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Theorising the emerging green prosumer culture and profiling green prosumers in the green commodities market

Chamila R. Perera[1] | Chandana R. Hewege[1] | Cai V. C. Mai[2]

[1]Swinburne Business School, Swinburne University of Technology, Hawthorn, Victoria, Australia

[2]Faculty of Business Administration, Hue University—University of Economics, Hue City, Thua Thien Hue Province, Vietnam

Correspondence
Chamila R. Perera, Swinburne Business School, Swinburne University of Technology, Hawthorn, VIC 3122, Australia.
Email: chamilaperera@swin.edu.au

Abstract

This paper explores the phenomenon of green prosumption with a view to theorising the phenomenon and highlighting the challenges and opportunities this particular subculture creates for marketers of green commodities. Narratives of young green prosumers were gathered from 18 phenomenological in-depth interviews. Capturing green prosumer experiences and subjective meanings, three thematic categories of green prosumption practices, (a) contraction, (b) control, and (c) creation, are postulated in the study. It also highlights several unforeseen challenges as well as a vast array of opportunities emerging from the three green prosumer segments identified in the study: semi-green prosumers, empowered green prosumers, and liberated green prosumers. This study provides green commodity marketers with a set of recommendations to exploit opportunities in these largely untapped market segments.

1 | INTRODUCTION

Production for self-use is referred to as prosumption (Toffler, 1980). Toffler's (1980) seminal work is followed by several researchers who explain prosumption as creating use value and exchange value (Humphreys & Grayson, 2008), value cocreation (Prahalad & Ramaswamy, 2004; Vargo & Lusch, 2004), a work of producers (Bruns, 2008), a method of do it yourself (Ahluwalia & Miller, 2014; Watson & Shove, 2008), and an apparent blurring of production and consumption (Beer & Burrows, 2010).

In well-cited work in this area (e.g., Ritzer, 2015a; Ritzer & Jurgenson, 2010), prosumption is explained as a coconstructed phenomenon involving both production and consumption. Ritzer and Jurgenson (2010, p. 31) even argue prosumption as a new form of capitalism, calling it as prosumer capitalism that could lead to developing a new consumer culture, which enjoys *free services, less clear-cut exploitation, offering products at no costs and abundance rather than scarcity*.

Australia now sees a rise of prosumers who make more informed choices using smart technology, especially in the area of energy usage (Mouat, 2016; Strengers, Nicholls, & Maller, 2016). Using the Central Park, Sydney, Australia as a unit of analysis, McLean and Roggema (2019) report several prosumer practices including generating free energy from the sun at home or office and selling the excess, recycle water and waste reaping the financial benefit, avoiding the second-largest household expense of a car by sharing mobility, and accessing shared data networks to plug in and play at little cost. They claim that the practices enhance sustainability, liveability, and resilience for the local and neighbouring communities.

These prosumption practices exemplify consumers' actions that could step into producers' end.

The growing awareness towards environmental issues has been considered the main catalyst for prosumer behaviour (Kotilainen, Mäkinen, & Järventausta, 2016), albeit minimum coverage in consumer studies. According some recent reviews of sustainability research (1975–2014), more investigations into how consumers embed sustainability concerns within consumer behaviour including issues related to sharing or renting of goods as opposed to possessing them are needed (Kumar & Polonsky, 2017). Moreover, it is essential that research focusing on green consumption should be extended beyond green best practices and green packaging (Zhu & Sarkis, 2016).

Informed by an ethnographic inquiry into nature conservation, Büscher and Igoe (2013) argue that in the context of green consumption, prosumption is again an escalation of the earlier form of capitalistic market mechanisms, which generates value-producing labour through consumer identity creation projects. On the other hand, several studies find green consumption as a counter-culture consumer movement clamouring against the mainstream consumer practices that are usually facilitated by the capitalistic market system (e.g., Cherrier, Black, & Lee, 2011;

Kilbourne & Carlson, 2008). In line with this scholarly conversation, we argue that green prosumption behaviours should be investigated treating them as a unique phenomenon within a boarder context of prosumption.

Green consumption is defined as voluntarily engaging in environmentally friendly consumer practices (Connolly & Prothero, 2008) such as recycling, reusing, or buying green commodities. Some green consumers intentionally minimise consumption or completely abstain from purchasing commodities (Cherrier, 2010). To this end, we see a special category of green consumers who tend to self-produce what they need. They tend to seek critical information regarding the environmental credibility of producers before making a purchase, when they have to (Perera, Auger, & Klein, 2016). Thus, we can define green prosumers as consumers transiting into producers, preferring to view themselves as *actors in coconstruction* (e.g., Hansen & Hauge, 2017; Kessous, Boncori, & Paché, 2016), producers for self-use and who are less manipulated by producers with no or low environmental consciousness. For example, green prosumers may have a home-grown, organic hydroponic garden or home-created rainwater recycling system.

Previous literature on green prosumption is mainly concentrated on energy use among general consumers (e.g., Ellsworth-Krebs & Reid, 2016; Strengers et al., 2016). Only a handful of studies focus on young green prosumer behaviour with an emphasis on creativity, freedom, and eagerness of the young prosumers in the context of information and technological advancements (e.g., Lebiejko, 2011; Lucyna & Hanna, 2016). Our research objective is, therefore, to explore a range of green prosumer practices and experiences through narratives of young green prosumers who are largely considered an untapped green consumer market (Unruh & Ettenson, 2010). No consistent age classifications on young individuals are used by the Australian government in reporting youth data. Nevertheless, according to the Australian Institute of Health and Welfare (2007), young individuals are generally referred to as all individuals aged between 12 and 24 years. In consultation with several studies involving youth, individuals aged between 18 and 25 years are defined as young adult consumers in this study.

Green business investments in the market are proliferating. In Australia, it had grown from A$5 billion in 2010 to more than A$150 in 2018 (Gilbert + Tobin, 2019). Wanting to demonstrate the environmental concerns as well as earning higher profits from this growing market drive the investments (Gilbert + Tobin, 2019). Thus, green business investors can face some roadblocks on their way if they do not understand the emerging green prosumer culture. In addition to the theoretical insights on the phenomenon, this study can provide green commodity marketers with some useful insights to understand green prosumer behaviour and develop environmentally friendly marketing strategies corresponding to emerging green prosumer trends.

2 | LITERATURE REVIEW

2.1 | Prosumption

Prosumers were first defined as people who consume self-produced goods and services rather than purchasing them in the marketplace

(Toffler, 1980). They have ever since then been called by different names such as *values cocreators* (Lusch & Vargo, 2006; Prahalad & Ramaswamy, 2004), *market partners* (Prahalad & Ramaswamy, 2000), and *postconsumers* (Fırat & Dholakia, 2006). Figure 1 is a word cloud that depicts the frequency of some keywords used to define prosumers or prosumption in previous literature.

As depicted in Figure 1, prosumers/prosumption definitions are mostly (i.e., proportionally larger appearance of words) reported using words such as *consumption*, *prosumption*, *sharing*, *creation*, and *value*. The word *energy* is relatively common. *Economy*, *peer*, *self*, also common, albeit less frequent. It is interesting to note that words, *sharing* and *creation* appear in between *consumption* and *prosumption*. As it will be detailed in the rest of the literature review, previous research shows that the discourse of prosumer/prosumption could range from consumption to sharing, to creation, to fully constructed prosumption. Moreover, the somewhat prominent presence of *energy* in prosumption literature is understandable because most of the existing prosumption literature is scatted around energy prosumption. Further, the word *produser* that disappears from the word cloud due to infrequent use in literature basically refers to digital prosumers who play a dual role of users and producers of information and knowledge. Table 1 is developed based on a systematic literature review.

We initiated the literature search with three inquiries in mind (*How does previous research define prosumption? In which context/s does prosumption behaviour seem to occur? How does previous research interpret the motives behind prosumption?*). Next, we mapped more closely, through an inductive process of reading and discussion, the specific ways in which green consumption and prosumption were conceptualised together. Here, we identified three broad categories of prosumption by adopting Tian, Shen, and Chen's (2017) approach: as an alternative market tool, as a community facilitator of change in people's behaviour, and as a tool of sustainable innovation. At the final stage, we engaged in close reading of articles by category, in order to create a detailed mapping of themes and approaches within each. Studies with similar findings or fewer impacts on prosumption literature development were removed from the search results. Forthcoming subsections provide a synthesis of the literature.

FIGURE 1 Word cloud using keywords of the definitions of prosumers in previous literature

TABLE 1 Summary of literature

Author/Authors	Definitions of prosumers/prosumption	Key contribution	Literature development stages
Toffler (1980)	People who produce some of the goods and services entering their own consumption	Introduces the term prosumption for the first time and acknowledges the crucial role of corporations in prosumption.	Conceptualisation stage
Kotler (1986, 2010)	Production for self-use	Urges scholars and business to take into consideration the emerging prosumption phenomenon as a new market segment	
Prahalad & Ramaswamy, (2000); Prahalad and Ramaswamy (2004); and Vargo and Lusch (2004)	Value cocreation	Introduce consumer cocreation concept that blurs the line between producers and consumers. Emphasise the emergence of the more balanced cocreation between business and its stakeholders. Conceptualise the "service-dominant logic," wherein consumers are active value cocreators	
Fırat and Dholakia (2006)	Postconsumers	Introduced prosumers as both cultural constructors and players of one or more communities	Enrichment stage
Bruns (2008)	Produsers refers to Web 2.0 community members. Produsage refers to a hybrid process of content creation embraced by produsers	Explores the collaborative contributions of "produsers" – Web 2.0's community members who play a dual role of users and producers of information and knowledge	
Humphreys and Grayson (2008)	Co-production of exchange value	Prosumers are "temporary employees" when manipulated by corporations.	
Watson and Shove (2008)	Do it yourself (DIY)	Argue that consumer competence and confidence determine the types and forms of do-it-yourself practices.	
Xie et al. (2008)	Cocreators of value	Prosumption is a value-driven "trying process" rather than "a single act."	
Zwick and Denegri-Knott (2009) Beer and Burrows (2010)	Collapse of consumption into production	Highlight the emergence of big-data prosumers. Emphasise the widespread "participatory web cultures" of consumers in the digital space	
Ritzer and Jurgenson (2010)	Involves both production and consumption.	Argue that digital prosumption triggers a new form of capitalism wherein firms meddle less with prosumers	
Cole (2011)	New socio-historic subject	Explore prosumption from digital musical perspective	
Duncum (2011)	Who are producing their own videos in their own time drawn from their consumption of popular media	Shows that young consumers actively engage in the knowledge exchange process through online networks	
Nakajima (2012)	The fusion of the processes of production and consumption	Multiapproach stage Acknowledge the influences of prosumption in art history and creative artists	
Ritzer, Dean, and Jurgenson (2012)	A primordial concept	Web 2.0 has contributed to the larger significance and the greater diversity of prosumption	
Serafin (2012)	Continuous and transformable process of cocreation	Internet-savvy youngsters would become both active market participants and skilled prosumers	

TABLE 1 (Continued)

Author/Authors	Definitions of prosumers/prosumption	Key contribution	Literature development stages
Izvercian, Seran, and Buciuman (2013)	Intellectual capital collaboration for innovation	Develop a prosumer transformation model to maximise benefits from prosumers' collaboration	
Kesting and Bliek (2013)	Produce and consume energy, and freely exchange electricity that exceeds their consumption need	Key agents underlined energy prosumption attitude and behaviours are end-users' comfort level, system functionality, cost reduction, and system sustainability	
Ahluwalia and Miller (2014)	Highly educated, insecure workers who undertake casualised cultural work	Criticise Toffler' notions of "cognitariats" and "prosumers" as a tool of customer exploitation	
Ritzer (2014, 2015a, 2015b)	A wide range of processes existing along a continuum.	Production and consumption coexist in a prosumption continuum; current modern lifestyles tend to resemble the early days when people consciously prosume to fulfil their own needs.	
Parag (2015)	Active "niche" consumers who provide various services to the renewable, smart grid.	Energy prosumers have the freedom and flexibility to carry out prosumption functions	
Perren and Grauerholz (2015)	Peer-to-peer' exchange	Collaborative consumption practices in "sharing economies"	
Ziemba and Eisenbardt (2015)	Consumers collaborate with enterprises to produce things of value.	Propose a conceptual framework of prosumers' participation in business processes	
Dressler (2016)	Extended integration of customers into the processes of the producers	Treat prosumption as a value generation tool for wineries in terms of nurturing client loyalty.	
Ellsworth-Krebs and Reid (2016)	Who produce and consume their own electricity and heat	Energy prosumption symbolises changes in the capitalistic market mechanisms	
Hartmann (2016)	Practices that are the primary joint in the consumption–production continuum	Consumption and production are not dualistic opposites but coexist	
Kessous et al. (2016)	An actor in the coconstruction of sustainable values	Prosumers take conscious actions to minimise existing market systems' environmental impacts	
Kotilainen et al. (2016)	Niche actors within the smart grid innovative ecosystem from the socio-technical framework.	Propose six different types of prosumer roles in the smart grids	
Miller (2016)	Simultaneously cultural consumers and producers.	Despite cybertarianism's effects, firms remain the key beneficiary of prosumption practices	
Fine, Gironda, and Petrescu (2017)	Consumers whose ability to share their product/service experiences openly	Prosumers' motivations, service quality perception, and age are the primary influencers on their engagement in online eWOM	
Hansen and Hauge (2017)	Consumers transiting into producers.	Prosumers use green technologies for comfort, cleanliness, and convenience reasons	
Ritzer (2017)	Putting the customer to work	Explore prosumption from food and drink consumption perspective	
Andrews and Ritzer (2018)	An organised and competitive approach to playing computer games	Explore prosumption from sport perspective	

(Continues)

TABLE 1 (Continued)

Author/Authors	Definitions of prosumers/prosumption	Key contribution	Literature development stages
Dusi (2018)	Process that subsumes production and consumption and concerns every human activity.	Multiapproach stage Call for revision on the conceptualisation of prosumption	
Tse and Tsang (2018)	Consumers who adeptly acquire related fashion information and skills to create a personal fashion image.	Identify the way prosumers share and utilise knowledge in organisations	
Ziemba and Eisenbardt (2018)	Actively engage in the processes of products' design or improvement.	Prosumers who mainly engage in the organisational product evaluation process	
Baruk (2019)	Authentic marketing partners who integrate with native offerors for both behavioural and psychological reasons	"Potential ethnocentric prosumers" cocreate for behavioural and psychological reasons	
Dellaert (2019)	Consumer's co-production process to create values for other consumers	Consumer co-production via sharing-economy platforms offer sustainable economic benefits	
Eckhardt et al. (2019)	Prosumers take on institutional roles that are typically conducted by firms in the traditional economy	Argue that peer-to-peer sharing platforms are transforming individuals' roles previously served by firms	
Halassi, Semeijn, and Kiratli (2019)	Services and products cocreation activities embraced by consumers	Explore prosumption from high-tech printing prosumption	
Sioshansi (2019)	Store the surplus of electricity for later use, thereby possess greater independence than average prosumers.	Argue that the new energy market would transform into a new, liberalised system for energy prosumers	

2.2 | Collapse of consumption into production

As shown in Table 1, Kotler (1986, 2010) who revisits Toffler's prosumer theory stresses that prosumption should be seen as a catalyst to a new marketing era where several overlapping systems coexist to facilitate consumer satisfaction. This view is backed by several studies that find prosumption as the complete collapse of consumption into production (Humphreys & Grayson, 2008; Zwick & Denegri-Knott, 2009).

Cova and Dalli (2009), however, take a different approach towards the systems coexisting to facilitate consumer satisfaction. By coining the concept of *working consumers*, the researchers explore the negative sides of consumer production and collaboration, which they call as *double exploitation*. The researchers argue that the working consumers perform immaterial work and play a primary role in the co-production to gain individual and social rewards, such as personal gratification, purchase satisfaction, and social recognition. Ritzer and Jurgenson (2010) regards this as a high level of exploitation experienced by prosumers.

2.3 | Coexistence of consumption and production

In contrast to the above, Prahalad and Ramaswamy (2004) and Vargo and Lusch (2004) outline in a win-win scenario in which consumers and producers collaborate to bring knowledge and skills that benefit both

sides. More recently, Albinsson and Perera (2018) also explore the challenges and opportunities of a sharing economy in which, producers and consumers directly communicate to share, swap, trade, or rent (p. 4). This is considered an outgrowth of collaborative consumption.

The traditional ownership is disrupted, as consumers play multiple roles of producers, or users, or both. Further, the strengthened sense of community resulted from collaborative consumption also give prosumers more confidence to vouch for their political and personal ideologies (Perren & Grauerholz, 2015). Conducting a review of prosumer literature over the last three decades, Cova and Cova (2012) argue that the discourse of prosumption is an extension of postmodern marketing scholarship in the 1980s and 1990s. Cova and Cova (2012, p. 149) describe prosumers as *new consumers* who are agents of their own destinies.

To summarise, as shown in Figure 2, a review of prosumption literature clearly shows the changing role of consumers who usually considered to be at the recipients' end of a value creation process. More importantly, literature in the past two decades either attempts to induce the conceptual developments of prosumption (Stage 1) or explores prosumption practices in various industries and/or from multiple perspectives (Stages 2 and 3). The most popular subtopics in discussion are energy prosumption, impacts of new technological advancements, and the changing roles of individuals in their relations with enterprises and society. Nevertheless, green prosumption
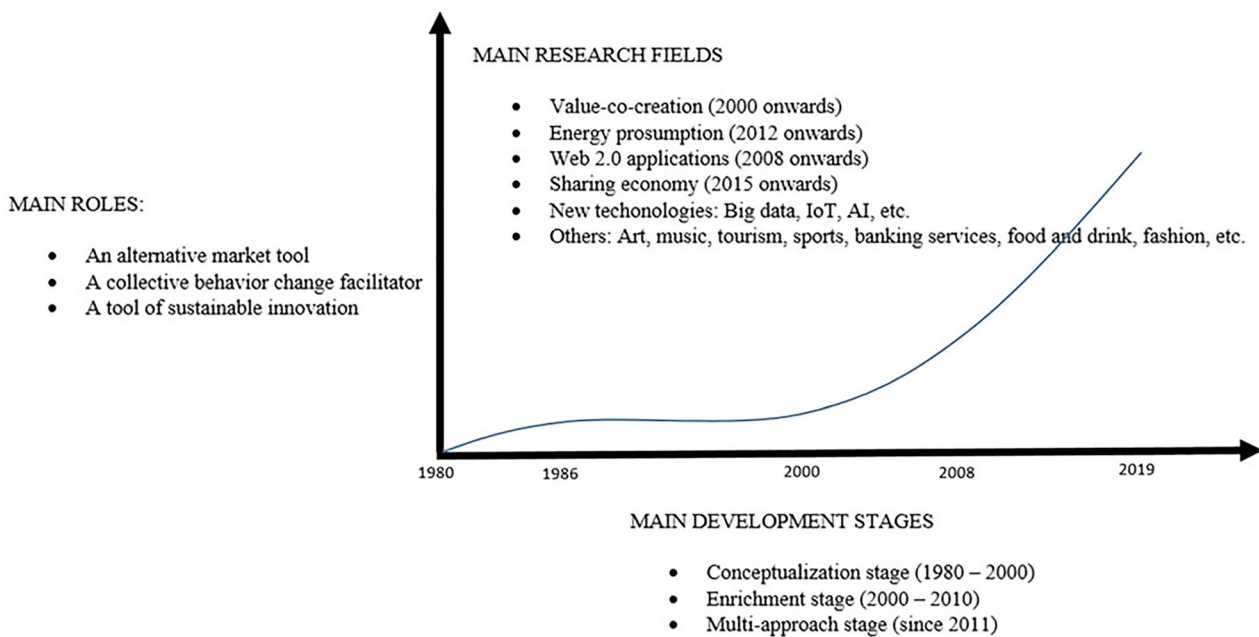
FIGURE 2 Developments in prosumption literature over time (adjusted from Tian et al., 2017) [Colour figure can be viewed at wileyonlinelibrary.com]

activities on a wider scale (excluding energy prosumption behaviours) remain as nearly an untouched field in the broad prosumption discourse. Thus, further explorations into the phenomenon from various perspectives are necessary. The next section reviews prosumption literature from a green consumption perspective.

2.4 | Green prosumption

Green prosumers may not necessarily perceive prosumption as double exploitation rather an empowered consumption that could signal their resistance to environmentally unfriendly markets (Cherrier, 2010; Perera et al., 2016). Green consumption research reveals a shifting role of consumers from a passive position to a more active stance with takes conscious actions to minimise environmental effects of the existing market system (Kessous et al., 2016; Perera et al., 2016). Further, lifestyles of some green prosumers apparently resemble early days, as Toffler (1980) describes, agricultural society, when people consciously prosume to fulfil their own needs due to environmental concerns.

Campbell (2005) identifies three theoretical perspectives of green consumption research based on (a) the rational, utility maximisation assumptions of green consumption (e.g., Leonidou, Leonidou, & Kvasova, 2010); (b) the critical views of consumption as an unfavourable phenomenon as far as environmental sustainability is concerned (e.g., Carrier, 2010; Kilbourne & Carlson, 2008); and (c) the socially constructed meanings of consumption that view green consumption as a conscious effort of exchanging symbolic meanings of consumer objects (e.g., Connolly & Prothero, 2008). The third perspective is often used to revisit criticisms levelled against the existing capitalist market mechanisms that are considered the main culprit triggering environmentally destructive behaviour (Kilbourne & Carlson, 2008).

Prosumption can also function as a symbolic meaning sharing behaviour (e.g., innovation, freedom, and eagerness) in the context of crowdsourcing practices shared among young consumers who involve in cause-related projects (Lucyna & Hanna, 2016). On the basis of this background, we attempt to explore the evolving process of green prosumption subcultural practices, experiences, and symbolic meanings through narratives of young green prosumers.

Seyfang (2004) classifies four competing subcultures of consumption along with different attitudes towards nature and subsequent green consumption that could exist simultaneously: (a) individualists (active green commodity purchasers), (b) fatalists (passive green commodity purchasers), (c) hierarchists (responsible consumers), and (d) egalitarians (who consume less). In prosumer literature, individuals taking a more active role in value creation by pushing the boundaries of the existing market mechanisms is referred to as *value cocreation* (Ramaswamy & Ozcan, 2014, p. 3). Previous literature contains a debate of prosumption concerning whether or not it is a new form of capitalistic market mechanism (Büscher & Igoe, 2013; Ritzer, 2015a; Ritzer & Jurgenson, 2010). Thus, we assume that Seyfang's (2004) classification, which shows different types of subcultures of green consumption depending on active and passive control over personal consumption, is also useful in exploring the green prosumer culture.

Ironically, certain parts of prosumer culture can be manifested against the existing market mechanisms even though some aspects of prosumer culture can be facilitated by the mechanisms (Perera et al., 2016; Prothero, McDonagh, & Dobscha, 2010). Put simply, to disengage from the green commodity discourse, a green prosumer might engage in self-production. However, raw materials required for production can be purchased from the market. Therefore, we assume that prosumer culture may surpass any form of coexistence with the existing market mechanisms and can also be manifested as an independently emerged prosumption subculture.

2.5 | Emerging young green prosumers

Some consumer surveys show that young consumers (aged 16 to 35) in the world have become the most environmentally conscious generation compared with other generations (GlobalWebIndex Q2, 2018) with $143 billion purchasing power (Forbes, 2018), Inevitably, they are the more promising green market segments (Ecosphere, 2018; Prothero et al., 2010).

The focus of the majority of prosumption literature on young prosumers falls into the context of technological advancements (Duncum, 2011). In particular, Lebiejko (2011, p. 66) describes young consumers as *first creators* of prosumption in relation to their high interest, participation, and innovation roles in the net-related prosumption activities. By actively involving in the process of knowledge acquisition and value cultivation through online social networks, young consumers are likely to be exposed to news about ecological issues at a global scale (Perera, 2014; Prothero et al., 2010), and they can set the ground for actual and potential changes in prosumption (Andersson & Öhman, 2017).

Nevertheless, hardly any study examines prosumption involving young prosumers in Australia. To our knowledge, although at an exploratory level, this study could be a pioneering study in this area. However, prosumer behaviour in Australia is investigated in the context of energy prosumers (solar energy user who wishes to share stored energy (Rathnayaka, Potdar, & Kuruppu, 2012: Haines & McConnell, 2013). Further, in a recent study, Miller (2019) finds issues that affect the ability of prosumers in Gold Coast, Australia when incorporating sustainability into their food practices, highlighting the possibility of developing a *sharing-economy* food production typology and a performance indicator including people, planet, profit, governance, and propagation to understand this development.

In Australia, previous studies reveal a sense of powerlessness shared among youth in engaging in green practices (Fien, The-Cheong Poh Ai, Yencken, Sykes, & Treagust, 2002) regardless of their ability to be *agents of change* in making the Australian society more environmentally conscious (Fien, Neil, & Bentley, 2008). Fielding and Head (2012) find that environmentally conscious 18–24 olds in Australia have more internal locus of control (i.e., beliefs that their actions can make an impact on environmental well being. Therefore, they attribute responsibility of environmental well-being to the community as opposed to the government. In 2019, a large representation from young adults is reported to participate in climate rallies in Australia (ABC, 2019). Thus, it is reasonable to assume that Australian youth are becoming interested in green consumption practices.

3 | METHODOLOGY

Given that little empirical research has examined prosumption behaviour in the context of green consumption in previous studies, an exploratory research design was necessary. This study has, therefore, adopted a qualitative approach with phenomenological interviews to explore green prosumer experiences among ages between 18 and 25 years old. This approach is recommended when a study is concerned with subjective experiences and meanings of a phenomenon being investigated (Denzin & Lincoln, 1998).

To ensure to have access to *information rich* cases (Patton, 2002), we contacted young individuals who can provide us with evidence of engagements in green prosumption practices using the snowball sampling technique. The technique involves identifying potential respondents based on the recommendations of their acquaintances. With an aim of ensuring the authenticity of the responses, researchers made preliminary observations of green prosumption practices without revealing the focus of the investigation to the respondents. In consultation with previous studies (e.g., Perera et al., 2016), extra attention was paid to recruit respondents with a sense of environmental well-being. All respondents were assured of anonymity. Respondents' pseudonyms and a brief profile are shown in Appendix A.

The study conducted 18 phenomenological interviews and validated its findings through six of member check interviews. Phenomenological interviews are conducted with an idiographic focus and aim to uncover deep insights into how a given person, in a given context, makes sense of a given phenomenon as opposed to individual narratives (Bevan, 2014). The phenomenon of green prosumption was the main focus of the investigation, which investigated the respondents' perceptions, interpretations, and experiences of green prosumption. Unlike other qualitative research techniques including ethnography, participant observation, case studies, observations, and content analysis, phenomenological interviews provide researchers with an opportunity to uncover inner accounts of human experiences of a phenomenon being investigated (Osborne, 1994).

After each interview, the researcher presented a summary of the discussion to the respondents. A summary of interpretations and findings were sent to six respondents before conducting the member check interviews. The respondents' comments in the member check interviews via telephone conversations for approximately 30 min were helpful in confirming the validity of the findings of the research as well as setting the boundary conditions when presenting the results of the study (Wallendorf & Belk, 1989).

The in-depth interviews were conducted until the findings reached theoretical saturation. Theoretical saturation means the findings of an interview are substantiated by findings of another (Eisenhardt, 1989; Guest, Bunce, & Johnson, 2006). In qualitative research, the size of the sample is determined by theoretical saturation, which usually occurs within the first 12 interviews (Guest et al., 2006).

Respondent diversity was also ensured through the researchers' preliminary screening conversations with potential participants before commencing the in-depth interviews. The recommendations of knowledgeable sources (Patton, 2002) facilitated the researchers to recruit respondents who are genuinely interested in environmental well-being and can provide evidence of prosumption practices. Furthermore, most of the interviews were conducted at the respondents' place of residence where they provided the researchers with visual evidence of prosumption practices.

The respondents were mainly based in a large city in Australia. Many of them have been interested in ensuring environmental well-

being in the form of becoming environmental group members and/or making changes in their personal consumption practices to ensure the environmental well-being (e.g., gardening and recycling). Some of them have had extensive travel experience in countries where either natural disasters (e.g., Bangladesh) are more frequent or well known for their natural sceneries (e.g., Nepal and India). Most of the respondents were engaged in or interested in employments that social or environmental well-being was focused.

A structured in-depth interview protocol was not utilised in order to unearth emic meanings of the phenomenon being investigated in this inductive investigation. The researchers, however, asked a mix of *grand tour* questions (McCracken, 1996) and used several prompts to encourage the respondents to deeply reflect on their prosumption experiences. This facilitated the researchers to collect information in forms of descriptions, structure (i.e., how does it work), and verifications. Table 2 shows the general structure of the phenomenological interview process adopted in the study.

The interviews were conversational in nature, and the respondents were often encouraged to utilise visual cues (images or photographs) where they find appropriate. They were particularly useful in facilitating the respondents to recall their prosumption experiences (Beverland & Farrelly, 2010).

Several rounds of in-depth interviews involving the respondents were conducted. Each interview ran approximately 1 ½ to 3 hr. All of the interviews were audio-recorded, and transcripts were made. To capture prosumers' experiences, we adopted the hermeneutically grounded interpretive framework (Cherrier et al., 2011; Thompson, 1997) where meaning-based linkages were developed for and between each respondent and recurring patterns of meanings were identified. In qualitative research, the hermeneutically grounded interpretive framework is recommended for interpreting the narratives of respondents about their everyday experiences (Thompson, 1997) gathered through long interviews (McCracken, 1996) to generate interactions between interviewers and interviewees. From a hermeneutic perspective, the stories respondents tell about their experiences are a prime locus of discovery (Thompson, 1997, p. 439). Given that the focus of our study is to uncover everyday green prosumer experience as a phenomenon as opposed to individual cases, a hermeneutically grounded interpretive framework is considered suitable to guide the data analysis of the study.

The data analysis and interpretations of the interview transcripts were done in three stages (Thompson, 1997, 438). First, we read each interview transcript in its entirety in an iterative manner, to gain a holistic understanding of the phenomenon of green prosumption from emic perspectives expressed in each transcript. Second, we discerned the key patterns of meanings and difference across different interview transcripts. This was an iterative process in which we at times reconsider previously interpreted transcripts in light of this newly developed understanding. This allowed us to explore patterns that were not noted in the first stage.

Third, we derived three broader thematic categories from the analysis of the respondent narratives. To do this, the transcripts were reanalysed using the line-by-line analysis. The line-by-line analysis

TABLE 2 Structure of phenomenological interviewing

Interview structure	Questions/ prompts format	Example questions/ prompts
Context of green prosumption	Descriptive/ narrative	Why have you become interested in environmental wellbeing? Why have you become a member of an environmental group?
Apprehending green prosumption	Descriptive and structure	Tell me about your typical day. What do you do when you dive into a dumpster?
Clarifying green prosumption	Clarifying structure	Describe how your dumpster diving would change if the retailers asked you to leave/ called the police?

Notes: Adapted from Bevan (2014, p. 139).

involves (a) open coding (take note of respondents' words/meanings and establish properties of each code), (b) axial coding (identifying relationships among the open codes), and (c) selective coding (figuring out the core variables; Strauss & Corbin, 1998). From collating the codes into potential themes, checking, and refining the themes, the thematic categories were derived. They capture the recurring patterns and holistic relationships among the meanings and categories the participants used to describe their experiences of green prosumption shared among respondents (Strauss & Corbin, 1998; Thompson, 1997). Followed by the forthcoming findings section, in the discussion section, we positioned the thematic categories within the existing literature on prosumption.

4 | FINDINGS

This section describes green prosumption practices among young individuals using three thematic categories. They are (a) *contraction*, (b) *control*, and (c) *creation*. The hermeneutically grounded interpretive framework, which is utilised in the data analysis enabled us to discern the key patterns of meanings and differences across different interview transcripts when deriving the thematic categories. To simplify the presentation of the findings, Table 3 shows a summary of the findings including indicative quotes gathered from the interview transcripts and some power quotes that are derived from consulting previous literature (Strauss & Corbin, 1998). Figure 3 depicts the phenomenon of green prosumption, how it evolves (as a contraction), positions (as a control), and grows (a creation) within everyday green consumption practices. The key cases (respondents), as well as key prosumption practices corresponding to each thematic category, are shown in the Figure 3, followed by the details of the thematic categories.

TABLE 3 Summary of indicative interview excerpts (power quotes)

No.	Indicative interview excerpts (power quotes[a])	Evidence of contraction (open and axial coding[b])
Contraction		
1	I think, I have been lucky enough you know, I never had a shortage of food. So, it was never true like necessity for food that I started dumpster diving. I think the reason that I started and one of the main reasons that I continue it is because it's an environmentally good thing to do, because I reduce the amount of waste that goes to landfill. You know, that raises methane [in the air]. There is a whole range of negative things about landfill, but also, if I'm eating food from dumpsters. I'm consuming but I am not buying things. I am not contributing to unsustainable food production. So yeah, I think it is an environmentally good thing to do (Ann, interview excerpt).	Counter-culture movement (Brosius et al., 2013; Edwards & Mercer, 2012). Consume in alternative ways (Albinsson & Perera, 2018).
2	I get really angry sometimes when I see how much good food [is] being thrown out. Sometimes, you know, people [who are] working at supermarkets ask me to leave. I ask why, it's ridiculous, why they cannot let me to have these [sic] food. It's probably ended up in landfill (Travis, interview excerpt)	
Control		
3	My own stuff [individual commitments] would be significant only if enough people do it. Then, it's taking the power away from the people that are doing crappy things. So, I can't find myself giving money to [name of a supermarket] instead of going down the road [and] getting my food from other places. I go to Op shops [Opportunity shops], get clothes from recycles [dumpsters or second-hand clothing shops]. This jumper, I got it for free (Chris, interview excerpt).	Control through collective (Barnett, 2010). Public and private practices (Darmody, Yuksel, and Venkatraman (2017).
Creation		
4	I keep learning and thinking of things all the time … I am sure these things might not [be] important to other people, but I don't think that's what gets us anywhere … we have to think about alternative ways of making things (Emma, interview excerpt).	Consumers as producers create their own food and drink alternatives (Ritzer, 2017)

[a]The quotes are reported as they are gathered at the depth interviews. No editing is performed on them in order to maintain the authenticity of the quotes.
[b]Some quotes for the comparisons were also derived from consulting previous literature (Strauss et al. 1998).

4.1 | Contraction

An important aspect of respondents' narratives of this interpretive data analysis is that they adopt a different consumer role from that of mainstream green consumers. Their green prosumption practices partly emerge as alternate procurements as opposed to green commodity purchases. The alternate procurement practices appear to be formed through and facilitated by the existing market system. Nevertheless, the practices symbolise counter actions taken by emerging green prosumers against the environmentally unfriendly adverse effects of the current market practices (e.g., food waste) and certain other undesirable actions (i.e., greenwash).

The procurement practices do not necessarily involve production for self-use as prosumer literature shows. However, unlike mainstream green consumers, these respondents refrain from making purchases of green commodities passively because of the adverse environmental effects of mass production, unethical business practices, waste, and landfilling. Thus, they play a role that is different from conventional consumer's role. Thus, the theoretical category of *contraction* is formed. This behaviour can thus be considered an early stage of becoming semiprosumers. This is explained in the next few paragraphs and further described in Section 5.

Dumpster diving, procuring goods that have been thrown away by sellers (e.g., supermarkets and bakeries), is one of the most prominent behaviours shared among the respondents. Among them, Travis has been engaging in dumpster diving for about 7 years and identified himself as a heavy dumpster diver. He also explains that he usually keeps a couple of bags on his bicycle (see Figure 4) so that he can use them to take dumped food or other goods wherever he finds them. Travis explains: *there are all sorts of food that [name of a seller] throws away which is perfectly good. You can't waste them.*

Travis keeps his green commodity purchases to a minimal level and he nurtures a habit of procuring necessities from dumpsters, which partly reflects a counter-culture movement (Cherrier, 2010) as procurements from dumpsters is not usually shared among mainstream green consumers, let alone mainstream consumers. However, interestingly, under this "contraction" theoretical category, practising these types of green prosumption is almost impossible if the respondents do not refuse to be seen as conventional consumers.

Further, environmental reasons (e.g., minimise waste and landfilling) appear to be prioritised in this particular dumpster diving practice, when Travis says, "you don't know [whether] you will buy these things, but you know you can't waste them." Similar to Travis, Ann also emphasises
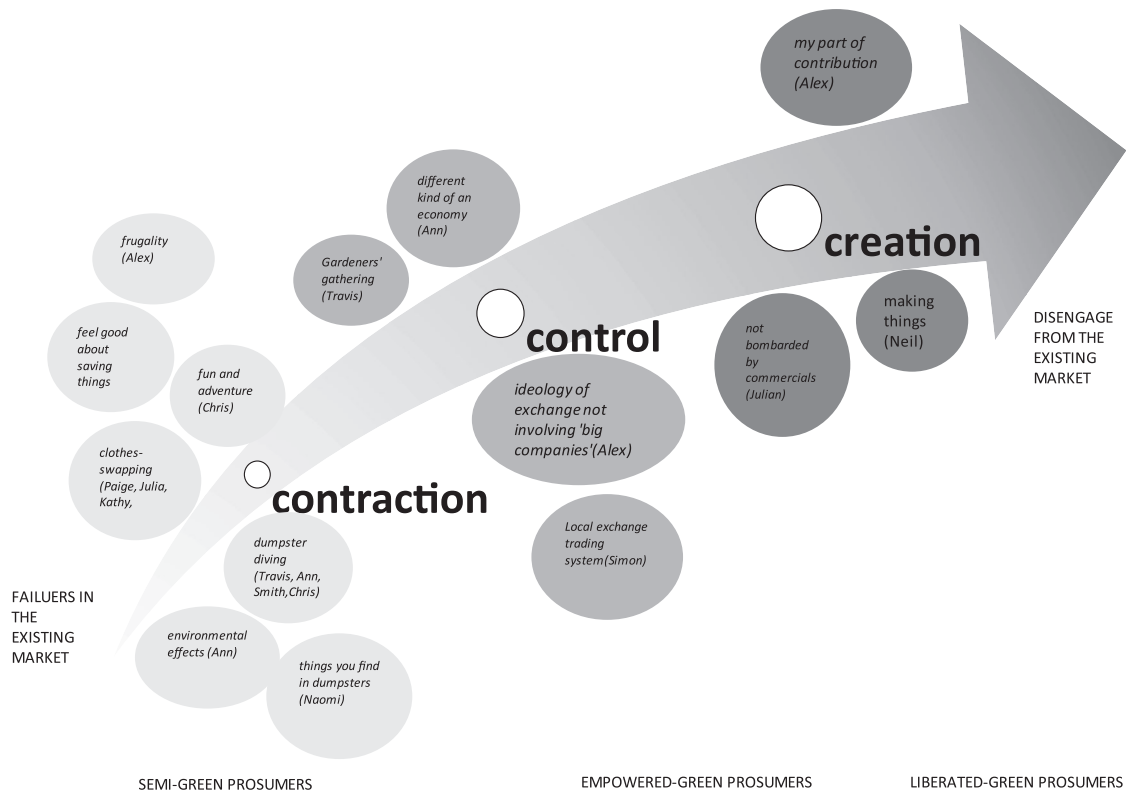
FIGURE 3 Phenomenon of green prosumption

FIGURE 4 A couple of bags full of food collected from dumpsters [Colour figure can be viewed at wileyonlinelibrary.com]

the positive environmental effects of her green prosumption practices. It appears that reusing resources or food, which otherwise is thrown out or ended up in landfills is their primary concern.

Both Travis and Smith deliver the dumpster food to their neighbourhoods and close friends. Ann explains that although her close friends are not involved in dumpster diving as much as she is, they are happy to eat "dumpster things" (Ann). Smith and Chris provide evidence of excitement of dumpster diving when they do it together with a group of friends. For example, Smith explains:

> It is an adventurous [activity]. It is. The other day, going [sic] collecting bikes and bread and a lot of things, it was a massive adventure for those friends and me. We had such a good day with laughing [sic] each other. We didn't spend a cent doing all that kind of stuff but have to buy a bit of oil [fuel] for the car [which they used to collect the bikes and bread].

These alternate procurements among the respondents are not limited to dumpster diving. *Clothes swapping*, which involves exchanging one's apparels with another free of charge, appears to be another green prosumption practice. Many of other respondents who engage in swapping clothes consider adverse environmental effects of purchasing new clothes. The degree of involvement in this procurement practice, however, varies among the respondents. Whereas Paige and Julia are two of the respondents who are keenly involved in organising clothes-swapping events, Kathy often collects swapping apparels to recreate something new (e.g., a skirt can be converted to a handbag).

In addition to its functional purpose of exchanging clothes for free without needing to buy new clothes from the market, similar to dumpster diving, *clothes swapping* is another positive, environmentally

FIGURE 5 Clothes-swapping event [Colour figure can be viewed at wileyonlinelibrary.com]

friendly and enjoyable practice widely shared among the respondents. Sharing a picture of the recently run clothes-swapping event (see Figure 5), Julia recalls the enjoyment as well as environmental benefits of clothes swapping: In a way, *it's subtly like changing the wardrobe without buying new, it's nice to have a bit of recycling going on*.

Through our member check interviews that are conducted to ensure the validly and reliability of this finding, some other aspects of the prosumption narratives are found. They are reported here to set the boundary conditions of the findings.

One of the respondents, Emma, practises prosumption not because of environmental reasons but her preference of not to shop. She explains:

> Well, this is not really because of an environmental thing, but I tend not to buy much stuff. A lot of my clothing, I keep [them] for ages, and I tend to get second-hand clothing [as well], for example, [clothes] from my sister [which] she may not wear [not like them for various reasons]. So, lots of clothing that she doesn't wear, I wear them. I am using them [...] well [...], I used to not buy stuff because simply, I don't like shopping.

Amber, who shared a somewhat different experience of purchasing from "vintage op shops," explains:

> I think that every piece of clothes in my wardrobe has not been bought new but [are from] recycle [recycling] bins. It was like Op shops [Opportunity shops] or in more kind of a vintage Op shops [Opportunity shops] and/or kind of hand-me-down from friends or family ... maybe for four years. I mean [...] this kind of dressing [pointing to her dress], I mean, I am not being an alternative. It's very much the kind of social norm, just general like [among the] people in Melbourne that I'm friends with. It's also like fashionable. I think, mainly because it's fashionable and maybe secondly, because they think that it's environmental or not supporting the fashion industry, but I would say it's kind of both for me. It's like aesthetically, I don't like the fashion industry in general.

As can be seen in the above excerpts, other personal reasons over environmental well-being such as dislike shopping (Emma) and being able to join the fashion trend of wearing recycled or vintage clothing are shared among her social group who believes not supporting mainstream fashion industry is "environmental" (Amber).

This theoretical category of "contraction" shows an alignment to some other discourses such as "environmental effects" (Ann), "frugality" (Alex) and "fun and adventure" (Chris) or "things you find in dumpsters" (Naomi) and feel good [about] saving things [that] (Smith). These discourses can also be shared among mainstream consumers. Further, without the existence of the existing market (i.e., original purchases), none of the practices (dumpster diving and clothes swapping) can be performed. Thus, "contraction" cannot be entirely framed as counter-culture of green consumption as previous studies advocate. While coexisting in collaboration with the existing market system, enjoying several symbolic and emotional benefits from the green prosumption, the respondents appear to have evolved as semi-green prosumers.

4.2 | Control

The respondents' narratives reveal that green prosumption is practised situating it as less consumption or certain actions are taken to control green commodity purchases from the market. Instead, the respondents prefer engaging in exchanges (monetary or nonmonetary) among individuals in their close networks. These collective identity-building narratives of the respondents who engage in fewer commodity purchases that are enabled and reinformed through collective actions are theoretically framed as *control*.

The first theoretical category of *contraction* can be distinguished from the second theoretical category of *control* based on how they engage in green prosumption practices. The former practices are largely performed as individual actions, whereas the latter takes a form of reinforcing the former through collective actions. As shown in Figure 1, the collective actions can take a form, for example, joining a group named, Gardeners' gathering (Travis) to learn permaculture gardening or share what they produce.

According to Ann, she engages in a *different kind of an economy* in which individuals *can go by trust*. These respondents' ideology of exchange is not involved in *big companies*, *supermarkets* (Alex) or *a longer value-creation process* (Simon, Kelly). It should be trust based, directly connected exchanges (Ann). To this end, Kelly describes her ideology of an exchange process using Figure 6 shown below:

> That was one of the farm gates that we passed, when we were travelling in Queensland. I love that one because it's an honesty box [pointing the "honestly box"]. So, they [farmers] just put pecans at the end of their drive way and say *Can you please pay two dollars for a bag of pecans* which I thought it's a really [...] yeah, it's a quite a trusting thing to do. Obviously [it] works for them. You can see the pecan trees behind the box of pecans. So, it's very [...] it's a direct transaction.

FIGURE 6 Selling pecan nuts at a farm gate [Colour figure can be viewed at wileyonlinelibrary.com]

FIGURE 7 A wardrobe made out of reusables by a respondent [Colour figure can be viewed at wileyonlinelibrary.com]

Kelly believes that the above types of transactions are *direct* as *pecan bags haven't been passed along the chain [supply chain]*. She also believes that sending pecan bags through a supply chain is *an unnecessary process*. She explained this as follows:

> [If pecan bags went through a supply chain], a company would like to put them in package [packaging], may be interstate to supermarkets … you know that's a fairly unnecessary process in my mind … So when somebody can just grow it, sell it, and made their own price according to […] you know, how much they [need] in return for what they produce … that's a really fantastic thing.

They expect strong collective actions to build collective identities of green prosumers and replace the existing market system with environmentally friendly, self-reliant economies such as local exchange trading system (Simon), Gardeners' gathering (Travis). Chris further emphasises the importance of engaging in those actions collectively to make an impact on mainstream consumption.

Distinguishing themselves from the mainstream consumers, control framework captures aspects of active consumers who appear to be refusing to engage in the existing market system. Furthermore, they are in the process of empowering their collective identity projects of prosumption through engaging in alternative exchange systems. This collective egalitarians' behaviour (Seyfang, 2004) is therefore framed as a prosumption practice that is strengthened by the identities shared among similar groups of respondents.

4.3 | Creation

Green prosumption under this *creation* framework is practised by the respondents as an effort to entirely disengage them from the existing market system. As shown in Figure 3, emerging from *contraction* (at an individual level) to *control* (at a collective level), the phenomenon of green prosumption seems to reach *creation* that is largely centred around individual-level practices. For example, Neil is one of the committed prosumers who is passionate about permaculture practices and engages in gardening. While showing his collection of gardening tools, Neil described the enjoyment of *making things* instead of buying commodities. Further, discourses such as *doing things by yourself*, *making something* (Neil), *my part of contribution* (Alex), *not bombarded by commercials* (Julian) delimit the prosumers' motive of engaging in a value creation activity. Paige made a wardrobe using reusables by herself (see Figure 7):

Among other things, homemade yoghurt, bread, beer, honey, and bicycle assembling are used as examples of the respondents' creations, and they describe them with the excitement of engaging in the activities. Overall, it is found that many of the respondents are reluctant to be perceived as passive consumers who simply purchase green commodities.

Another important boundary aspect of the theoretical category of *creation* is that the respondents' reluctance to identify with established green identities such as environmental activists. For example, Alex said:

> I don't feel like my participation in those environmental groups would necessarily bring more results. I am doing the right thing [at a personal level] without becoming a member. The people [environmentalists] who are passionate to that extent … protest and lobby … that doesn't really feel like me. Sometimes … sometimes I feel like some of those groups tend to be passionate to the extent that they almost push beyond to run to the reason … does that make sense?
> Interviewer: Can you explain it more?
> I am not saying I am not engaged in but when I was more engaged almost I got frustrated with hippies really who would just had blind faith in utopian ideas and it didn't seem like that I was able to integrate necessarily and have functional interaction, and look at the amount of those leaflets those environmental groups sent out, what a waste!

Most of the narratives contain rather personal encounters of self-production to disengage from the existing market system. The respondents often criticise *beyond necessary* (Emma) aggressive

environmentalism (e.g., public protests) as well. This shows the respondents' preference to reinforce their engagement in green prosumption practices at a personal level.

5 | DISCUSSION

The objective of this study is to explore a range of green prosumer practices and experiences through narratives of young green prosumers. Although one could argue that prosumer culture is still shared among only a few people in society, it is clearly going to change when young individuals become active market participants (Serafin, 2012). Further, based on a comprehensive review of 161 articles on green marketing (1990–2014), Kumar (2016) shows that from mid-2000s onwards, economic value of green marketing strategies and functions has been investigated by many scholars. We believe that our investigation can be a pioneering investigation that initiates an essential scholarly conversation to spark off a debate in green marketing.

As shown in Figure 2, the phenomenon of prosumption is found to be an evolutionary process as opposed to a singular end-stage process (Ritzer, 2015a; Xie, Bagozzi, & Troye, 2008, p. 118). Cova and Cova (2012) also discuss the "governmentality" process in which consumers have progressively participated in the cocreation of values, thereby transforming into creative consumers or prosumers. To this end, our study shows that green prosumption can be understood as an emerging subculture involving three segments. These evolving segments are either partly facilitated by and/or greatly motivated by the resistance towards the existing market mechanisms. This section discusses the findings of the investigation in light of previous research on prosumption.

Previous research (e.g., Ritzer & Jurgenson, 2010) argues that the existing market system has less influence over prosumers than producers and consumers. It is discussed that in a new form of capitalism, prosumers tend to exert power of resistance over the existing capitalistic market mechanisms through a distinct economic system (Ritzer & Jurgenson, 2010). Our study partly agrees with this argument and reveals unique challenges, as well as a form of resistance against the existing market system, emerged in the subculture of prosumption.

Nevertheless, prosumers' narratives of our research also show a variety of green prosumption practices shared among young green prosumers. Some of these prosumption practices can be performed only within the existing market system (e.g., contraction). This confirms the findings of previous green prosumption research (e.g., Büscher & Igoe, 2013) that reveals the power green prosumers are assumed to have in a new form of prosumer capitalism which is ultimately limited. This sets the boundaries to the existing debate of prosumption as indicated in prosumption literature. The findings of the study are shown in Table 4.

Organised into three thematic categories: (a) contraction, (b) control, and (c) creation, Table 4 shows how the subculture of green prosumption is evolved within the existing green commodity market. The first theme "contraction" shows green prosumption behaviours that are intentionally practised as forms of alternate procurements. These are often facilitated through the existing market system.

Green prosumers as identified through the narratives of dumpster-diving practices may not be attracted to purchasing green commodities. They do not necessarily purchase green commodities. However, their alternative procurements are triggered by environmental concerns, needing to avoid landfilling, frugality, seeking fun and adventure. Put simply, green prosumers expect to minimise the adverse environmental effects of the existing market mechanisms. Practices such as dumpster diving that are popular among the young respondents of the current research symbolise the emergence of a particular green prosumer subculture (Edwards & Mercer, 2012). This subculture emerges as a counter-culture consumer movement clamouring against the excessive consumption that is considered environmentally unfriendly. This also confirms previous research that contrary to the usual "future-for-others" framing of green consumption, dumpster diving can be framed as "present-for-us" (Brosius, Fernandez, & Cherrier, 2013, p.15).

Albinsson, Perera, Parsons, and Maclaran (2009) exemplify consumers' voluntary disposition behaviour such as in sharing items beyond repair, recycling, donating, sharing, and exchanging (trading) within a network. The researchers find that voluntary disposition decisions and modes of disposition are driven by (a) individual characteristics, (b) community characteristics, and (c) item characteristics. Extending the existing understanding, our study reports that the dynamics of alternate procurement such as *clothes swapping* involves exchanging one's apparels with another free of charge. Being green

TABLE 4 Summary of findings: Emerging prosumer culture

Thematic categories of emerging prosumer culture	Contraction	Control	Creation
Market mechanisms	Formed through the existing market mechanisms	Manifested against the existing market mechanisms	Disengaged from the existing market mechanisms, Self-production
Prosumer segment	Semi-green prosumers	Empowered green prosumers	Liberated green prosumers
Discourses	Environmental effects Avoid landfilling Frugality Fun and adventure	Environmental effects Empowerment Excitement Fun and adventure	Environmental effects Autonomy Value creation
Social nexus	Individual/collective	Collective	Individual

prosumers, many of the respondents who engage in swapping clothes consider adverse environmental effects of purchasing new clothes whereas other respondents reveal the happiness they gain by participating in the clothes-swapping events. More importantly, creating something new from the exchanged clothes is the most popular practice. As confirmed in previous studies, these types of exchanges empower to consume in alternative ways that are more effective, flexible, cost-saving, and less stressful. Further, they are an ethical platform to reuse and recycle, thereby creating a sustainable and responsible lifestyle (Albinsson & Perera, 2018).

The second theme, *control*, shows green prosumption in the form of everyday, mundane practices. They are carried out mostly collectively, and hence, certain prosumers' narratives take a form of collective driven. Confirming previous research (e.g., Barnett, 2010), these practices are empowered through several collective actions. Further, when distinguishing *control* from *creation* aspects of the prosumption phenomenon, the study confirms recent research findings (e.g., Darmody et al., 2017) that prosumption can be classified into two dimensions: public and private prosumer practices.

As found by Fırat and Dholakia (2006), these practices indicate consumer transformation from a passive member of consumer culture to a cultural constructor as well as a shift in orientation from consumer satisfaction to consumer empowerment. Further, these are also instrumental in resisting mainstream consumer practices driven by the mainstream market system (Izberk-Bilgin, 2010; Papaoikonomou, Valverde, & Ryan, 2011).

As explained by Humphreys and Grayson (2008), when manipulated by the mainstream market system, prosumers are *temporary employees* and, therefore, do not imply a fundamental change in the existing market system, a change in the system only occurs when prosumers create exchange values. The practices we identified in the thematic category of *control* are such attempts to create a new system of exchange. To this end, our study confirms previous research findings regarding trends of forming a *cocreative economy* (e.g., energy prosumer community; Ramaswamy & Ozcan, 2014, p. 223) or *sharing economy* (i.e., peer to peer exchange; Perren & Grauerholz, 2015, p. 143). The trend of *sharing economy* is highlighted as one of the fundamentals of prosumption. However, more compelling evidence is required through future research. Especially, Miller (2016) who investigates the impacts of new technologies on cultural industries in Australia claims that the main beneficiaries of prosumers' work are still the business firms in the existing market system.

One could, therefore, argue that *sharing economy* that is considered fundamental to the evolution of prosumer culture (Perren & Grauerholz, 2015) may not still be ready to be fully flourished without relying on the existing market system. Further, as Ritzer (2017) predicts, the ongoing prosumer demand for alternative means of consumption can still be manipulated by the existing market system to turn them into mainstream market behaviour. Seran and Izvercian (2014) also highlight the level of freedom and creativity the firms can offer to prosumers to gain better performance of the co-produced product, service, or experience (p. 1973). Nevertheless, more recent research provides evidence that *sharing-economy platform*s can offer

sustainable economic benefits (Dellaert, 2019) as well as environmental benefits (Eckhardt et al., 2019). However, Eckhardt et al. (2019) call for future research to develop a metric to measure the latter.

Albinsson and Perera (2012) study collaborative consumption and alternative consumption within the specific context of online and offline free sharing and swapping events to understand consumers' resistance against traditional consumption practices and how they are moving towards alternative marketplaces. According to the researcher, the event organisers, who are referred to as consumer-citizens, educate the public and encourage responsible consumption, thereby fostering sustainability ideology into daily lives. For participants, sense of community is both the main driver for their participation and the desired achievement from these events. Symbolic values (i.e., social connection, psychological well-being, and other personal benefits) overtake utilitarian (economic) values in these cases.

These alternative consumption practices challenge conventional notions of exchange and reciprocity. Whether such behaviour could be sustained over times depends mostly on the availability of local infrastructure as well as the asymmetric in value configurations among sharing event participants. However, empowered through sharing symbolic meanings such as collective identity expressions, they can be an attractive market segment for green commodities.

The third theme *creation* shows prosumers who are driven by value creation practices, largely disengage from the mainstream market. Consumer research focuses more on purchasing behaviour and the distinction between consumers and producers rather than what consumers actually do when they consume (Firat & Venkatesh, 1995). Therefore, consumers are not often identified as creators but as passive responders in the value creation process (Shaw, Newholm, & Dickinson, 2006). Further, despite the notion of consumption being considered the key defining characteristic of contemporary consumer society, the notion is often perceived in negative terms—for example, the terms "waste" and "destruction" are key terms used in explaining the notion (Fien, Neil, & Bentley, 2008, p. 53). The findings pertaining to "creation" practices provide evidence that consumers are moving away from the negative associations of consumption, in particular, being passive purchasers of market commodities.

There are some theoretical debates on the possibilities of promoting green consumption within the existing market system that governs mainstream consumer practices (e.g., Carrier, 2010; Prothero & Fitchett, 2000). Black and Cherrier (2010) in their research on anticonsumption practices find that in addition to environmental concerns, various subjective meanings and contextual motives drive anticonsumption that is centralised on the rejection of consumption. The prosumption practices, especially "creation" practices, stand out as a new perspective for investigating green prosumption practices as opposed to green commodity discourse. Ritzer (2017) argues that prosumers as consumers reject or actively seek alternative food and drink, whereas consumers as producers create their own food and drink alternatives (i.e., gardening). Our study confirms the latter.

Further, through this paper, we endeavour to advance the argument that the emerging green prosumption culture warrants some theoretical frameworks of its own separate from the wider prosumer

discourse. Towards this end, this paper argues that green prosumer culture is emerging as a dominant subset from broader prosumer discourse and that green prosumer segment profiles of semi-green prosumers, empowered green prosumers, and liberated green prosumers can be derived from the theoretical categories of contraction, control, and creation. This conceptual schema could be of immense use in informing future green prosumption research. This provides new opportunities and challenges for marketers as elaborated in the next section.

Douglas and Isherwood (1996) also suggest that consumption should be viewed as a motivation to work, a part of a social need of relating to others. Therefore, commodities, as well as consumer practices such as prosumption, should be considered useful mediators in satisfying those social needs. To this end, our study also finds that environmental reasons, excitement, adventure, frugality, social connections, and creations are the discourses shared across the three segments identified. This confirms previous studies of green consumption among young consumers (Pentina & Amos, 2011; Perera et al., 2016; Xie et al., 2008).

6 | IMPLICATIONS FOR GREEN COMMODITY MARKETERS

As Serafin (2012, p. 130) argues, prosumers with the skills to fully take part in the prosumption process may be in the minority now, but this is going to change in less than a decade when Internet-savvy youngsters become active market participants. More specifically, according to a recent review (Dangelico & Vocalelli, 2017; p. 1272), Internet plays a key role in *green distribution* and *reverse logistics* by minimising carbon footprints and providing essential information to green consumers who are willing to pay premium prices according to green products' functional attributes or their contribution towards the natural environment.

Recent surveys show that the green consumer, as well as green investment market, is poised to grow further (Natural Marketing Institute, 2017; Gilbert + Tobin, 2019). To this end, our study highlights several implications. We suggest three prosumer segments: semi-green prosumers, empowered green prosumers, and liberated green prosumers. Approached strategically, all of the three segments could be made attractive for green marketers.

Semi-green prosumers' practices emerging from the theoretical category of *contraction* are formed through the existing market mechanisms, although they do not necessarily purchase green commodities. They appear to engage with the mainstream market with a view to engaging in an alternative procurement. Avoiding landfilling is one of the main concerns of semi-prosumers. Their alternative procurements are also driven by frugality, fun, and adventure. It can, therefore, be recommended that strategies that aim to market green commodities should highlight these discourses as unique selling propositions. Green commodities that symbolise frugality and can be consumed individually or in groups with a positive appeal and with minimal waste could be appealing to this segment. If their expectations were met, these consumers could also be attracted to the established brands having green brand extensions.

Empowered green prosumers' practices are manifested against the existing market mechanisms. Therefore, it can be very challenging to win this market segment over. This subcultural group could create difficult situations for marketers if these consumers are not provided with an opportunity to engage in value cocreation. If not properly dealt with, the marketers might gain no value but facing new risks of competition from the prosumers in forms such as antibrand communities (Cova & Cova, 2012).

The discourses emerged from the respondents' narratives in this segment are, however, collective identity projects as well as excitements of the prosumption. It can, therefore, be recommended that strategies that aim to market green commodities should highlight these discourses as unique selling propositions. Thus, green commodities that are higher in collective identity expressions could be appealing to this market segment.

Liberated Green Prosumers' practices emerging from the theoretical category of *creation* are largely disengaged from the existing market mechanisms. The discourses that emerged from the respondents' narratives in this segment are autonomy and value creation. They also, to a large extent, engage in green prosumption practices individually. Their value creation practices are positioned against the green commodity discourse as well. This poses serious challenges for marketers of green commodities. It can, therefore, be recommended to use strategies to engage these consumers in the value creation aspects of green commodities to secure a fair share of this market segment.

7 | CONCLUSION

This paper explored green prosumption through visual cues elicited, phenomenological interviews conducted with young prosumers. Interpretive analysis of green prosumption practices among young individuals revealed three theoretical categories of contraction, control, and creation. Three green prosumer segments were profiled emphasising several challenges and opportunities each segment creates in the green commodity market. In conclusion, it was shown that all the three green prosumer segments could be made attractive for green marketers provided appropriate unique selling propositions are used in green marketing strategies. This qualitative inquiry has its inherent limitations as the findings were drawn from an analysis of 18 phenomenological interviews. Although generalisation of the findings was not the purpose of the study, the findings should be followed by a survey with a larger sample to validate them. In order to gain rich accounts of green prosumption practices, the study limited its focus only to the experiences of environmentally conscious individuals. Future research should focus on prosumer practices of mainstream consumers to expand the study domain.

ORCID

Chamila R. Perera https://orcid.org/0000-0002-4206-0955

REFERENCES

Ahluwalia, P., & Miller, T. (2014). The prosumer. *Journal for the Study of Race, Nation and Culture, 20*(4–5), 259–261.

Albinsson, P.,. A., & Perera, B. Y. (2012). Alternative marketplaces in the 21st century: Building community through sharing events. *Journal of Consumer Behaviour*, 11(4), 303–315.

Albinsson, P. A., & Perera, B. Y. (2018). *The rise of the sharing economy: Exploring the challenges and opportunities of collaborative consumption*. Santa Barbara: ABC-CLIO, LLC.

Albinsson, P. A., Perera, B. Y., Parsons, E., & Maclaran, P. (2009). From trash to treasure and beyond: The meaning of voluntary disposition. *Journal of Consumer Behaviour*, 8(6), 340–353.

Andersson, E., & Öhman, J. (2017). Young people's conversations about environmental and sustainability issues in social media. *Environmental Education Research*, 23(4), 465–485.

Andrews, D. L., & Ritzer, G. (2018). Sport and prosumption. *Journal of Consumer Culture*, 18(2), 356–373.

Australian Institute of Health and Welfare. (2007). Young Australians: Their health and wellbeing. Retrieved from https://www.aihw.gov.xn-augetmediayathaw07-f89jia.pdf.aspx/

Barnett, C. (2010). The politics of behaviour change. *Environment and Planning A*, 42(8), 1881–1886.

Baruk, A. I. (2019). The effect of consumers' ethnocentric attitudes on their willingness for prosumption. *Heliyon*, 5(7), 63–71. https://doi.org/10.1016/j.heliyon.2019.e02015

Beer, D., & Burrows, R. (2010). Consumption, prosumption and participatory web cultures: An introduction. *Journal of Consumer Culture*, 10(1), 1469–5405.

Bevan, M. T. (2014). A method of phenomenological interviewing. *Qualitative Health Research*, 24(1), 136–144.

Beverland, M. B., & Farrelly, F. J. (2010). The quest for authenticity in consumption: Consumers' purposive choice of authentic cues to shape experienced outcomes. *Journal of Consumer Research*, 36(5), 838–856.

Black, I. R., & Cherrier, H. (2010). Anti-consumption as part of living a sustainable lifestyle: Daily practices, contextual motivations and subjective values. *Journal of Consumer Behaviour*, 9(6), 437–453.

Brosius, N., Fernandez, K. V., & Cherrier, H. (2013). Reacquiring consumer waste: Treasure in our trash? *Journal of Public Policy & Marketing*, 32(2), 286–301.

Bruns, A. (2008). *Blogs, Wikipedia, second life, and beyond: From production to produsage (45)*. New York: Peter Lang Publishing, Inc.

Büscher, B., & Igoe, J. (2013). 'Prosuming' conservation? Web 2.0, nature and the intensification of value-producing labour in late capitalism. *Journal of Consumer Culture*, 13(3), 283–305.

Campbell, C. (2005). The craft consumer: Culture, craft and consumption in a postmodern society. *Journal of Consumer Culture*, 5(1), 23–42.

Carrier, J. G. (2010). Protecting the environment the natural way: Ethical consumption and commodity fetishism. *Antipode*, 42(3), 672–689.

Cherrier, H. (2010). Custodian behavior: A material expression of anti-consumerism. *Consumption, Markets & Culture*, 13(3), 259–272.

Cherrier, H., Black, I. R., & Lee, M. (2011). Intentional non-consumption for sustainability: Consumer resistance and/or anti-consumption? *European Journal of Marketing*, 45(11/12), 1757–1767.

Cole, S. J. (2011). The prosumer and the project studio: The battle for distinction in the field of music recording. *Sociology*, 45(3), 447–463. https://doi.org/10.1177/0038038511399627

Connolly, J., & Prothero, A. (2008). Green consumption: Life-politics, risk and contradictions. *Journal of Consumer Culture*, 8(1), 117–145.

Cova, B., & Cova, V. (2012). On the road to prosumption: Marketing discourse and the development of consumer competencies. *Consumption, Markets and Culture*, 15(2), 149–168.

Cova, B., & Dalli, D. (2009). Working consumers: the next step in marketing theory? *Marketing Theory*, 9(3), 315–339.

Dangelico, R. M., & Vocalelli, D. (2017). "Green marketing": An analysis of definitions, strategy steps, and tools through a systematic review of the literature. *Journal of Cleaner Production*, 165, 1263–1279. https://doi.org/10.1016/j.jclepro.2017.07.184

Darmody, A., Yuksel, M., & Venkatraman, M. (2017). The work of mapping and the mapping of work: Prosumer roles in crowdsourced maps. *Journal of Marketing Management*, 33(13/14), 1093–1119.

Dellaert, B. G. C. (2019). The consumer production journey: Marketing to consumers as co-producers in the sharing economy. *Journal of the Academy of Marketing Science*, 47(2), 238–254.

Denzin, N. K., & Lincoln, Y. S. (1998). *Collecting and interpreting qualitative materials*. Thousand Oaks, CA: Sage.

Douglas, M., & Isherwood, B. (1996). *The world of goods*. New York: Routledge.

Dressler, M. (2016). Prosumers in the wine market: An explorative study. *Wine Economics and Policy*, 5(1), 24–32.

Duncum, P. (2011). Youth on YouTube: Prosumers in a peer-to-peer participatory culture. *The International Journal of Art Education*, 9(2), 24–39.

Dusi, D. (2018). Beyond prosumer capitalism: Retaining the original understanding of prosumption. *Current Sociology*, 66(5), 663–681.

Eckhardt, G. M., Houston, M. B., Jiang, B., Lamberton, C., Rindfleisch, A., & Zervas, G. (2019). Marketing in the sharing economy. *Journal of Marketing*, 83(5), 5–27.

Ecosphere. (2018). The millennial consumer: A driving force for corporate sustainability. Retrieved from https://ecosphere.plus/blog/millennial-consumer-driving-force-corporate-sustainability/

Edwards, F., & Mercer, D. (2012). Food waste in Australia: The freegan response. *The Sociological Review*, 60(2), 174–191.

Eisenhardt, K. M. (1989). Building theories from case study research. *Academy of Management Review*, 14, 532–550.

Ellsworth-Krebs, K., & Reid, L. (2016). Conceptualising energy prosumption: Exploring energy production, consumption and microgeneration in Scotland, UK. *Environment and Planning A*, 48(10), 1988–2005.

Fielding, K. S., & Head, B. W. (2012). Determinants of young Australians' environmental actions: The role of responsibility attributions, locus of control, knowledge and attitudes. *Environmental Education Research*, 18(2), 171–186.

Fien, J., Neil, C., & Bentley, M. (2008). Youth can lead the way to sustainable consumption. *Journal of Education for Sustainable Development*, 2(1), 51–60.

Fien, J., The-Cheong Poh Ai, I., Yencken, D., Sykes, H., & Treagust, D. (2002). Young environmental attitudes in Australia and Brunei: Implications for education. *The Environmentalist*, 22, 205–216.

Fine, M. B., Gironda, J., & Petrescu, M. (2017). Prosumer motivations for electronic word-of-mouth communication behaviours. *Journal of Hospitality and Tourism Technology*, 8(2), 280–295.

Fırat, A. F., & Dholakia, N. (2006). Theoretical and philosophical implications of postmodern debates: Some challenges to modern marketing. *Marketing Theory*, 6(2), 123–162.

Firat, A. F., & Venkatesh, A. (1995). Liberatory postmodernism and the reenchantment of consumption. *Journal of Consumer Research*, 22(3), 239–267.

Forbes. (2018). How much financial influence does Gen Z have. Retrieved from https://www.forbes.com/sites/jefffromm/2018/01/10/what-you-need-to-know-about-the-financial-impact-of-gen-z-influence/#618ce63c56fc

Gilbert + Tobin. (2019). Green bond market in Australia and overseas. Retrieved from https://www.gtlaw.com.au/insights/green-bond-market-australia-overseas

globalWebIndex (2018). The rise of green consumerism: What do brands need to know. Retrieved from https://blog.globalwebindex.com/chart-of-the-week/green-consumerism/

Guest, G., Bunce, A., & Johnson, L. (2006). How many interviews are enough?: An experiment with data saturation and variability. *Field Methods*, 18(1), 59–82.

Haines, F., & McConnell, D. (2013). Green electricity markets? Constructed realities, prosumerism and Solar PV. Constructed Realities, Prosumerism and Solar PV. RegNet Research Paper No. 2013/20. https://ssrn.com/abstract=2364244 or https://doi.org/10.2139/ssrn.2364244.

Halassi, S., Semeijn, J., & Kiratli, N. (2019). From consumer to prosumer: A supply chain revolution in 3D printing. *International Journal of Physical Distribution & Logistics Management*, 49(2), 200–216.

Hansen, M., & Hauge, B. (2017). Prosumers and smart grid technologies in Denmark: Developing user competences in smart grid households. *Energy Efficiency*, 10(5), 1215–1234.

Hartmann, B. J. (2016). Peeking behind the mask of the prosumer: Theorizing the organization of consumptive and productive practice moments. *Marketing Theory*, 16(1), 3–20.

Humphreys, A., & Grayson, K. (2008). The intersecting roles of consumer and producer: A critical perspective on co-production, co-creation and prosumption. *Sociology Compass*, 2(3), 963–980.

Izberk-Bilgin, E. (2010). An interdisciplinary review of resistance to consumption, some marketing interpretations, and future research suggestions. *Consumption, Markets and Culture*, 13(3), 299–323.

Izvercian, M., Seran, S. A., & Buciuman, C. F. (2013). Transforming usual consumers into prosumers with the help of intellectual capital collaboration for innovation. *International Journal of Information and Education Technology*, 3(3), 388–392.

Kessous, A., Boncori, A. L., & Paché, G. (2016). Are consumers sensitive to large retailers' sustainable practices? A semiotic analysis in the French context. *Journal of Retailing and Consumer Services*, 32, 117–130.

Kesting, S., & Bliek, F. (2013). *From consumer to prosumer: Netherland's power matching city shows the way, in Energy Efficiency* (pp. 355–373). Boston: Academic Press.

Kilbourne, W. E., & Carlson, L. (2008). The dominant social paradigm, consumption, and environmental attitudes: Can macromarketing education help? *Journal of Macromarketing*, 28(2), 106–121.

Kotilainen, K., Mäkinen, S., & Järventausta, P. (2016). *The role of residential prosumers initiating the energy innovation ecosystem to future flexible energy system*. Porto, Portugal: European Energy Markets Conference. https://ieeexplore.ieee.org/document/7521325

Kotler, P. (1986). The prosumer movement: A new challenge for marketers. *Advances in Consumer Research*, 13(1), 510–513.

Kotler, P. (2010). The prosumer movement. In B. Blättel-Mink & K.-U. Hellmann (Eds.), *Prosumer revisited. Zur Aktualität einerDebatte*. Wiesbaden: VS Verlag für Sozialwissenschaften, 51–60.

Kumar, P. (2016). State of green marketing research over 25 years (1990-2014) literature survey and classification. *Marketing Intelligence & Planning*, 34(1), 137–158.

Kumar, P., & Polonsky, M. J. (2017). An analysis of the green consumer domain within sustainability research: 1975 to 2014. *Australasian Marketing Journal*, 25(2), 85–96.

Lebiejko, A. (2011). Prosumer–a new trend of active consumption on the example of banking services. *Journal of Interdisciplinary Research*, 1(2), 65–69.

Leonidou, L. C., Leonidou, C. N., & Kvasova, O. (2010). Antecedents and outcomes of consumer environmentally friendly attitudes and behaviour. *Journal of Marketing Management*, 26(13), 1319–1344.

Lucyna, W., & Hanna, H. (2016). Prosumption use in creation of cause related marketing programs through crowdsourcing. *Procedia Economics and Finance*, 39, 212–218.

Lusch, R. F., & Vargo, S. L. (2006). Service-dominant logic: Reactions, reflections and refinements. *Marketing Theory*, 6(3), 281–288.

McCracken, G. (1996). *The long interview*. California: Sage Publications.

McLean, L., & Roggema, R. (2019). Planning for a prosumer future: The case of Central Park, Sydney. *Urban Planning*, 4(1), 172–186. https://doi.org/10.17645/up.v4i1.1746

Miller, T. (2016). Cybertarian flexibility—When prosumers join the cognitariat, all that is scholarship melts into air. In M. Curtin & K. Sanson (Eds.), *Precarious creativity: Global media, local labor* (pp. 19–32). Oakland, California: University of California Press.

Miller, W. (2019). Food, water, energy, waste: An examination of socio-technical issues for urban prosumers–part 1 (context). *Energy Procedia*, 161, 360–367.

Mouat, S. (2016). A new paradigm for utilities: The rise of the prosumer. *Renew Economy*. Retrieved from https://reneweconomy.com.au/new-paradigm-utilities-rise-prosumer-26384/

Nakajima, S. (2012). Prosumption in art. *American Behavioral Scientist*, 56(4), 550–569. https://doi.org/10.1177/0002764211429358

Natural Marketing Institute. (2017). State of Sustainability in America. Retrieved from http://www.nmisolutions.com/index.php/research-reports/sustainability-reports/2017-state-of-sustainability-in-america

ABC News. (2019). Global climate strike sees 'hundreds of thousands' of Australians rally across the country. (2019, September 20). Retrieved from https://www.abc.net.au/news/2019-09-20/school-strike-for-climate-draws-thousands-to-australian-rallies/11531612

Osborne, J. W. (1994). Some similarities and differences among phenomenological and other methods of psychological qualitative research. *Canadian Psychology/Psychologie Canadienne*, 35(2), 167–189.

Papaoikonomou, E., Valverde, M., & Ryan, G. (2011). Articulating the meanings of collective experiences of ethical consumption. *Journal of Business Ethics*, 110(1), 15–32.

Parag, Y. (2015). *Beyond energy efficiency: A 'prosumer market' as an integrated platform for consumer engagement with the energy system. ECEEE* (p. 2015). France: Summer Study on Energy Efficiency.

Patton, M. Q. (2002). *Qualitative research and evaluation methods*. Saint Paul, MN: Sage.

Pentina, I., & Amos, C. (2011). The Freegan phenomenon: Anti-consumption or consumer resistance? *European Journal of Marketing*, 45(11/12), 1768–1778.

Perera, C., Auger, P., & Klein, J. (2016). Green consumption practices among young environmentalists: A practice theory perspective. *Journal of Business Ethics*, 152(3), 843–864.

Perera, L. (2014). A processual theory of green identity formation: The case of young environmentalists in Australia. *International Journal of Consumer Studies*, 38(3), 289–296.

Perren, R., & Grauerholz, L. (2015). Collaborative consumption. *International Encyclopedia of the Social & Behavioral Sciences*, 4, 139–144.

Prahalad, C. K., & Ramaswamy, V. (2000). Co-opting customer competence. *Harvard Business Review*, 78(1), 79–90.

Prahalad, C. K., & Ramaswamy, V. (2004). Co-creation experiences: The next practice in value creation. *Journal of Interactive Marketing*, 18(3), 5–14.

Prothero, A., & Fitchett, J. A. (2000). Greening capitalism: Opportunities for a green commodity. *Journal of Macromarketing*, 20(1), 46–55.

Prothero, A., McDonagh, P., & Dobscha, S. (2010). Is green the new black? Reflections on a green commodity discourse. *Journal of Macromarketing*, 30(2), 147–159.

Ramaswamy, V., & Ozcan, K. (2014). *The co-creation paradigm*. Stanford, CAL: Stanford University Press.

Rathnayaka, A. D., Potdar, V. M., Dillon, T., Hussain, O., & Kuruppu, S. (2012). Analysis of energy behaviour profiles of prosumers. In IEEE 10th International Conference on Industrial Informatics, 236–241.

Rathnayaka, A. J. D., Potdar, V. M., & Kuruppu, S. (2012). Design of smart grid prosumer communities via online social networking communities. *International Journal for Infonomics*, 5(1/2), 544–556.

Ritzer, G. (2014). Prosumption: Evolution, revolution, or eternal return of the same? *Journal of Consumer Culture*, 14(1), 3–24.

Ritzer, G. (2015a). Automating prosumption: The decline of the prosumer and the rise of the prosuming machines. *Journal of Consumer Culture*, 15(3), 407–424.

Ritzer, G. (2015b). Prosumer capitalism. *The Sociological Quarterly*, 56(3), 413–445.

Ritzer, G. (2017). Can there really be 'true' alternatives within the food and drink markets? If so, can they survive as alternative forms? *Journal of Marketing Management*, 33(7/8), 652–661.

Ritzer, G., Dean, P., & Jurgenson, N. (2012). The coming of age of the prosumer. *American Behavioral Scientist*, 56(4), 379–398. https://doi.org/10.1177/0002764211429368

Ritzer, G., & Jurgenson, N. (2010). Production, consumption, prosumption. *Journal of Consumer Culture*, 10(1), 13–36.

Serafin, D. (2012). Defining prosumption for marketing: Understanding the nature of prosumption after the emergence of internet-based social media. *International Journal of Management and Economics*, 36, 124–142.

Seran, P. S., & Izvercian, M. (2014). Prosumer engagement in innovation strategies: The prosumer creativity and focus model. *Management Decision*, 52(10), 1968–1980.

Seyfang, G. (2004). Shopping to save the planet?: A critical analysis of sustainable consumption policy and practice. ECPR joint sessions of workshops (citizenship and the environment), Uppsala, Sweden, 13–18.

Shaw, D., Newholm, T., & Dickinson, R. (2006). Consumption as voting: An exploration of consumer empowerment. *European Journal of Marketing*, 40(9/10), 1049–1067.

Sioshansi, F. (2019). *How service innovations will disrupt the utility business model*. Consumer, Prosumer, Prosumager: London, Academic Press.

Strauss, A. L., & Corbin, J. M. (1998). *Basics of qualitative research: Techniques and procedures for developing grounded theory*. CA: Sage Publications, Inc.

Strengers, Y., Nicholls, L., & Maller, C. (2016). Curious energy consumers: Humans and nonhumans in assemblages of household practice. *Journal of Consumer Culture*, 16(3), 761–780.

Thompson, C. J. (1997). Interpreting consumers: A hermeneutical framework for deriving marketing insights from the texts of consumers' consumption stories. *Journal of Marketing Research*, 34(4), 438–455.

Tian, J. M., Shen, L., & Chen, Y. (2017). A study on customer prosumption concept and its impact on enterprise value co-creation. *Theoretical Economics Letters*, 7, 2040–2053.

Toffler, A. (1980). *The third wave*. NY: William Morrow and Company, Inc.

Tse, T., & Tsang, L. T. (2018). Reconceptualising prosumption beyond the 'cultural turn': Passive fashion prosumption in Korea and China. *Journal of Consumer Culture*, 1–21. https://doi.org/10.1177/1469540518804300

Unruh, G., & Ettenson, R. (2010). Winning in the green frenzy. *Harvard Business Review*, 88(11), 110–116.

Vargo, S. L., & Lusch, R. F. (2004). Evolving to a new dominant logic for marketing. *Journal of Marketing*, 68(1), 1–17.

Wallendorf, M., & Belk, R. W. (1989). Assessing trustworthiness in naturalistic consumer research. ACR Special Volumes. *Association for Consumer Research*, 69–84.

Watson, M., & Shove, E. (2008). Product, competence, project and practice: DIY and the dynamics of craft consumption. *Journal of Consumer Culture*, 8(1), 69–89.

Xie, C., Bagozzi, R. P., & Troye, S. V. (2008). Trying to prosume: Toward a theory of consumers as co-creators of value. *Journal of the Academy of Marketing Science*, 36(1), 109–122.

Zhu, Q., & Sarkis, J. (2016). Green marketing and consumerism as social change in China: Analyzing the literature. *International Journal of Production Economics*, 181, 289–302. https://doi.org/10.1016/j.ijpe.2016.06.006

Ziemba, E., & Eisenbardt, M. (2015). Prosumers' participation in business processes. *Online Journal of Applied Knowledge Management*, 3(1), 114–127.

Ziemba, E., & Eisenbardt, M. (2018). The ways of prosumers' knowledge sharing with organisations. *Interdisciplinary Journal of Information, Knowledge and Management*, 13(95), 95–115.

Zwick, D., & Denegri-Knott, J. (2009). Manufacturing customers: The database as new means of production. *Journal of Consumer Culture*, 9(2), 221–247.

AUTHOR BIOGRAPHIES

Chamila Roshani Perera is a lecturer of Marketing at Swinburne Business School. Her previous research appears in *Journal of Business Ethics, International Journal of Consumer Studies, Journal of Consumer Marketing, International Journal of Sustainability in Higher Education*, and *Social Responsibility Journal*. Her research interests are in consumer culture and behaviour, climate change-related behaviour, sustainability, environmentalism, minimalistic lifestyles, corporate social responsibility, research methodological issues, and pedagogy.

Chandana Rathnasiri Hewege is a senior lecturer of International Business at Swinburne Business School. He published several research papers in *Marketing Intelligence & Planning, Australasian Marketing Journal, Journal of Consumer Marketing, International Journal of Sustainability in Higher Education*, and *International Journal of Consumer Studies*. His research interests are in management control and governance issues of international firms in transitional societies, corporate social responsibility, supply chain and logistics, actual versus virtual issues in the global marketplace, organisational and consumer level responses to climate change-related issues, critical research in international business, research methodologies, and pedagogical practices.

Cai Vinh Chi Mai is a lecturer of International Business at Faculty of Business Administration, Hue University—University of Economics, Hue City, Thua Thien Hue Province, Vietnam.

APPENDIX

RESPONDENTS' PROFILE

No.	Name of respondents[a] (M/F)[b]	Age (years)	Current workplaces and future career interests
1	Amber (F)	21	Environment officer
2	Neil (M)	25	Food coop (part-time)
3	Ben (M)	25	Organic food seller
4	Jill (F)	25	Environmental law professional
5	Emma (F)	22	Personal assistant
6	Smith (M)	21	Unemployed
7	Travis (M)	24	Special interest in national parks and deserts
8	Naomi (F)	21	Nature photographer
9	Kelly (F)	21	Unemployed/volunteering
10	Kathy (F)	22	Environment educator
11	Paige (F)	23	Unemployed
12	Alan (M)	22	Food security and food production
13	Chris (M)	23	Sex educator
14	Julian (M)	18	Unemployed
15	Alex (M)	20	Disability support worker for about 4 years
16	Simon (M)	19	Unemployed
17	Julia (F)	24	An officer at an energy conservation firm
18	Ann (F)	23	A worker at a recycled leather plant

[a]Pseudonyms to ensure their anonymity.
[b](M/F) gender.