make unsustainable choices to satisfy their basic needs. Åke expressed his changes during the pandemic:

So, I am using some public transportation, yes, but in the face of that there is a pandemic outbreak, and I have to limit my social contact with others so I will prefer to use my own private car. So, this is the new priority. It has affected my sustainable choices. So, it depends on the priorities.

As Åke shared, reducing social contact with others to keep healthy is a priority for him. Therefore his previous sustainable choice was replaced by an unsustainable one. People will prioritize their basic needs to defend themselves when they confront a survival crisis (Maslows, 1943; Pyszczynski et al., 1997).

As a new prioritized motive, basic human needs deviate participants from identifying with sustainable identity, especially for these prosumers who only make initial identity choices with sustainable identity in the formation process. Carl used “surviving mode” to describe the status of people when a pandemic occurs:

[...]. I don't feel like the people will think or care about green or which kind of products are eco-friendly, or carbon dioxide. [...] And whenever people are scared, they start to go into survival mode. So, they don't really care about what they want. [...]

He proposed that people be more worried about their health problems than environmental concerns. Although changing context causes the changes in prosumers' motives, the interview data also shows that motives change might vary from one context to another. Compared with COVID-19, the dire consequences of climate change do not inspire more people to engage in sustainable prosumption behaviors. Åke confirmed that when unexpected events threaten people's health and even survival, people are more likely to take action to reduce uncertainty and avoid risk:

But unfortunately, the people, with climate change, do not see how this rapid and quick changes [...] because they don't see the direct outcome of the economic changes.

From Åke, the unexpected economic outcome might make people more aware of environmental changes. On the other hand, the outbreak of COVID-19 brings economic issues to people, making it even harder to choose sustainably. For instance, Helena expressed:

Well, it definitely affects, and the biggest effect of COVID-19 was the economic issue which reduced a lot of sustainable choices or on the contrary, it led people to use eco-unfriendly ways to generate electricity and to heating.

She demonstrated that the economic issues brought by COVID-19 had diminished the possibility for individuals to make more sustainable choices. Notably, people might keep their prosumer identity during the pandemic whether they are prosuming sustainably or unsustainably. Previous literature has proved that many sustainable prosumer activities have been more visible after crisis times (COVID-19 outbreak) (Perera & Hewege, 2021; Lang et al., 2020) or notable incidents (9/11 and the Great Recession in 2008) (Martindale & McKinney, 2020). However, from the respondents, we could notice that prosumers' prioritized motives have changed due to changing context, influencing their commitment to their identities.

Table 1: Sustainable prosumer identity development and motives

Fully developed sustainable prosumer identity		
Process	Guiding Motives	Sources
Sustainable prosumer identity formation	Environmental motive	Hansen et al. , 2022; Palm, 2017
	Moral motive	de Groot & Steg, 2009; Gatersleben et al. , 2019; Hardy & Carlo, 2005; Stern, 2000
	Long-term economic motive	Black & Cherrier, 2010; Hansen et al. , 2022; Palm, 2017
	Efficacy motive	Bandura, 1994; Bussey, 2011; Bresó et al. , 2011; Deci & Ryan, 2000; Vignoles, 2011
	Belonging motive	Baumeister & Leary, 1995; Ryan & Deci, 2000; Vignoles, 2011
Sustainable prosumer identity evaluation	Environmental motive	Hansen et al. , 2022; Palm, 2017
	Moral motive	de Groot & Steg, 2009; Gatersleben et al. , 2019; Hardy & Carlo, 2005; Stern, 2000
	Efficacy motive	Bandura, 1994; Bussey, 2011; Bresó et al. , 2011; Deci & Ryan, 2000; Vignoles, 2011
	Self-esteem motive	Pyszczynski et al. , 1997; Vignoles, 2011
	Continuity motive	Vignoles, 2011
Partially developed sustainable prosumer identity		
Sustainable prosumer identity formation	Short-term economic motive	Black & Cherrier, 2010; Hansen et al. , 2022
	Environmental motive	Hansen et al. , 2022; Palm, 2017

	Belonging motive	Baumeister & Leary, 1995; Ryan & Deci, 2000; Vignoles, 2011
	Moral motive	de Groot & Steg, 2009; Gatersleben et al., 2019; Hardy & Carlo, 2005; Stern, 2000
	Self-esteem	Pyszczynski et al., 1997; Vignoles, 2011
Unsatisfied motives	Short-term economic motive	Black & Cherrier, 2010; Hansen et al., 2022
	Efficacy motive	Bandura, 1994; Bussey, 2011; Bresó et al., 2011; Deci & Ryan, 2000; Vignoles, 2011
Undeveloped sustainable prosumer identity		
Unsatisfied motives	Short-term Economic motive	Black & Cherrier, 2010; Hansen et al., 2022
	Efficacy motive	Bandura, 1994; Bussey, 2011; Bresó et al., 2011; Deci & Ryan, 2000; Vignoles, 2011

5

Discussion and conclusion

This chapter concludes our main findings and interprets our results with existing theories. After that, we highlight this thesis's theoretical contributions and managerial implications. The discussion chapter ends with the limitations and recommendations for future studies.

5.1 Discussion

To investigate the development of sustainable prosumer identities and their guiding motives, 19 semi-structured interviews have been conducted to reveal prosumers' different motives for choosing sustainable prosumer identities, among other alternatives, and the market's impact on this process. This study exposed several different motives by which sustainable prosumer identity development is guided and how the development and the evaluation of a sustainable prosumer identity serve and satisfy these motives. Furthermore, our results underline the market's role in assisting prosumers in choosing and evaluating their sustainable identities. By employing the integrated identity development model, we traced these motives from the formation process to the identity evaluation process. Accordingly, participants are distinguished by three unique personal identity development processes, and a set of motives guides each process. This implies that the participants have been divided into three clusters, wherein each cluster shares, to a certain extent, the same manner of sustainable identity development and its guiding motives.

The first cluster of participants represents the prosumers with fully developed sustainable identities. Environmental, moral, long-term economic, efficacy, and belonging motives are the most common motives that guide prosumers to explore different identity choices in breadth and make the initial commitment to sustainable identity. Apart from several motives for the formation process, prosumers with a solid commitment to sustainable identity have undergone the identity evaluation process guided by their self-esteem and continuity motives, which are more salient than others. Environmental, economic and moral motives are always indispensable for prosumers to engage in sustainable prosumption actions (Hansen et al., 2022; Lehner, 2019; Palm, 2018; Stikvoort et al., 2020).

Our results proved that environmental motive as the most salient and stable motive guides prosumers to undergo sustainable identity formation and evaluation process.

As Perera and Hewege stated (2022), these consumers, who are conscious of the harmful effects of their consumption on the environment, reject their typical consumer identity and embrace the sustainable identity to express themselves. Besides, moral motive stemming from altruistic and biospheric is one of the essential motives leading to pro-environmental behaviors (Gatersleben et al., 2019). Prosumers who believe that a sustainable identity satisfies their moral motivation express their concern and a sense of social responsibility for the community, other people, and future generations. Moreover, these prosumers who fully developed a sustainable prosumer identity perceive sustainable identity can fulfill their long-term economic motive, for instance, to save on future power costs by installing solar panels to generate electricity.

In addition, sustainable identities can satisfy the efficacy motive of these prosumers, for example, those who are aware of the negative impact of mass consumption on the environment and believe in changing the market and the environment by making sustainable prosumption choices. People could feel empowered to control and change their surroundings (Vignoles, 2011). When their efficacy motive has been satisfied, prosumers with strong, sustainable identification tend to explore more sustainable prosumption activities to extend themselves. Influenced by the belonging motive, fully developed sustainable prosumers also prefer to engage in collective sustainable actions. Afterward, these prosumers evaluate and make identification with a commitment to their sustainable identity driven by self-esteem and continuity motives. The positive feedback and the willingness to achieve the consistency of their identity play an essential role in this process.

As for the prosumers from the second cluster, except for some same motives that prosumers have in the first cluster, their extra dominant motive towards sustainable prosumer identity is the short-term economic motive. However, these prosumers cannot make the final commitment to sustainable identity in the evaluation process since their economic motive and efficacy motive cannot be satisfied by sustainable identity. Earlier results show that prosumers with a strong identity commitment to sustainable identification demonstrated the long-term economic benefits of sustainable consumer activities. In contrast, those with a weak commitment to sustainable identity were more concerned with whether it would satisfy their economic needs in the short term. Thus, the sustainable identity of prosumers who prioritize short-term economic motives over long-term economic motives is more uncertain. Additionally, the role of belonging motive in forming sustainable identities is more evident in this group of prosumers. Other than the need to create social relationships with others and to feel a sense of belonging to society, pressure from peers may also motivate prosumers to pursue and develop their sustainable identities. In addition, sustainable prosumer identities can satisfy their need to actualize a positive and noble self. Self-esteem motive guides people to choose and maintain specific identities that can fulfill their personal values (Pyszczynski et al., 1997; Vignoles, 2011). Aside from the short-term economic motive that the sustainable prosumer identity may be unmet, there is also the possibility that the efficacy motive is unsatisfied. Efficacy motive is closely associated with people's perceptions of their capabilities, and they are likely to refuse to explore new activities when they have low perceptions of their capabilities (Bandura, 1994; Bussey, 2011; Vignoles, 2011). When prosumers perceive that

they lack the specific ability and knowledge to undertake sustainable prosumption activities, they may stop their in-depth exploration of sustainable prosumer identity.

Moreover, short-term economic, and efficacy motives are two motives that cannot be met by sustainable prosumer identity, which is why prosumers from the third cluster have not made choices and identified with sustainable identity. Although these prosumers are likely to undertake sustainable prosumption activities without an environmental motive, their options are still dominated by economic motivation. In this case, economically motivated sustainable prosumption choices might be replaced by unsustainable ones over time. For instance, sustainable prosumption might be a time-consuming and less financially rewarding option for prosumers with an undeveloped sustainable identity. In addition, like those who have not completed the sustainable identity evaluation process, and for these prosumers without sustainable identification, their efficacy motive cannot be satisfied by sustainable identity as well. It was evident from this research that those who were unable to forge a confirmed relationship with a sustainable prosumer identity had a lower perception of their efficacy in undertaking sustainable prosumption activities, such as generating electricity or planting self-consumed foods. Some prosumers avoid engaging in sustainable actions as sustainable prosumer identity fails to service their efficacy motive, especially when they are required to be detached from market mechanisms.

Regardless of which stage the development of a sustainable prosumer identity is at, markets and choices will always influence the process and outcome of prosumer identity construction, more or less. Previously, in consumer culture theory, consumers seek and make their own unique identity narratives by utilizing the symbolic meanings of material objects in the market (Arnould & Thompson, 2005; Belk, 1988; Gabriel & Lang, 2006; Larsen & Patterson, 2018). Nonetheless, these sustainable prosumer identity projects indicate that consumers are less influenced by the options offered in the marketplace when choosing to engage in exploration in-breadth and make the initial commitment to the sustainable prosumer identity. This formation process is more driven by the environmental motive to seek and construct sustainable self-expression through sustainable prosumption.

However, the role of the market in influencing the construction of sustainable identities for such prosumers becomes increasingly evident in the identity evaluation process. Put it differently, when participants were after more information to increase their assurance regarding the chosen identity, the market might be among those who have provided the participants with the required information, so this will strengthen their identification with the chosen identity. More specifically, given that both exploration in breadth and in-depth are characterized by the same themes, by being information-oriented (Luyckx et al., 2006), individuals, in the exploration in breadth, internally and externally, gather information about different identity alternatives, whereas, during exploration in-depth, they gather the information that with regard to the choice they have already made. So the market roles might vary with both explorations in breadth and in-depth. While the market might assist individuals in choosing a sustainable prosumer identity, among other alternatives, it might also help them reach the required level of security and certainty when it comes to their current commitment that fits their standards and aspirations. Ultimately, the

market might help the participants choose the sustainable prosumer identity among other alternatives during the formation process and help them keep this identity after the evaluation process.

As discussed earlier, identity work is influenced by the surrounding environment (Giddens, 1991; Perera & Hewege, 2021). The influence of climate change and COVID-19 on the prosumer sustainable identity projects and their associated motives have been highlighted. Moreover, given that individuals, whether they are consumers (Arnould & Thompson 2005; 2018) or prosumers (Perera & Hewege, 2021), are constantly working with market-generated offerings to construct a sense of self-identity (Arnould & Thompson 2005; 2018), different choices' impact on prosumer sustainable identity projects and its motives have also been taken into consideration. When it comes to Covid-19 and its dire consequence on public health is more visible to participants, most of the expressed motives were strongly connected to the basic human needs, whereas, in the case of climate change, which is less visible to people, participants have shown motives that are not, as strongly connected to the basic human needs as COVID-19. Our analysis showed that a sustainable prosumer identity is not a desirable identity to satisfy the participant's basic human needs. Indeed, it might differ depending on the context itself. At the end of the day, whether considering COVID-19, climate change, the Syrian war, or any other unprecedented incidents, sustainable prosumer identity, to a certain extent, is not the desirable identity to satisfy basic human needs. Even if sustainable prosumer identity is not the chosen identity when basic human needs are dominated, achieving sustainability might, at least in our opinion, play a significant role in avoiding such unpleasant challenges. During unprecedented incidents, we could notice that prosumers produce their products and services sustainably to serve their basic needs rather than environmental motives. In this context, sustainable prosumer identity cannot be constructed strongly driven by prosumers' needs to survive.

5.2 Theoretical and practical contributions

While drawing on the identity development process-oriented model, this research expands on the consumer identity projects to explore the sustainable identity development and several guided motives of prosumers who produce their products or services for self-use/self-help. First, this research demonstrates that individuals deconstruct their original consumer identities in changing contexts and turn to new forms of identity to express their values and satisfy their motivations through sustainable prosumptions Luyckx et al., 2006 Perera & Hewege, 2021 Vignoles, 2011. By delving into the different motives and identity construction processes of sustainable prosumers, this project explores how prosumers are guided by multiple motives to construct their sustainable identity and steer away from it actively. We have found that the sustainable prosumers' identity motives might change across the different stages of the identity development process, and market offerings and changing surroundings could influence the changes in motives. In short, this study borrows from a psychological identity development model to trace the role of personal motives in guiding the construction of sustainable prosumer identity, which adds to existing research on prosumer identity and their motives in the context of sustainability to enhance the understanding of sustainable prosumer identity development,

especially in the face of unpredictable environmental change.

Moreover, a practical contribution to managers and providers of sustainable products and services is provided by examining the role of the market in the motives and sustainable prosumer identity development. This thesis helps managers further understand prosumers' different motives to make their sustainable presumption choices, especially when they attempt to steer away from market mechanisms. For instance, environmentally motivated identity seekers might actively explore and construct a solid and continuous sustainable prosumer identity, supported by the sustainable information and choices provided in the market. Conversely, the limited sustainable alternatives in the marketplace may not satisfy prosumers' short-term economic and efficacy motives, thereby preventing them from exploring in-depth and identification with a commitment to this sustainable prosumer identity. Sustainable products and services providers could potentially develop more efficient marketing strategies with the findings of this research. Adequate options and information could be provided to prosumers when they explore and develop their sustainable identities, facilitating a more intrinsic commitment to sustainable identities and increasing engagement in presumption activities.

5.3 Limitations and future research

The thesis has some limitations. First, most of the interviews were conducted online via Zoom for practical reasons during the data collection process. Still, the online meeting may raise some difficulties in conducting long-time interviews. For example, the quality of the responses to interview questions might decline when the interview cannot flow well due to network problems, or respondents might become distracted after a long time. After the interviews, the authors obtained additional responses from the interviewees to address such issues. We also asked interviewees to reconfirm the transcriptions to ensure the reliability of the research. In addition, to ensure the heterogeneity of the sample, we selected respondents from different countries and cultural backgrounds. Different living environments and social backgrounds may have influenced the respondents' answers, but this issue was not the focus of this research. Moreover, due to the limited time, this research could not interview more prosumers from sustainable enterprises, which might make the findings of this study less comprehensive. More prosumers who provide sustainable initiatives could be studied in the future.

Although this study revealed that the motives guiding the development of sustainable prosumer identity might change throughout the process, we cannot determine precisely at which stage the motives change. For instance, our findings did not assist us in identifying clearly whether prosumers with weak sustainable identification have prolonged their exploration in-depth or resumed and started a new exploration in-breadth. Therefore, future research could further focus on how identity motives change and at what stage the market and the changing context influence them. Moreover, the role of the market in the sustainable prosumer identity development process deserves further investigation. It is also relevant to study the relationship among different motives and their influence on identity development so that people can better interpret sustainable prosumer identity development and motivational

changes.

5.4 Conclusion

This research traced the processes through which individuals develop their sustainable prosumer identity while determining the motives that guide them to forge the sustainable prosumer identity and the corresponding motives that hinder individuals from embracing this identity. Moreover, the research also explored how the choices offered by the market and unprecedented incidents (e.g., COVID-19 and climate change) impact the sustainable prosumer identity development processes and their guiding motives. The consumer identity projects of consumer culture theory, the identity development process-oriented model, and identity motives of identity theory formed the theoretical basis of this research. An Abductive approach was employed in this qualitative research, and we conducted 19 semi-structured interviews with sustainable prosumers to gather empirical data, which were then subject to qualitative analysis.

The findings indicate that firstly, for individuals who highly believe that the sustainable prosumer identity is in line with their criteria and values, environmental, moral, long-term economic, efficacy, and belonging motives are the primary motives that steer them to form the sustainable prosumer identity. Aside from that, self-esteem and continuity motives guide these prosumers to evaluate their sustainable identity further. The second cluster of prosumers initially chooses the sustainable prosumer identity, but they lack tentative identification with a commitment to this identity. Short-term economic, environmental, belonging, moral, and self-esteem motives are the dominant motives directing them to choose a sustainable identity. However, sustainable prosumer identity cannot ultimately satisfy short-term economic and efficacy motives, so these individuals deviate from the identity evaluation process. Individuals who cannot choose a sustainable prosumer identity deviate from forming this identity because their short-term economic and efficiency motives cannot be satisfied. Besides, this research shows that the sustainable alternatives offered by the market perform a significant role when individuals choose and evaluate their sustainable prosumer identity, especially in the identity evaluation phase. Finally, guided motivations for sustainable identity development are apparently influenced by environmental changes. When unprecedented events occur, basic needs overtake other motives as the priority needs of prosumers. Yet, sustainable prosumer identity fails to serve as a desired identity that individuals adopt to satisfy their basic needs.

In conclusion, this research extends the previous works on consumer identity projects by investigating the market impact on sustainable prosumer identity development processes and their guiding motives within the sustainability context. Besides, it could also provide insights into how marketers could assist prosumers in identifying with a commitment to sustainable identity, especially after some unprecedented contextual changes (e.g., COVID-19).

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Appendix A

Appendix A Interview theoretical guide

Interview guide (Questions theoretical background)

Q1: Are you a prosumer? Are you a sustainable prosumer?

Prosumer:

- Prosumers are those who produce goods and services on their own (Toffler, 1980).
- DIY prosumers Lang et al. (2020) “Prosumers who perform entire tasks for their own use and consumption” (Toffler, 1980). - Self-service prosumers Lang et al. (2020) “Prosumers who perform partial self-service tasks, often through technology” (Toffler, 1980; Kotler, 1986).
- Customizing prosumers Lang et al. (2020) “Prosumers who personalize and customize their own products and services” (Ritzer, 2014; Fox, 2018). Collaborative prosumers Lang et al. (2020) “providing value for others, particularly through technology (Andrews and Ritzer, 2018; Darmody et al., 2017; Perera et al., 2020). Therefore, we label the fourth prosumer archetype “collaborative prosumers”.
- Monetized prosumers Lang et al. (2020) “Prosumers who create value that is accessible to others through a commercial third party” (Morreale, 2014; Andrews & Ritzer, 2018).
- Economic prosumers Lang et al. (2020) “Prosumers who receive formal incentives from a commercial third party when creating value for others” (Jose Planells, 2017; Eckhardt et al., 2019).

Sustainability Conscious Prosumer (Perera & Hewege, 2021):

- Semi-prosumers: “Semi-prosumer practices are shaped through the prevailing market mechanisms, although these prosumers do not necessarily buy eco-friendly commodities. These consumers appear to connect with the prevailing market mechanism to secure an alternative procurement.” (Perera & Hewege, 2021).

- Collective prosumers: “Act against the existing market mechanisms. Very challenging to win these consumers. If not properly engaged, they could form anti-brand communities.” (Perera & Hewege, 2021).
- Creative prosumers: “Disengaged from the existing market mechanisms. Autonomy and value creation are important. Engage in individual prosumer practices. Tend to oppose mainstream eco-friendly commodity markets by engaging in creating value on their own.” (Perera & Hewege, 2021).
- “Toffler, in *The Third Wave*, mentions the self-help movement as an example of the prosuming which began to occur when people once more performed services for themselves, which they had learned to hire out to others during the industrial period.” (Manos, 1993).

Q2: Apart from the market offerings, what motivates an individual to formulate a Sustainable prosumer identity?

- Drawing on the processes-oriented model, Commitment formation process, (exploration in breadth and commitment making dimensions), the authors seek to reveal the motive/motives behind sustainable prosumer (in-breadth) exploration of different alternatives, as well as the motive/motives behind his/her premier choice. Having in mind, the premier choice does not imply that the identification process is finished (Luyckx, Goossens, & Soenens, et al., 2006, p. 81).
- Motivations for Sustainability Prosumers might vary. It might show itself in social, environmental, economic acts: Motive definition: “Tendencies toward certain identity states and away from others, which guide the processes of identity definition and enactment.” (Vignoles, Regalia, Manzi, Golledge, & Scabini, 2006; Schwartz et al., 2011, p. 405).

Motives examples in the literature:

- “Sustainability conscious prosumer practices can be described as any form of self-production an individual engage in with a view to minimizing the adverse effects of consumption on the environment, for instance, growing vegetables for personal consumption.” (Perera & Hewege, 2021).
- “Sustainability conscious prosumer practices can partly emerge as alternate procurements (e.g., dumpster diving) as opposed to eco-friendly commodity purchases. Although these types of alternate procurement practices are obviously shaped and facilitated by the prevailing market practices, these practices also symbolize counter actions of emerging sustainability conscious prosumers” (Perera & Hewege, 2021).
- “Unlike mainstream consumers, some sustainability conscious prosumers can refrain even from making purchases of eco-friendly commodities because they are mindful about the adverse environmental effects of mass production of eco-friendly commodities, unethical business practices, waste and landfilling.” (Perera & Hewege, 2021).

- “In Britain in 1970, a Manchester housewife named Katherine Fisher, “after suffering for year from a desperate fear of leaving her own home founded an organization for others with similar phobias” (p. 285). The Phobics Society was a self-help group that quickly grew beyond its British roots. No matter what the problem is that draws people together in self-help groups, they usually share the goal of becoming more knowledgeable about all dimensions of their difficulty, invading what formerly was thought of as sacred professional territory. Their acquired skills and talents, and years of experience as patients, are not being fully used to good advantage.” (Manos, 1993).
- “Prosumers in times of crisis paper addresses how prosumers helped overcome challenges caused by COVID-19.” Lang et al. (2020)

Q3: Apart from market offerings, what role does your motive play in evaluating your choices and in which it facilitates embracing a sustainable prosumer identity?

- Drawing on the processes-oriented model, Commitment evaluation process, (exploration in depth and identification with commitment dimensions), the authors seek to understand the motive/motives behind sustainable prosumer’s inward attention to evaluating his/her choice being taken, and how this evaluation grows as a conviction that the chosen identity is the right one and identification with that sustainable production identity will strengthen, and other choices are weakened (Luyckx, Goossens, & Soenens, et al., 2006, p. 81).

Q4 a: What might lead a sustainable prosumer to resume the exploration in breadth?

Q4 b: What motivates a prosumer to step away from, presumably, sustainable identity?

- “If the person decides that this major is not the correct one, then exploration in breadth may resume and a broad-based search for different alternatives might start again.” (Luyckx, Goossens, & Soenens, et al., 2006, p. 81).

Appendix B

Appendix B Interview guide

The targeted groups:

1. Non-profit organizations (where sustainable prosumers are attendees).
2. Non-profit organizations (organizers as prosumers).
3. Individuals with sustainable prosumers identity.

Non-profit organizations (as organizers)

Our interview questions are divided into two interrelated groups. The first group is more oriented towards the initiative itself as well as the founders. Whereas the second part is considering the attendees and their different motives to participate in the initiative at hand.

1. After reading the story behind your initiative idea, we would like to know what encouraged you to start this great idea, personally?
2. What are the rationales to incorporate sustainability in your personal life?
3. What makes you opt for this initiative among other initiatives?
4. Would you consider initiating another initiative in another domain, why?
5. Personally speaking, as a founder, do you think that you might have the same motives if you want to incorporate a new sustainable idea into your initiative, or perhaps inaugurate a new initiative, for instance, a social initiative? In a nutshell, do you think that your motives, on the question of a sustainable initiative, are identical or they might differ? What are they, and why would they differ or not?
6. Unprecedented environmental problems such as climate change and major health crises such as COVID-19 have a great impact on people and societies. What was the impact of COVID-19 on your initiative?
7. Do you think that climate change has the same impact as COVID-19 on your initiative? What are those impacts? and why are they different?

8. Do you think these unprecedented environmental problems have increased or decreased people's participation in your initiative? To what can you ascribe that?

Organizers and founders as prosumers

1. What are the expected contributions of your initiative sustainability (Socially, Environmentally and Economically)?
2. Why do you think people want to participate in a sustainable initiative?
3. What might increase or decrease the participation in a sustainable initiative?
4. Do you think that people have the same motives to participate in different sustainable initiatives, would you please elaborate on your answer?
5. What makes certain activities within one initiative more favorable to people, in your opinion?
6. Do you think that the tendency for people to be interested in sustainable initiative is temporary?
7. How can people be more motivated to participate in a sustainable initiative?
8. What makes an initiative that is performed collectively has a superior impact in comparison to those conducted on the individual level?
9. How do COVID-19 affect people's participation in your sustainable initiative?
10. Do you think that climate change has the same impact as COVID-19 on people's participation?

Individuals with sustainable prosumers identity

1. Are you a prosumer?
Are you a sustainable prosumer?
 - (a) Have you performed any sustainable activities? For instance, sorting your garbage, separating recyclables from food items, planting your own food, mending your clothes, buying SHC (secondhand clothes), and/or generating your own clean electricity.
 - (b) Among other products and services, have you ever bought eco-friendly products or services? Why did you choose these products, or not? For instance, recycled products, recycled fabric clothes, rechargeable batteries, SHC (secondhand clothes), and/or reusable water bottles.
 - (c) How can the market with its different products and services assist you (or not) with your sustainable choices, if any?
 - (d) Do you think that your sustainable choices depend heavily on what the market offers (i.e., eco-friendly products and services)? Or do you think that you can make sustainable choices independently (i.e., apart from markets offering sustainable products and services offered by the market)? Why?

- (e) To what extent are you depending on the market's products and services to make your sustainable choices? Let's say on a scale from one to 10.
 - (f) Are there any difficulties when you produce your own products (e.g., growing your own food), and services? Do you think these difficulties would stop you from producing your own products or services? Why? What do you expect from the market in this regard?
 - (g) Do you think purchasing eco-friendly commodities promotes sustainability? In what way? Have you ever thought about the dire consequences of eco-friendly commodities? In what way?
 - (h) If people collectively perform sustainable actions, for instance, collectively generate energy using solar panels, would that make a superior impact in your opinion? And would this motivate you to participate in such a sustainable action, and why?
 - (i) Have you ever participated in a collective sustainable initiative? For instance, community gardens, mending clothing, and/or similar social and environmental initiatives.
 - (j) Have you produced your own sustainable products and/or services, and why? For instance, planting your own food, generating your own energy, and/or mending your clothes. Apart from the market offerings, what motivates an individual to formulate a sustainable prosumer identity?
2. Apart from the market offerings, what motivates an individual to formulate a sustainable prosumer identity?
 - (a) What motivates you to opt, or not, for similar sustainable initiatives, actions, and/or sustainability-conscious practices? Apart from market offerings, what role does your motive play in evaluating your choices and in which it facilitates embracing a sustainable prosumer identity?
 3. Apart from market offerings, what role does your motive play in evaluating your choices and in which it facilitates embracing a sustainable prosumer identity?
 - (a) If you rethink your different sustainable choices, are you going to invest more effort and collect more information to evaluate/reevaluate the sustainable choices that you have already made, or would you be happy with your initial choices? What makes you evaluate/reevaluate your sustainable choices or not? For instance, you might reconsider some of your sustainable choices (i.e., reevaluate in-depth the different consequences caused by some eco-friendly commodities or some other certain sustainable choices), you might search for even more sustainable products and services, you might start a sustainable initiative, or you might collect more information to improve your sustainable choices.
 4. What might lead a sustainable prosumer to resume the exploration in breadth? What motivates a prosumer to step away from, presumably, sustainable identity?

- (a) Do you think that you have different or similar motives whenever you are faced with new sustainable choices? I.e., Whether you are purchasing sustainable products and services, choosing to participate in a social or environmental initiative or even performing a sustainable practice, would your motives be the same every time you make a sustainable choice, or it might differ? What would they be, if any? For instance, Do the same motives guide your choice to purchase vegan food, plant your own food, or even mend your clothes identical?
 - (b) Let's say, presumably, you are generating your own electricity sustainably, would you consider planting your own food sustainably, and why?
5. Examine the impact of different challenges such as COVID-19, and climate change on identity development and motives.
- (a) How can/could exceptional challenges such as COVID-19 or climate change affect your choices when it comes to different products and services, or even your sustainable practices? How did the COVID-19 outbreak and its consequences (e.g., being locked up in homes) affect people's uncertainty when it comes to, for instance, food, different products, and other services accessibility?
 - (b) Did such challenges have any impact on your sustainable choices? For instance, did climate change affect your purchasing choices or the types of products and services that you are willing to buy, in what way?

Appendix C

Appendix C Participants list

Table 1: List of interviewees from non-profit organisations

No.	Name	Organization	Location	Date of interview	Service Area	Interview format and duration
1	A staff member	Bay Area Green Tours NGO	USA	17/03/22	Provides educational and inspirational green tours, and online events for individuals and groups.	Email
2	Heba Mousa founder	Tabdeel NGO	Egypt	03/04/22	Encouraging young Egyptian women to bike.	Zoom 40 mins

Table 2 List of interviewees

No.	Alias	Age	Gender	Occupation	Nationality	Date of interview	Interview format and duration
1	Erik	24	Male	Mechatronics engineer	Syrian	09/03/22	Zoom 30 mins
2	Anna	25	Female	Food researcher	Chinese	10/03/22	Zoom 30 mins
3	Eva	-	Female	Architect	Turkish	10/03/22	Email
4	Carl	24	Male	Computer engineer	Croatian	09/03/22	Zoom 30 mins
5	Ella	28	Female	Medical advisor	Syrian	11/03/22	Zoom 60 mins
6	Emma	28	Female	NGOs	Spanish	13/03/22	Zoom 45 mins
7	Olof	24	Male	Student	German	13/03/22	Zoom 54 mins
8	Sven	28	Male	Masters' student	Syrian/Swedish	13/03/22	Zoom 60 mins
9	Åke	42	Male	Masters' student	Swedish	14/03/22	Zoom 60 mins

No.	Alias	Age	Gender	Occupation	Nationality	Date of interview	Interview format and duration
10	Helena	24	Female	Mechatronics engineer	Syrian	15/03/22	Email
11	Nils	26	Male	Accounting consultant	Sri Lankan	16/03/22	Zoom 40 mins
12	Anders	30	Male	Post Ph.D.	Chinese	11/03/22	In-person 30 mins
13	Ingrid	26	Female	Masters' student	Chinese	11/03/22	In-person 30 mins
14	Astrid	40	Female	Masters' student	Chinese	11/03/22	In-person 30 mins
15	Alfred	28	Male	Post Ph.D.	French	16/03/22	In-person 45 mins
16	Noah	33	Male	Network engineer	Swedish	25/03/22	Zoom 40 mins
17	Leo	24	Male	Computer engineer	Syrian	17/03/22	Zoom 55 mins